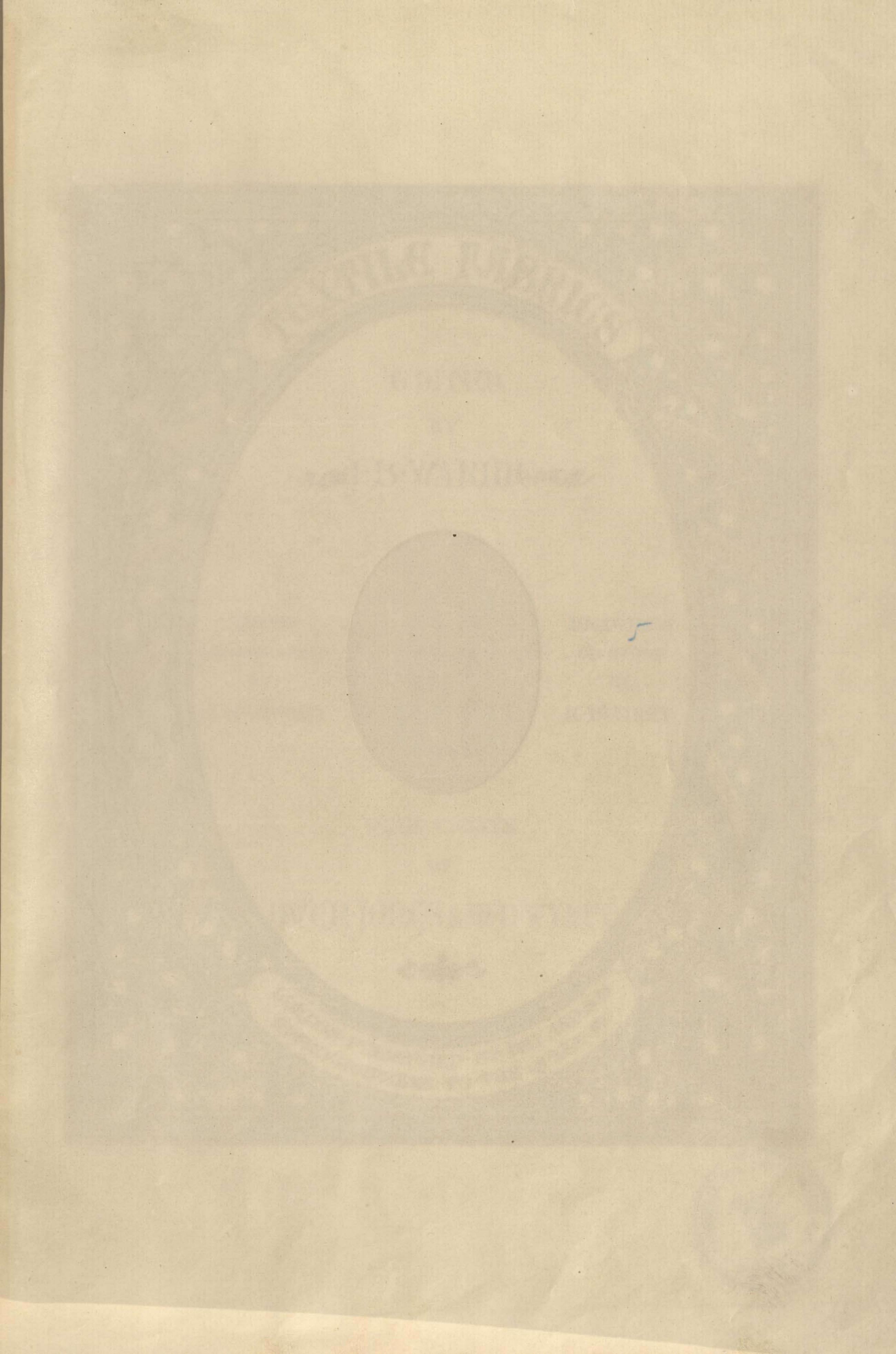
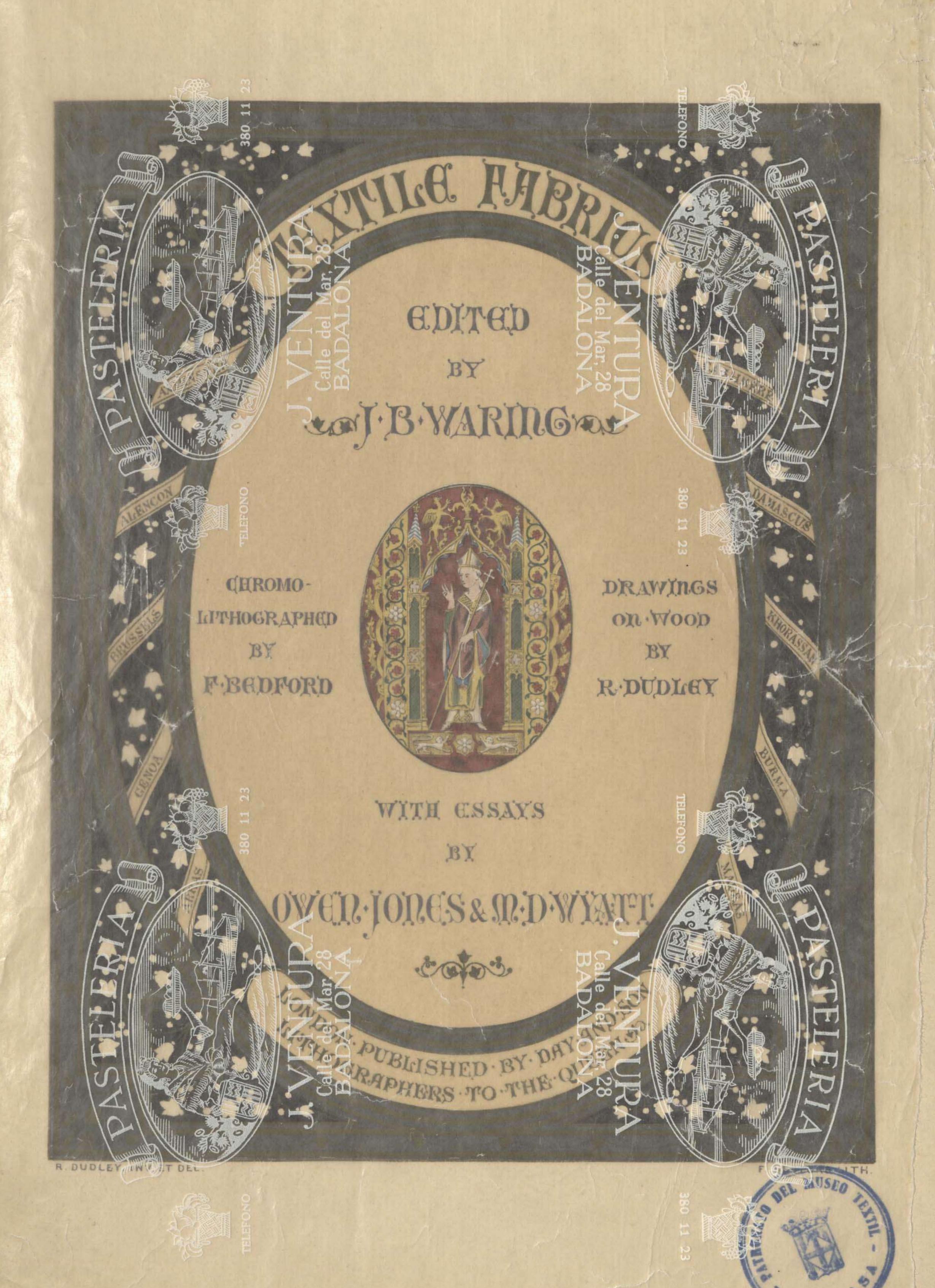


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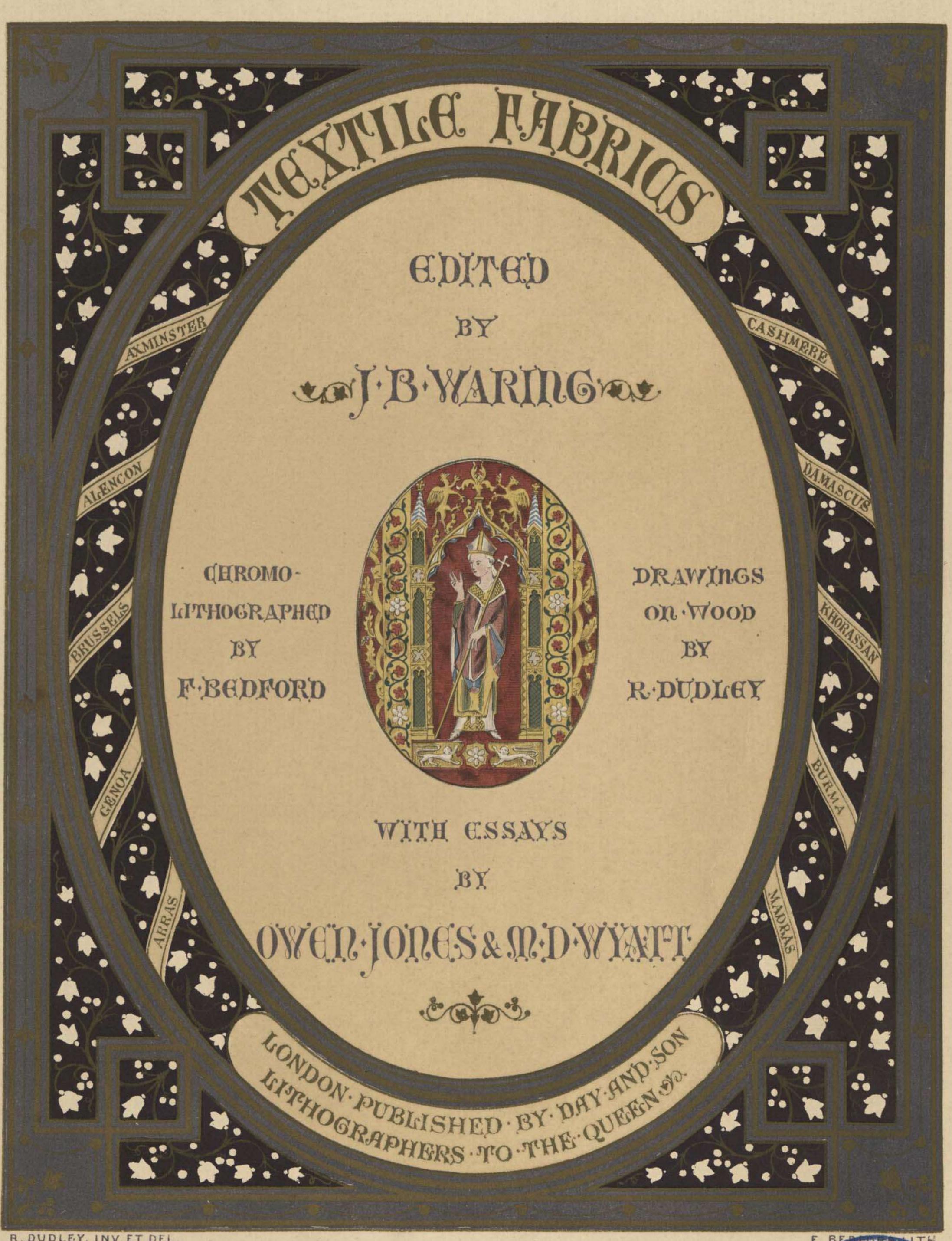


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R. DUDLEY, INV. ET DEL.





OF



WEAVING AND EMBROIDERY.

SELECTED

From the Royal and other Collections.

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EDITED BY J. B. WARING.

CHROMO-LITHOGRAPHED BY F. BEDFORD. DRAWINGS ON WOOD BY R. C. DUDLEY.

With Essays

commented det an the det Livenson

BY OWEN JONES & M. DIGBY WYATT,
ARCHITECTS.

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WEAVING AND EMBROIDERY,

FROM THE COLLECTIONS OF

HER MAJESTY THE QUEEN.

LADY LYTTLETON.

H. BOWDON, Esq.

STONYHURST COLLEGE.

THE SOULAGES COLLECTION.

G. MILES, Esq.

HAMPTON COURT.

MISS JANE CLARKE.

THE EAST-INDIA COMPANY.

F. LEAKE, Esq.

J. MILLS, Esq.

THE ASHMOLEAN MUSEUM, OXFORD.

ST. MARY'S COLLEGE, OSCOTT.

The Examples chosen for Illustration formed a portion of the Museum of Ornamental Art in the Art Treasures

Exhibition, Manchester. The Oval subject on the Title-page is from a Cope

contributed by H. Bowdon, Esq., of Chesterfield.

INTRODUCTION.

The antiquity of weaving is such that, as Professor Semper has observed in an essay on the Four Elements of Architecture,* "the art of dress is less ancient than that of the manufacture of stuffs, as several examples of people to whom clothing is unknown, and who, nevertheless, possess an industry more or less developed in tissues and embroidery, may satisfy us." In so lengthened a period, we may naturally then expect that some pretty tales of tender interest are enwoven with the web of its history. Such, to say nothing of the incidents described in the Bible, were the presumption of Arachne, the dyer's fair daughter, who challenged the immaculate goddess Minerva to a trial of skill in embroidery, and being excelled by that patron saint of ancient weavers, hung herself in despair; upon which the gods considerately changed her into a spider. Then we have the jealous Dejanira victimized by the cunning Centaur, who gave her the tunic which was to regain her husband's love, but which, with its poisoned woof, caused him to die in agony. Here, too, is Penelope the faithful, who for twenty weary years wove and unwove the threads of that tapestry, the conclusion of which held her bound to make choice of another husband in place of the long-lost Ulysses. Such were a few of the romantic touches which antique fable coupled with the art. Nor are tales of later times altogether wanting. Many a noble lady, surrounded with her bevy of fair maidens, plied the needle to celebrate the achievements of her lord in war or the chase, as Matilda commemorated the exploits of her hero. Now may we see a company of demure nuns, cloistered in convent grey, devoted to the more holy task of working altar-cloths and vestments, with subjects from many a saintly history; whilst the less pretentious free maidens, knitting in the sun, chanted old country ditties in unison with their homely work. In later times still, many a fair hand was busily employed in making those rich coverlets which adorned the handsome couches of grove-hidden country mansions, or were sent as presents to swathe the tender limbs of children when presented at the baptismal font. In humbler dwellings might be seen the sampler, carefully framed and glazed, with name and date of the precocious powers of the childish needlewoman, who, at a more mature age, became acquainted with all the mysteries of point lace. At the present day, if the history of individuals is less connected than in olden time with productions of the needle and the loom, it is because greater interests are connected with the manufacture, and a different turn given to its application. Textile art is now one of the sources of national prosperity, and is carried out on an unprecedented scale. Improved machinery has enabled England to supply the whole world with certain classes of woven goods; and the decay of this branch of industry might lead to such political revolutions as would alter the whole framework of society. But of this decay there appears to be no sign: so far from that, fresh markets are continually opening to us; and if we can but equal the artistic ability of our continental neighbours, we need fear no rivalry whatever. In this respect, however, much has yet to be done. When, as Mr. Jones remarks in his very valuable essay attached to these lithographs, there is a regular trade in France for the exportation of designs, and there are ten times the number of artists employed in their production in Paris than there are in London or Manchester,—it is clear, that in this department of the manufacture there is very much for us yet to learn and do. The principles which should guide the designer in this class of work have been very ably insisted on, of late years, by several gentlemen eminent in art, and in the present volume by Mr. Wyatt, in his excellent treatise.

^{*} See Appendix to "An Apology for the Colouring of the Greek Court, Sydenham," by Owen Jones.

INTRODUCTION.

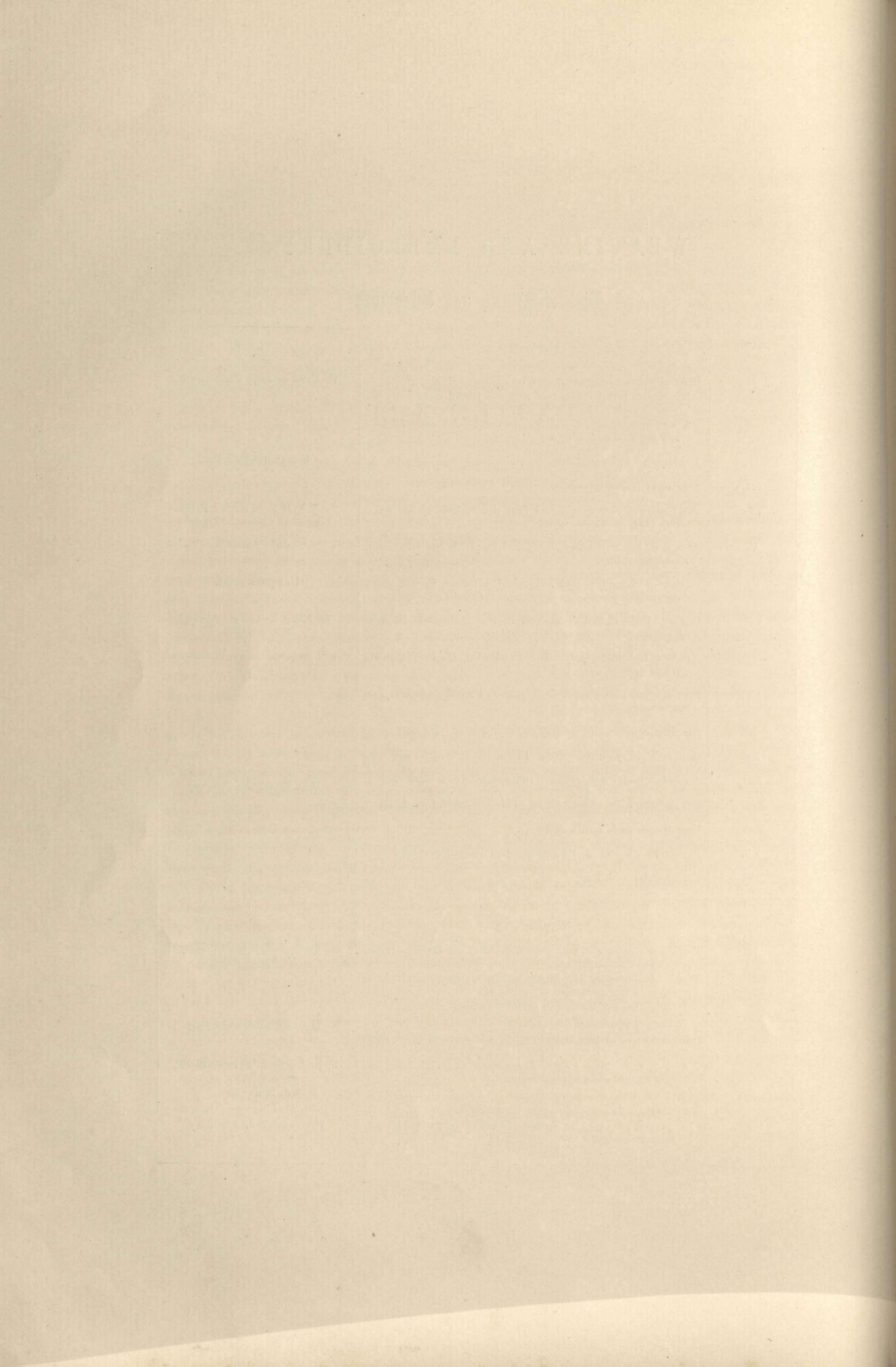
Good principles certainly form a ground-work most desirable for the draughtsman to start from; but good examples placed before his eyes are, perhaps, of still greater value; and we would especially request his attention to the specimens of Oriental manufacture in this volume. Of still greater service would it be to him were he to spend days of quiet observation in the East-India Museum in Leadenhall Street; for we are inclined to think that, as a general rule, the taste of Orientals in this matter is as unerring as in the productions of Nature herself. There is also a series of subjects of varied Oriental origin or type, beautifully reproduced in the "Mélanges d'Archéologie" of Messrs. Cahier and Martin, worthy of careful study by every student of design in this branch of manufacture. As regards tapestry, no collection has ever, perhaps, been got together equal to that of the Manchester Exhibition, deficient as it may have been in many large and important pieces of early date, which, through unforeseen circumstances, were not obtained.

Although it is only in some of our old family mansions that the bonâ fide use of tapestry is still retained, yet its practical use will, we trust, again come into fashion. In winter, nothing could be more comfortable, and certainly nothing looks so rich and picturesque. Pieces of tapestry, ornamented with figure-subjects, might be let into panels on the walls, and used for portières across those folding-doors so common in our houses. For the drapery of beds, &c., we conceive that tapestry, on which are depicted stories from history or romance, would be pleasing to more senses than that of sight, in our cold and changeful climate. Nor can we agree even with such a high authority as Sir John Falstaff, that "a pretty slight drollery, or the German hunting in water-work, is worth a thousand of these bed-hangings and these fly-bitten tapestries." As far as mere execution is concerned, we perhaps surpass anything done by our predecessors; of which proof was given in the Great Exhibition of 1851; witness that magnificent piece, the Slaughter of the Mamelukes, after Horace Vernet, now in the possession of Her Majesty. If objections can be reasonably urged against the use of tapestry hangings in private houses, on the score of their collecting dust, &c., the same hardly holds good in respect to our public buildings; and we can fancy that a civic feast even might receive additional charms were the guests ranged beneath richly-coloured drapery, worked with subjects of national or local import; or, should the corporation desire it, they might be of the same description as those belonging to Charles the Bold, Duke of Burgundy, which represented allegorical figures of Messrs. Banquet and Supper, who attack Masters Gluttony, Daintiness, Pastime, Your Health, and Good Cheer, with a regiment of Gout, Colic, Apoplexy, and other grim carles. Messrs. Banquet and Supper are, however, taken prisoners, and brought before the judge, My Lord Experience, assisted by grave doctors, who finally condemn the great Banquet to be hung by the neck; whilst extenuating circumstances being brought forward in favour of the culprit Supper, he is condemned only to keep at least six hours off Dinner for the rest of his natural life. Whatever the choice of subjects may be, we are in hopes that this branch of textile art will receive its due development in England, and that in obtaining this result, the present volume may not be without some effect.

WEAVING AND EMBROIDERY.

Nist of Plates and Woodcuts.

PLATE.	SUBJECT.	OWNER.
I.	 Two chasubles. Fifteenth century. 1. Crimson velvet cross, gold and silk thread embroidery on blue damask. 2. Crimson velvet cross on purple velvet, with coloured floss silk and gold embroidery. 	H. Bowdon, Esq., Chesterfield.
II.	A chasuble. Fifteenth century	Stonyhurst College.
III.	Portions of Italian brocade	Soulages collection.
IV.	Two baptismal cloths, gold and floss silk embroidery on white satin. Eighteenth century.	Lady Lyttelton, Hagley Park. Miss Jane Clarke, Liverpool.
V.	Portion of tapestry—Arras. Worked in pieces and fine-drawn. Fifteenth century.	Soulages collection.
VI.	Portion of tapestry; gold and coloured thread, in one piece. Subject, Melchisedek and Abraham. Sixteenth century.	Hampton Court.
VII.	Tapestry from Raffaelle's cartoon of the Miraculous Draught of Fishes. Sixteenth or seventeenth century.	G. Miles, Esq., Ford Abbey, Somersetshire.
VIII.	A piece of Gobelin tapestry. Subject from Don Quixote, in framework of wreaths, &c.	Her Majesty the Queen, Buckingham Palace.
IX.	Portion of an Indian saddlecloth, gold and silver embroidery on red damask.	
X.	Silk, gold, and bead embroidery on black muslin. Indian	
XI.	Gold embroidery on red velvet. Indian	
XII.	An Indian book-cover, gold and silk embroidery on black cloth	Hon. East-India Company.
XIII.	Silk and silver thread embroidery on black bobinet, from Delhi	
XIV.	Four specimens of Indian embroidery	
XV.	Fac-simile of a portion of a native Indian design for a shawl	
XVI.	Coloured straw matting	
	WOODCUTS.	
	Portion of a cope, silk and gold embroidery on crimson velvet. Fourteenth century.	H. Bowdon, Esq., and St. Mary's College, Oscott.
	Woodcuts illustrating Mr. M. Digby Wyatt's Essay on the Principles of Design applied to Textile Art.	
	1. A specimen of the Indian palmette pattern	TT T 1' C
	2. Portion of coloured Indian printed stuff 3. Portion of another Indian carpet, gold embroidery on crimson cloth.	Hon. East-India Company.
	4, 5, 6, & 7. Four pieces of embossed and gilded leather. Seventeenth and eighteenth centuries.	F. Leake, Esq., Warwick Street, London.
	8. Knife with embroidered sheath	J. Mills, Esq.
	9. Portion of a stamped leather Mexican mocassin 10. Portion of pattern of an Indian flock carpet; white ground, coloured design.	Ashmolean Museum, Oxford. Hon. East-India Company.



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In addition to the many-coloured fabrics produced by the ordinary loom, there are two branches of Textile Art which require especial notice; namely, Embroidered fabrics and Tapestries. Embroidery may be described as consisting of ornamental patterns worked by the needle upon any plain fabric, whether of cotton, linen, silk or velvet; or, when so worked upon one fabric, such as linen, attached, by the process termed appliqué, to a richer material or ground, such as velvet. Coloured silks, gold and silver thread, pearls and other gems are employed in great variety and with the richest effect, in the production of embroidery. In tapestry, on the contrary, the coloured design forms a part of the fabric itself, and is produced by an ingenious process, partly mechanical and partly manipulatory, which was, perhaps, carried to its greatest perfection in the tapestry works of Arras.

We need hardly say that embroidery, or ornamental needlework, is one of the oldest of the arts, and there is reason to believe that tapestry was also made at a remote period of antiquity. In the Middle Ages, patterns and subjects of the same kinds were worked for mural decorations by both processes, and the terms embroidery and tapestry have been sometimes rather indiscriminately applied. The so-called "Bayeux Tapestry," for example, is strictly a specimen of embroidery, the subject being entirely worked upon a plain ground by the needle.

We turn involuntarily to the sacred writings for the earliest notices of these arts. The "coat of many colours" which Jacob gave to the son whom he loved "more than all his children, because he was the son of his old age," may have derived its description from the labours of either the embroiderer or the weaver, or it may have consisted of pieces of differently coloured fabrics united by the needle. Our first distinct notice of embroidery occurs in reference to the erection of the Tabernacle in the wilderness, and, as we are expressly told that Moses was "skilled in all the learning of the Egyptians," there can be no doubt that the Jews derived their knowledge of this, as of other arts, from the land of their captivity. The "fine linen of Egypt" is a familiar expression in Holy Writ, and "fine linen, with broidered work from Egypt," is mentioned by Ezekiel. Sir Gardiner Wilkinson informs us that "many of the Egyptian stuffs presented various patterns worked in colours by the loom, independent of those produced by the dyeing or printing process; and so richly composed, that Martial says they vied with the Babylonian cloths embroidered with the needle." He adds, that "the art of embroidery was commonly practised in Egypt, and the Hebrews on leaving the country took advantage of the knowledge they had acquired to make the rich hangings and fabrics, described by Moses, for the tabernacle and the garments of

Aaron."* These works were doubtless the most magnificent which the artists of the period could produce; and they are described in the book of Exodus as the productions of "the cunning workman, and of the embroiderer in blue and in purple, in scarlet and in fine linen, and of the weaver;" and Aholiab, who, with Bezaleel, was called by the Lord to this work, is described as of the tribe of Dan, and as "an embroiderer" in these materials. The ephod and other vestments of Aaron and his fellow-priests are enumerated in a manner which leaves it doubtful whether weaving or embroidery had the larger share in their decoration, though no doubt the skill of Aholiab was fully exercised. In one passage we are told that "they did beat the gold into thin plates, and cut it into wires, to work it in the blue, and in the purple, and in the scarlet, and in the fine linen;"† and Sir G. Wilkinson considers that the gold thread so used was "beaten out with the hammer and afterwards rounded." This opinion is, however, questioned by M. Achille Jubinal, in his valuable "Recherches sur l'Usage et l'Origine des Tapisseries," who supposes that the gold was used in the form of fine-drawn wires, flattened and wound round threads in the manner of modern gold thread. Sir G. Wilkinson remarks, that "as no mention of silver stuffs occurs in the writings of ancient authors, it has been supposed that their introduction was of late date. It was, however, known in Egypt about 3,300 years ago, being found at Thebes at the time of the third Thothmes; and it was probably known and used nearly as soon as gold, which we find attached to rings bearing the name of Osirtasen I., who lived more than 600 years earlier."

The mother of Sisera, expecting the return of her son from victory, exclaims, "Have they not divided the prey to Sisera; a prey of divers colours, a prey of divers colours in needlework; of divers colours of needlework on both sides, meet for the necks of them that take the spoil?" a proof at once of the ancient practice of the art, and of the estimation in which it was held. And we find that Tamar, the sister of Absalom, had "a garment of divers colours upon her; for with such robes were the king's daughters, that were virgins, apparelled," though we are not told by what process the "divers colours," so highly prized, were obtained.

The interesting account of the erection of the Temple of Solomon has scarcely any reference to textile fabrics; but we are told that "he made the vail of blue, and purple, and crimson, and fine linen, and wrought cherubims therein." And in the description of his wealth and glory, we find that he had "horses brought from out of Egypt, and linen yarn; and the merchants received the linen yarn at a price.";

The art of embroidery appears to have been practised in Assyria as early as in Egypt, and was not only carried to great perfection in that region, but was probably introduced from thence into India, where to this day the Mahomedans embroider with consummate skill and taste the fabrics woven by the Hindoos. Dr. Royle describes the Babylonian stuffs as being "adorned both with gold and variously coloured figures. The peacock's tail," he says, "is compared to a figured Babylonicum enriched with gold." "Who," exclaims the prophet Isaiah, "who is this that cometh from Edom, with dyed garments from Bozrah; this that is glorious in his apparel?" It is ingeniously conjectured by Gottfried Semper (in an "Essay on the Four Elements of Architecture," 1852,) that the art of the Assyrian sculptor had its origin in the embroidered work of the country; and he refers to the peculiar interlacings, knots, and similar patterns in Assyrian architecture, in support of his opinion. The costume of the kings, priests, and warriors, so vividly represented in the sculptures now brought to

^{* &}quot;Popular Account of the Egyptians," 12mo. 1854, p. 81.

[†] Exodus, xxxiv. 3.

[‡] In the Psalms of David and in the Song of Solomon we find mentioned garments "smelling of myrrh, aloes, and cassia;" and others resembling "the smell of Lebanon,"

light, affords abundant evidence of the extent to which this kind of ornament was carried in Assyria. As already mentioned, Martial compares the woven fabrics of Egypt with the "embroidered" work of Babylon; but Pliny (Hist. Nat. ch. xlviii.) would lead us to suppose that the famous textures of the latter city were the products of the loom. His translator, Holland, thus quaintly renders him:—"As for embroderie itselfe and needleworke, it was the Phrygians' invention, and hereupon embroderers in Latine bee called *Phrygiones*. In Babylon they used much to weave their cloth of divers colours, and this was a great wearing among them, and clothes so wrought were called *Babylonica*. Metellus Scipio, among other challenges and imputations laid against Capito, reproached and accused him for this—that his hangings and furniture of his dining-chamber, being Babylonian work, or cloth of Arras,* were sold for 800,000 sesterces; and such like of late daies stood Prince Nero in 400,000 sesterces."

The golden tissues of Persepolis are alluded to by Diodorus Siculus, Virgil, and Heliodorus; and the magnificence of Tyre is described by Ezekiel in the words, "Syria was thy merchant by reason of the multitude of the wares of thy making: they occupied in thy fairs with emeralds, purple and broidered work, and fine linen, and coral, and agate." And in the same prophet we read, "Thy raiment was of fine linen, and silk, and broidered work." "Fine linen with broidered work from Egypt was that which thou spreadest forth to be thy sail."

It is clear from Homer that the Grecian ladies were skilled and industrious in the use of the needle. On the departure of Ulysses for Ilium, Penelope is described as throwing over him an upper garment, broidered in gold, on which were represented the incidents of the chase.† The tunic or under-garment of the Greeks was frequently adorned with sprigs, spots, stars, stripes, zigzag, and other devices worked with the needle, and with borders of more elaborate patterns; and the *peplum*, or outer garment, had also a rich border. From the remains of ancient statues and paintings, Mr. Hope infers that the Grecian costume was "gaudy in its colours and studied in its designs."‡

The most characteristic portion of Roman costume was the toga, which was originally worn by the Etruscans, and was generally made from wool. The toga prætexta worn by priests and magistrates, had a purple border, the trabea was a toga striped with blue throughout, and the toga worn by heroes in their triumphal processions was entirely of purple, to which an embroidery of gold was afterwards added.

The translator of Pliny, already quoted, says that "in the later time of Augustus Cæsar they began at Rome to use their gownes of cloth shorne, as also with a curled nap. As for those robes which are called *crebræ* and *papaveratæ*, wrought thicke with flowre worke, resembling poppies, or pressed even and smooth, they be of greater antiquitie; for even in the time of Lucullus the poet, Torquatus was noted and reproved for wearing them. The long robes embroidered before, called *prætextæ*, were devised first by the Tuscanes. The *trabeæ* were roiall robes, and I find that kings and princes only ware them. In Homer's time also they used garments embroidered with imagerie and flowre worke; and from thence came the triumphant robes. King Attalus was the first that devised cloth of gold; and thence come such clothes to be called *Attalica*. To weave cloth of tissue with twisted threedes both in woofe and warpe, and the same of sundrie colours, was the invention of Alexandria, and such clothes and garments were named *polymita*. The embroidered long

^{*} The cloth of Arras was, of course, unknown to Pliny, and the use of the term by his translator is analogous to the employment of the words "embroidery" and "tapestry" by the translators of the Bible, who used the language of their own times to convey the best idea of the original text.

^{+ &}quot;Odyssey," book xvii. line 225.

^{# &}quot;Costume of the Ancients." 4to. 1809.

^{§ &}quot;The hue denominated purple by the ancients seems to have run through all the various shades of colour intervening between scarlet, crimson, and the deep blue called purple at the present day."—Hope, vol. i. p. 44.

robes of Servius Tullus, wherewith he covered and arraied all over the image of Fortune, by him dedicated, remained whole and sound unto the end of Sejanus. And a wonder it was they neither fell from the image, nor were moth-eaten in 560 yeeres."*

The garment of Agrippina and the tunic of Heliogabalus appear to have consisted entirely of gold thread, without any woollen or linen ground; and the tunic of Tarquinius Priscus, mentioned by Verrius, was probably of the same material.

The paintings and mosaics of Herculaneum and Pompeii furnish numerous illustrations of costume, from which it is evident that in the prosperity of those cities the art under consideration was practised with great taste and ability. It was not, however, until the Lower Empire that embroidery was brought (under the patronage of the Emperor Constantine) to the highest degree of perfection which it attained in ancient times, and which, indeed, has since been scarcely surpassed. Mr. M. Digby Wyatt† refers to the encouragement which embroidery received from the taste for barbaric splendour and personal adornment in which the founder of the Greek empire so largely indulged. He states that, "in the earliest diptychs we find indications of embroidery on portions of the garments represented in the consular portraits. The most ancient manuscripts and mosaics afford still clearer evidence as to the early developed partiality of the Greeks for similar rich decorations. Their intercourse with Persia and the East no doubt fostered this taste; since the inhabitants of those regions had long been famed for the magnificence of their costume, and the skill with which their precious cloths and hangings were executed in the loom and adorned by the needle. It is reasonable, therefore, to find in the earliest representations of Greek embroidery an ornamental character; and in proportion as the power of the Saracenic races increased, so do we more and more clearly recognize the influence of the arts of design which they practised reacting upon the Byzantines, from whom the first and leading elements of these arts had been derived." The same author notices the fact, that the artists of Byzantium retained a practice of their classic ancestors, in embroidering inscriptions on the hems of their garments; a practice which was denounced by St. Asterius: but the taste for sumptuous decoration was too deeply implanted to be eradicated by any such devout appeals.‡

The vestments of the priests of the Greek Church afforded an abundant field for the exercise of the embroiderer's art; and not content with the legitimate effects of woven materials and gold thread, the Byzantine artists added precious gems to the decoration of their robes. Thus, Leo IV., who became Pope in the year 847, presented to the altar of his church a veil woven with gold, and glittering all over with pearls. So many instances, indeed, of this practice are on record, that, bearing in mind the accurate description by Theophilus, § of the processes of making false jewels, and the facilities afforded for such processes by the extensive manufacture of glass for mosaics, Mr. Wyatt is of opinion that it is only reasonable to assume that many of the so-called jewels were not in fact real gems, but imitations.

The magnificence of Greek embroidery is strikingly illustrated by the celebrated Dalmatica, called the "Cappa di San Leone," which is the only perfect specimen of the work of this period known to exist. This interesting relic is preserved in the sacristy of St. Peter's at

^{*} Pliny's "Nat. Hist." by Holland, book viii. c. 48, p. 288.

^{† &}quot;Industrial Arts of the Nineteenth Century," folio, 1852, lxx. cxxiii.

[‡] At this period "all classes sought with avidity the richest fabrics and the most precious furniture. Silks were woven and embroidered with the greatest variety of designs. Flowers, animals, birds, with incidents from the life of Christ, &c., were depicted upon the most costly stuffs. St. Asterius describes the tunics and mantles then in use as being covered with a profusion of figures; amounting in one instance to as many as 600,—a degree of prodigality and luxury which caused him to exclaim, that 'the dresses of the effeminate Christians were painted like the walls of their houses.' St. John Chrysostom says, that in his time all admiration was reserved for the goldsmiths and the weavers."—Ibid.

^{§ &}quot;Schedula diversarum Artium."

Rome, and "is said to have been embroidered at Constantinople for the coronation of Charlemagne as Emperor of the West, but fixed by German criticism as a production of the twelfth or early part of the thirteenth century." * It is described by the Rev. Mr. Hartshorne † as follows:—"The work is laid upon a foundation of deep-blue silk, having four different subjects, on the shoulders, behind, and in front, exhibiting, although taken from different actions, the glorification of the body of our Lord. The whole has been carefully wrought with gold tambour and silk, and the numerous figures, as many as fifty-four, surrounding the Redeemer, who sits enthroned on a rainbow in the centre, display simplicity and gracefulness of design. The field of the vestment is powdered with flowers and crosses of gold and silver, having the bottom enriched with a running floriated pattern. It has also a representation of Paradise, wherein the flowers, carried by tigers, are of emerald green, turquoise blue, and flame-colour. Crosses of silver, cantoned with tears of gold, and of gold cantoned with tears of silver alternately, are inserted in the flowing foliage at the edge. Other crosses within circles are also placed after the same rule; when of gold in medallions of silver, and when of silver in the reverse order."

"I do not apprehend," says Lord Lindsay, "your being disappointed with the Dalmatica di San Leone, or your dissenting from my conclusion that a master—a Michael Angelo I would almost say—then flourished at Byzantium. It was in this dalmatica, then semée all over with pearls and glittering with freshness, that Cola di Rienzi robed himself, over his armour, in the sacristy of St. Peter's, and thence ascended to the palace of the Popes after the manner of the Cæsars, with sounding trumpets and his horsemen following him, his truncheon in his hand, and his crown on his head, 'terribile e fantastice,' as his biographer describes him—to wait upon the legate;" and the author adds that this splendid work has been worn at various times by the emperors when serving as deacons at the Pope's altar during their coronation mass.

The general character of Byzantine embroidery was reproduced in the mosaics used in the architecture of the period, and which are familiar to the public by the many valuable illustrations published within the last few years. Combats of animals, strangely-formed birds, clustered pomegranates, and similar devices, were amongst the favourite objects represented.

M. Potier, in a learned essay prefixed to Willemin's "Monumens Inédits," considers that, through the medium of the Venetians, the textile fabrics of Constantinople were so largely exported, that they constituted the material for the more valuable garments of the higher classes throughout the whole of Europe; and it is evident from the pictures of the early Siennese, Neapolitan, and Venetian schools, that the Greek embroideries were generally adopted for the edgings of robes and vestments in the Italian church. M. Potier particularly notices the introduction of the art amongst the Saracenic inhabitants of Sicily about the middle of the twelfth century, and the peculiar character which it there assumed. The remains of the actual robes of Roger I., Arrigo VI., Arrigo VII., and Costanza II., kings of Sicily, have been discovered on opening their tombs; and some of them are delineated by M. Girault de Prangey in his "Essai sur l'Architecture des Maures et Arabes en Espagne, en Sicile, et en Barbarie" (Paris, 1841).‡ The art thus introduced into Sicily was practised by the Moors in all their after-wanderings, and is still in favour with their Spanish and African descendants. That it has been always cultivated in the East is evident from the records of the past; and that it still retains its inherent vitality there is proved by the gorgeous robes of the princes of Oriental nations who now, more frequently than

^{* &}quot;History of Christian Art," by Lord Lindsay, 8vo. 1847, vol. i. p. 137.

^{† &}quot;English Mediæval Embroidery." 16mo. 1848.

[‡] Mr. Gally Knight's work on the "Saracenic and Norman Remains in Sicily," contains a copy of a mosaic representation of King Roger, showing the decorated orfrays of his Dalmatica.

heretofore, visit our own shores. The state robes worn by the Princes of Oude, recently in this country, were equal in splendour both of material and workmanship, and in the many precious gems which adorned them, to any mentioned in the records of antiquity.

As illustrating our subject, during the dark ages in the East, we may mention that Abdallah carried from Damascus, in the seventh century, many valuable spoils; among which was a cloth of curious workmanship, embroidered with an image of the blessed Saviour, which was subsequently sold for ten times its weight in gold. When the Persians were defeated at Cadesia, and the religion of Zoroaster was overthrown by Omar, the rigid conqueror remorselessly destroyed a carpet found in the palace of Khosras, consisting of silk, gold, and precious stones,—the ruby, the emerald, the sapphire, the beryl, the topaz, and pearl, being arranged with such consummate skill, as to represent trees, fruits, and flowers, rivulets and fountains, roses and shrubs, of every description. In describing the encampment of the army of the Caliph Moctadis, on the banks of the Tigris, Abulfeda states that there hung in the palace 38,000 pieces of tapestry, 12,500 of which were of silk, bordered with gold; and we are also told that Nadir Shah had a tent of scarlet broadcloth, lined with satin, and covered with birds and beasts in pearls, diamonds, rubies, and other precious stones. Embroidery was extensively practised in Mesopotamia about the end of the ninth century. It is an art for which that country has always been celebrated; and it is probable that from the banks of the Euphrates it was first introduced into Bengal.

Mr. Wyatt observes that the commerce of Constantinople in precious textile fabrics had probably become very nearly extinct before the end of the Crusades; the other countries of Europe either making their own stuffs, or importing them from a nearer emporium; and he adds, that "when we consider the various apparels and orfrays required in a single set of priest's vestments, we can easily believe that the trade of the *brodeurs* was by no means an idle one." That it was most extensively and successfully carried on in our own country we must now proceed to show.

The influence exercised by the Roman conquerors and civilizers of Britain on the textile arts was necessarily small, and must have been obliterated soon after their departure. The Saxon ladies, however, were expert needlewomen; and we cannot doubt that the two silken vests presented in 790 by the Emperor Charlemagne to Offa, king of Mercia, were highly-decorated garments. In the poem of Beowulf we read that "in the great wine-chamber there shone, variegated with gold, a web upon the walls, in which many wonders to the sight of each of the warriors that would gaze on it became visible." Passing over some other scattered notices of this early period, we may at once advert to the very oldest existing specimen of embroidery, which, from its intimate connection with our history, we are tempted to claim as a work of English art—the celebrated "Bayeux Tapestry." An immense amount of learning and research has been bestowed upon the origin and purpose of this remarkable production,* and some ingenious attempts have been made to overthrow the generally received opinion

^{*} It was not till the year 1730 that the existence of this valuable relic was made known to antiquaries. Some time previously, M. Lancelot was examining the MSS. of M. Foucalt, Intendant of Normandy, when he discovered an illuminated drawing of part of this tapestry, which was afterwards seen by Père Montfauçon. The latter sent a copy of the drawing to Bayeux, where it was at once recognized by the canons of the cathedral as representing part of an ancient textile fabric which from time immemorial had been displayed in the choir of their church annually on the festival of St. John. Montfauçon published some engravings of the tapestry in the year above mentioned; and it at once excited the interest which it so well merits. The Abbé de la Rue (honorary canon of Bayeux) in the year 1824, ascribed the tapestry to Matilda the Empress, daughter of Henry I.; and Mr. Bolton Corney, in 1836 and 1838, contended that, instead of being a gift from either the first or the second Matilda, it was executed at the cost and under the superintendence of the chapter. In 1803 the tapestry was removed by Buonaparte to Paris, and there exhibited; and on its return to Bayeux it was placed under the charge of the municipality instead of the cathedral authorities. It is now in the hotel of the prefecture, and is coiled round a drum, and exhibited by being drawn slowly over a table.

that it was the work of Matilda, the wife of the Norman Conqueror, or was at least executed under her superintendence, as a gift to the chapter of Bayeux cathedral, in commemoration of the conquest of this island by her lord.* No theory, however, has been broached which admits of our assigning to it any other date than the eleventh century; and indeed its internal evidence is conclusive on this point. The Bayeux tapestry is familiar to all classes of readers, from the repeated descriptions and copies of portions of it which have appeared; and the engravings published by the Society of Antiquaries from the careful drawings of the late Mr. Charles Stothard,† render any minute explanation of it unnecessary. It is a strip or web of brownish-coloured linen cloth, about 19 inches in width, by 226 feet in length, and without seam, upon which the story is worked in worsted thread of different colours. This story, we need not say, refers to the events preceding and attending the Norman conquest, which it displays with much spirit and vigour, although in the rude style of art characteristic of the period. The faces of the bipeds have a cadaverous appearance, from the absence of flesh-colour in connection with the ground; whilst the quadrupeds rejoice in various tints, once warm and glowing, but now sadly faded. The design is divided into seventy-two compartments, each bearing an explanatory Latin inscription. A border runs along the top and bottom, and is ornamented with animals, birds, sphinxes, minotaurs, &c.

Amongst the entries in Domesday Book, we meet with one which is peculiarly interesting in reference to our present purpose, inasmuch as it records that a female bearing the name of Aluuid, held at Achelai, in Buckinghamshire, two hides of land, which Earl Godrick granted to her, so long as he remained Earl, on condition of her teaching his daughter to work embroidery.

During the Norman rule, throughout the era of the Plantagenets, and down even to the Tudor dynasty, warfare, religion, and the chase constituted the chief business of life. In the recesses of the cloister the monks devoted themselves to the cultivation of letters, the illumination of manuscripts, and other useful arts; whilst their pious sisters of the convent, and the noble dames whose lords were occupied abroad, solaced their solitude with the fabrication or decoration of church furniture, and the vestments of priests, the robes of state of monarchs and nobles, the surcoats of warriors, the tabards of heralds, the housings of chargers, together with banners, pennons, and other military paraphernalia; whilst in a more domestic sphere a like amount of skill was lavished in profusion upon the hangings of walls,‡ the coverings of beds, cupboards and cabinets, and the sides of books.

To enumerate the variety of patterns delineated by the industrious fingers of these ingenious artists, diversified as they necessarily were by the purposes to which they were applied, would require more space than we can devote to them. For sacerdotal and military purposes the symbols of religion and the quaint devices of heraldry were largely in request; whilst for the hangings (too often necessary "to patch a wall to expel the winter's flaw"), elaborate designs from sacred and profane history, legends of saints, and the triumphs of the chase, were wrought with a degree of patient labour almost painful in its minuteness. The early historians indeed record that our nation was remarkable "as excelling in three things: goldsmiths' work, the illuminating of manuscripts, and the embroidery of vestments." §

This was especially the case during the fourteenth century, when the latter art was evidently practised by males as well as females; and subjected as a trade to certain

^{*} Odo, bishop of Bayeux, was half-brother of William the Conqueror, and figures more than once in this celebrated tapestry.

^{† &}quot;Vetusta Monumenta," vol. vi.

[‡] These were originally suspended against the walls by means of hooks; whence the origin of the modern term upholder or upholsterer.

[§] Wyatt's "Industrial Arts of the Nineteenth Century."

restrictions and control. That its professors were not more immaculate than their Byzantine predecessors, is shown by the fact that the embroidered garments in which the body of Edward I. was interred (in 1307), were decorated in some parts with "quatrefoils of filigree-work in metal, gilt with gold, elegantly chased, and each ornamented with five pieces of beautiful transparent glass or paste, some cut and others rough, set in raised sockets, the largest in the centre, and the other four at the angles of the quatrefoil. These false stones differ in colour: some are ruby, others a deep amethyst, others sapphire, others white, and some a sky blue." Between the quatrefoils were seed pearls, but whether these were genuine or false was not clearly ascertained.*

It is clear from many passages in ancient writers, that the English embroidery was highly esteemed abroad under the name of "opus Anglicanicum." John, Archbishop of Marseilles, by his will, dated 1345, bequeathed to his church his white "chapel" ("capella," meaning a complete suit of vestments and altar furniture), "with English orfrays;" and a charter of 1382 mentions a chasuble of red stuff "finished with orfrays from England." †

Chaucer describes a robe of purple, in which he says:—

"—— full well,
With orfraies laied was every dell,
And purtraied in the ribanings
Of dukes' stories, and of kings."

We find that Isabella, the queen of Edward II. (in 1317), gave with her own hands to Rose de Bureford, wife of a London citizen, 50 marks, in part payment of 100, for an embroidered cope; and in the Liberate Rolls of Edward III. and Richard II. the "broudatores Domini Regis" are frequently referred to. For the former monarch "a white robe worked with pearls" was made; and also "a robe of velvet cloth, embroidered with gold of divers workmanship, against the confinement of the Queen Philippa:" and Richard II. is represented in Shaw's "Dresses and Decorations" (from a contemporary manuscript), arrayed in a long robe of a deep orange-colour, embroidered all over with the badge of the white hart. Several examples of this class of work were to be seen at Manchester, of which plates 1 and 2 afford good illustrations.

Two remarkable legislative provisions of the period referred to, sufficiently prove the extent to which sumptuous personal decoration had been carried. In a statute of Edward III. (1363) it is enacted that none whose income was below four hundred marks a year should wear cloth of gold, or drapery enamelled or embroidered. And in the second year of Henry IV. (1401) it is provided that "whereas divers persons exercise the craft of brauderie, maken diverse workes of brauderie of unsuffisaunt stuff, and unduly wrought, dreding the serch of the warders of brauderie in the citie of London,"—all such inferior goods should be forfeited to the king.

Copious illustrations of this period of the art will be found in the works we have already cited, and the "Testamenta Vetusta" of Sir Harris Nicolas abounds with bequests of specimens of its products, of the greatest variety and interest. Amongst these, embroidered beds of all kinds are more frequently mentioned than anything else excepting copes and other ecclesiastical objects; and the beds (or rather bed furniture) appear in many cases to have been heirlooms.

The "State Pall" belonging to the Fishmongers' Company is at once a remarkable and admirable specimen of the art as practised about the beginning of the sixteenth century, and an illustration of a singular old custom. A similar funeral pall, of about the same date, in the possession of the Saddlers' Company (exhibited at Manchester), is engraved by Shaw,

† Pugin's "Glossary of Ecclesiastical Ornament," art. Orphrey.

^{* &}quot;An Account of the Body of King Edward I., as it appeared on opening his Tomb in the Year 1774. By Sir Joseph Ayloffe, Bart. Read at the Society of Antiquaries, May 12, 1774," 4to. pp. 9.

who says that it was formerly the custom of the City Companies to lend their palls and chapels as well as their plate, &c., for public ceremonies. And in the Gentleman's Magazine, for January, 1813, examples are quoted to show that the City Livery palls were commonly let out for funerals up to a very recent period.*

Our space will not allow us to enlarge upon the splendours of the "Field of the Cloth of Gold," in 1520, as described by the chroniclers Hall and Holinshed. The former writer gives a most gorgeous and dazzling account of the dresses and caparisons of the actors in this brilliant drama, which indeed he seems never tired of describing. One passage we may quote, referring to a peculiar application of these beautiful textile fabrics: "For," says Hall, "the roofs of the chambers [of the castle of Guisnes, where Henry VIII. was lodged] were siled, and covered with cloth of silke of the moste faire and quicke invencion that before that tyme was seen; for the grounde was white ingrailed, embowed and batoned with riche clothes of silke knitte, and fret with cuttes and braides and sundry newe castes, that the same clothes of silke shewed like bullions of fine burned gold, and the lossenges that in the same rofe were in kindly course, furnished so to mannes sight, that no livyng creature might but joye in the beholding thereof."

On the suppression of religious houses by the orders of Henry VIII., we find it reported that there was not one religious person in any of them "but that they can and do use either imbrotheryng, writing books with very fayre hand, making their owne garments, carving, painting, or some other art." Queen Elizabeth directed many sumptuary proclamations against inordinate excess in apparel, describing in detail the materials of dress which persons of different degrees should wear, although indulging herself in great magnificence of attire, as we find by the jewelled stomachers and other details of her costume represented in contemporary portraits. So strictly were her Majesty's injunctions enforced, that at one period of her reign two members of the Ironmongers' Company were chosen, with two of the Grocers' Company, to attend at Bishopsgate, from seven o'clock in the morning till six in the afternoon, to examine the habits of all persons passing through the gates.† Elizabeth was herself a mistress of the needle, and both the British Museum and the Bodleian Library possess book-covers supposed to have been embroidered by her hand. But a yet more pleasing though painful interest attaches to the labours of the unhappy Mary Queen of Scots, still affectionately preserved at Hardwick Hall; and there are few more touching passages in history than that which tells us that during her confinement at Tutbury Castle, in 1568, "all day she wrought with her nydill, and the diversity of the colours made the work seem less tedious; and she continued so long at it, till very payne made her to give over."

Embroidery continued to be practised during the reigns of the Stuarts: and amongst other notices in the diary of Evelyn, we learn that the state bed of James II., at Whitehall, cost £3,000.

By this time, however, the glory of the art had departed. The loom had not only far surpassed the needle in economy, but had at least equalled in effect its most elaborate productions. Female ingenuity sought new sources of employment, and in the reign of Queen Anne the feathers of birds were applied with questionable taste, but with much ability, to

^{*} Mr. Herbert, in his "History of the Twelve Great City Companies" (i. 72; ii. 211), says,—"That no due token of respect might be wanting in celebrating the funerals of deceased members—indeed, that they might be buried with a degree of grandeur worthy the consequence of the fraternities they belonged to—almost the whole of these fraternities appear to have had a state pall, or, as it was called, a 'herse cloth.' The well-known printer, John Cawood, left such a pall to the Stationers' Company in 1572, which is described in his will. The records of the Merchant Taylors mention their possession of three different state palls in 1562." "In 1511 (3rd Hen. VIII.) it was directed that the Goldsmiths' pall was not to be lent to any other person than a goldsmith or a goldsmith's wife. When used, the company assembled were to pray for the souls of the donors of the pall, and the beadle was to have twelve pence for his safeguard and attendance with it." Herbert mentions palls belonging to the Drapers and Ironmongers, as well as those of the Saddlers and Fishmongers.

[†] Ibid. i. 165.

the hangings of rooms, as well as for articles of costume; and Pope, before his famous feud with his fair antagonist, exclaims:—

"The birds put off their every hue, To deck a room for Montague."

A correspondent of the *Spectator*, at a somewhat later period, complains most feelingly of the rising female generation, and declares that it grieves his heart to see "a couple of flirts, sipping their tea for a whole afternoon, in a room hung round with the industry of their great grandmothers;" and the *Spectator* responds to this appeal by submitting "the following proposals to all mothers in Great Britain:—1. That no young virgin whatsoever be allowed to receive the addresses of her first lover but in a suit of her own embroidering. 2. That before every fresh humble servant she shall be obliged to appear with a new stomacher at the least. 3. That no one be actually married until she hath the child-bed, pillows, &c. ready stitched, as likewise the mantle for the boy quite finished. These laws (he adds), if I mistake not, would

Portion of a Cope (14th century) belonging to H. Bowdon, Esq.

effectually restore the decayed art of needlework, and make the virgins of Great Britain exceedingly nimble-fingered in the business."

With the late Miss Linwood, whose pictures were so long exhibited as miracles, "high art" in needlework may be said to have become extinct. It is true that the needle is still as usefully and skilfully employed in this country as at any previous period; but in the present age of cheap mechanical production it would be most unreasonable to expect such a misapplication of labour as would be involved in the reproduction of works such as those we have here had to describe.

In less civilized nations, however, embroidery is still carried to a high degree of perfection, and in the "Great Exhibition of All Nations" in 1851, a collection of beautiful and interesting specimens, -such indeed as may never again be witnessed in this country,was displayed. Examples of these, from India, China, Russia, Greece, Tunis, and Turkey, are engraved and described in Mr. Wyatt's work on "The Industrial Arts of the Nineteenth Century," which contains some exceedingly valuable details of the processes and cost

of their production, and the peculiar styles of art which characterize them.

Amongst the illustrations of embroidery engraved in the present work, is a cope belonging

to H. Bowdon, Esq.; and as our references in the preceding pages to ecclesiastical vestments have been merely incidental, we may be allowed, before concluding this branch of our subject, to refer to them somewhat more particularly.

The cope was the most important of the priest's garments. It is described by Pugin as a vestment like a cloak, worn in solemn processions, at vespers, during the celebration of the mass, at benedictions, consecrations, and other solemn occasions. He adds, that it derived its name from the Latin *cappa*, or hood, it having originally had a hood attached to it, which could be drawn over the head. In shape it forms an exact semicircle, and along the straight edge runs a band of embroidered work called the orfray,* which hangs down from each shoulder when the cope is worn, and frequently contains a number of images in tabernacle-work.†

Copes were made after the Roman manner (cappæ Romanæ), of silver and variously-coloured fabrics in the ninth and eleventh centuries; and it appears that William the Conqueror sent to the abbey of Cluny a cope, nearly all of gold, in which nothing scarcely appeared but gold and amber, and pearls, and jewels; and all round the bottom edges hung golden bells,—the latter (either of gold or silver) being a not uncommon appendage to copes.

Embroidered and jewelled copes were common in the thirteenth century, being the most costly and magnificent of all the ecclesiastical vestments. We have referred in a preceding page to the famous Cappa di San Leone, and as an illustration of English examples, we may mention that presented by Henry III. to the Bishop of Hereford in 1241, which was of red silk embroidered, and cost £24. 1s. 6d.; estimated as equivalent to more than £360 in present money. In the archives of Poitiers there is preserved a bill of Colin Joyle, who received thirty-five crowns for making an embroidered cope for the use of Charles VII.; for the cope was worn by kings and popes, as well as the inferior clergy. In the year 1404 William of Wykeham bequeathed to the church of Winchester his new vestment of blue cloth, striped and embroidered with lions of gold, with thirty copes of the same cloth, embroidered with the history of Jesse in gold; and, in 1480, Elizabeth, Lady Latimer, left to the Collegiate Chapel of Warwick a pair of goodly vestments of white damask, powdered with bears and ragged staves of gold; directing that her scutcheon should be well and richly embroidered in the orfrays.‡

Several examples of copes and their orfrays are engraved in the work by Pugin above quoted, and the author refers to several ancient specimens still preserved in England. There are copes at Durham, § Ely, and Hereford cathedrals; at Black Ladies, Staffordshire; at St. Mary's College, Oscott; at the Jesuits' College, Stonyhurst; and at the churches of Chipping Camden, Gloucestershire, and Weston-under-Wood, Northamptonshire.

From old inventories of church furniture, it appears that Lincoln Cathedral possessed at one time thirty copes of velvet, cloth of gold, damask, satin, "bandekyn," | &c. richly

^{* &}quot;This word (in French, orphroi) is explained by Du Cange as frange d'or. It signifies a band of gold and rich embroidery affixed to vestments. Its Latin name, aurifrisium, expresses accurately its meaning and etymology."—Pugin. The Rev. Mr. Hartshorne, however, appears to trace an analogy between aurifrisium or aurifrigium and the opus Phrygium of Pliny. Ornamented fringes and borders, it will be remembered, are frequently mentioned in the Scriptures.

[†] Pugin's "Glossary of Ecclesiastical Ornament," art. Cope.

[‡] Nicolas's "Testamenta Vetusta."

[§] In Sanderson's "Antiquities of Durham Abbey" (p. 85) we read, that "in the Holy Thursday procession that holy relique, St. Cuthbert's banner, was carried first, with all the rich copes belonging to the church, every monk one. The prior had an exceedingly rich one of cloth of gold, which was so massy that he could not go upright with it, unless his gentlemen, who at other times bore up his train, supported it on every side whenever he had it on."

A mixed fabric of silk and gold. "The name is derived from the purpose to which the material was first applied; namely, to form the baldacchino, or canopy placed over the high altar of Italian churches on great occasions, and also over the thrones of princes. Alberti tells us that baldacchino is also the name of a Levantine stuff which comes from Babilonia, called by the Levantines Bagdad, and by our ancestors Baldacco."—Wyatt's "Industrial Arts of the Nineteenth Century."

embroidered, and many of them bearing the names and armorial bearings of the donors; and as many as ninety-four copes, of different materials, are enumerated as belonging to the Abbey of Peterborough.

The great bulk of the splendid vestments in possession of the Church were pillaged and destroyed at the dissolution of monasteries; and we probably owe the existence of those which remain to the fact that the cope is one of the few adjuncts of the Romish ritual adopted after the Reformation; as it is directed by the twenty-fourth canon to be worn by the clergy of the Church of England. This rule, however, gave offence to the Puritans, and has seldom been acted upon except in cathedral churches. At Durham it was used, during the celebration of the Communion, till a late period in the last century; and the Rev. Mr. Ormsby* informs us that "Bishop Warburton, who held a prebendal stall in that cathedral until his death in 1779, was the first who laid it aside. His temper, which was none of the best, was wont to get uncommonly ruffled by the high collar of the cope getting between his neck and his full-bottomed wig. At last, in a fit of more than ordinary irritation, he threw away the cope, and vowed he would never wear it again. After this they were gradually laid aside by the other prebendaries, and at last fell into total disuse."

The cope is still worn by the Archbishop of Canterbury at the coronation of the sovereign, and is shown in Sir George Hayter's picture of the Coronation of her present Majesty, as well as in Leslie's picture of the administration of the Sacrament on the same occasion.

Antependia, or altar frontals, stoles, chasubles, maniples, and albs, were alike enriched with needlework and jewels; and from the French terms chasublier, étolier, &c., applied to different classes of artificers, it is evident that their fabrication furnished employment for various kinds of workmen.

In speaking of the extinction of this interesting art at the present day, we must make a special reservation in regard to the productions of Mr. Gilbert French, who for some years past has carried on a most successful and extensive manufacture of church furniture, &c., at Bolton-le-Moors. The most elaborate works of Mr. French's establishment are sent to America; and it further appears that our colonies receive a better class of these articles than are required for home use.†

We must now proceed to consider the ornamental fabrics generally known as tapestries. The Greek word $\tau \alpha \pi \eta s$ or $\tau \alpha \pi \iota s$, and the Latin tapetum signified a covering for the bed or

floor. The word tapet is applied by Spenser to natural foliage, as the tapestry of the grove.

M. Achille Jubinal, in his "Recherches sur l'Usage et l'Origine des Tapisseries," is of opinion that the "cunning work" of the veil of the Holy of Holies in the Tabernacle, which had figures of cherubim, and which is mentioned in the book of Exodus, was the product of the loom; and it is a matter of doubt whether some kind of weaving or embroidery predominated in the famous works of the Babylonians. Sir Gardiner Wilkinson observes, that the ancient Egyptians not only used carpets in their houses, but even spread them for their sacred animals. These carpets, he adds, were of wool, but the fragments of them which exist have been so imperfectly preserved that it is impossible to form any opinion of their quality.

Carpets and similar fabrics were introduced into Europe from the East, where their manufacture has been practised from time immemorial, and is still carried on with great skill, as the productions of India and Turkey testify. Hence the tapestries used in France in the Middle Ages were called tapis Sarrazinois, or tapis de Turquie.

^{* &}quot;Sketches of Durham," 1846, p. 129.

[†] The technical operations of embroidery are described in Mr. Hartshorne's work, already referred to, and also in Miss Lambert's "Practical Hints on Decorative Needlework," 16mo., 1847; and we may here acknowledge our obligations for many of the above-mentioned facts to these writers, as well as to the "Art of Needlework," edited by the Countess of Wilton.

Tapestry is said to have been introduced in France as hangings for walls as early as the ninth century; and in the year 1205 there was a manufactory of such hangings at Poitiers.

The walls of the palaces of Henry III. were painted, and in one instance it is especially directed that the new pictures should be the same as those with which the rooms had been previously adorned. The "Painted Chamber" in the Palace of Westminster was a work of this era, and a good example of the style of decoration referred to. In the fourteenth century, however, when, as we have shown, English embroidery had an European reputation, it is evident that tapestry was also one of the trades of the metropolis. In the 17th Edward III. (A.D. 1344), a writ was issued de inquirendo de mysterâ tapiciorum of London.

In 1392, Richard Earl of Arundel bequeathed by his will "the hangings of the hall, which was lately made in London, of blue tapestry with red roses;" and we find mentioned in the will of the illustrious John of Gaunt, "the piece of Arras which the Duke of Burgoyne gave me when I was at Calais; and also two of the best pieces of Arras, one of which was given me by my lord and nephew the King, and the other by my dear brother the Duke of Gloucester (whom God pardon), when I lately returned from Spain."

The manufacture of tapestry had been most successfully practised in Flanders as early as the twelfth century. It was carried on at Brussels, Antwerp, Oudenarde, Lisle, Tournay, Bruges, and Valenciennes, but more especially at Ypres and Arras; and the productions of the last-mentioned town became so celebrated, that the best kind of tapestries, whether made there or not, became commonly known as "Arras." According to Jubinal, the manufactures of Arras were chiefly of wool, hemp and cotton being only occasionally used; and hangings of silk and gold thread being made at Florence and Venice. "Tapestry of Arras," representing the battles of Alexander the Great, were sent by the king of France, in 1396, to the Sultan Bajazet, as a part of the ransom of some captives taken at the battle of Nicopolis.*

The manufacture of tapestry was probably introduced into England by the Flemings, when they settled in this country. Chaucer includes a "tapiser" amongst his Canterbury Pilgrims; and in 1398, King Richard II. made a special grant of the Castle of Warwick, and other possessions, to Thomas Holland, Earl of Kent, in which he specially mentions a suit of "Arras hangings" in Warwick Castle, containing the combat of the famous Guy, Earl of Warwick, with the dragon, and which it is evident were highly valued.†

In the following year (1399) Isabella, the queen of Charles VI. of France, entered Paris in state: on which occasion "all the strete of Saynt Denyce was covered over with clothes of sylke and chamlet, suche plentie as thoughe suche clothes shulde cost nothynge. And I, Sir Johan Froissart, author of this hystorie, was present and sawe all this, and had great marveyle where suche nombre of clothes of sylke were goten; there was as great plentie as though they had been in Alysandre or Damas [Damascus]; and all the houses on bothe sydes of the great strete of Saynt Denyce, unto the bridge of Parys, were hanged with clothes of Arras of dyvers histories, the whiche was pleasure to beholde."‡

Another interesting illustration of our subject is furnished by the well-known Coventry Tapestry, which adorns the north end of St. Mary's Hall, in that city, occupying the space behind the dais and beneath the windows. This work is thirty feet long by ten feet high, and represents the marriage of Henry VI. and his queen, Margaret. It is a very skilful production, as may be seen by the engravings in Mr. Shaw's work on the "Dresses and Decorations of the Middle Ages;" and there seems reason to believe that the figures are portraits of the persons represented. It is assigned by Mr. Planchè to the latter part of the fifteenth century.

In the year 1503, the palace of Holyrood was the scene of the marriage of Margaret, the daughter of Henry VII., to James of Scotland, and on that occasion the hanging of the Queen's great chamber represented the "ystorye of Troye towne," whilst that of the bridegroom was hanged with "the story of Hercules, together with other ystorys."*

"Counterfeit Arras" hangings are mentioned in the will of Katherine, Lady Hastings, dated in the year last mentioned; thus furnishing indirectly a proof of the value attaching to the genuine productions of the Flemish looms.

Tapestry hangings, both of foreign and native manufacture, were in great request during the reign of Henry VIII. An act passed in the fourth year of that monarch's rule (cap. 6), mentions incidentally the importation of four thousand pieces of tapestry in one ship; and his Majesty by letters patent appointed John Mustian as his "arras maker." At the Field of the Cloth of Gold, tapestry and embroidered fabrics must have shone in gorgeous rivalry; and that the sovereign's taste for these choice productions was emulated by his princely subject, Wolsey, we have abundant evidence. The hangings of the cardinal's apartments (cloths of gold and silver, and pictorial subjects) are particularly mentioned in his inventories. The magnificent hall of his palace at Hampton Court is still adorned with a fine series of tapestries representing the History of Abraham, and long popularly regarded as a regal or imperial gift to the illustrious prelate and statesman. Mr. Jesse† remarks that—"In the tapestry of the hall of Hampton Court, the gold lies in broad spaces in the most perceptible splendour. The early history of those magnificent hangings has not yet been ascertained, but works of such beauty and of such intrinsic value must have been carefully recorded in the inventories of the Crown. They might very probably have been part of the magnificent gifts interchanged between Henry the Eighth and Francis the First at the celebrated Field of the Cloth of Gold. They are, in all likelihood, of that period; and it is well known that the French monarch, who patronized the fine arts in so regal a manner, had not overlooked the works of the loom. He engaged Primaticcio from Italy, expressly to make designs for tapestry, which was executed at a manufactory founded by this monarch at Fontainebleau, and placed by him under the direction of Babon de la Boundaisière, and where the introduction of gold and silver thread was carried to a great extent. Still more probable is it, however, that these tapestries were presented to Cardinal Wolsey by the Emperor Charles the Fifth. Such costliness of material would accord well with the splendour of a potentate who swayed not only the destinies of Germany and the Low Countries, but of the gold provinces of South America. There is much in the style of Raphael in the treatment of the subjects. One boy in particular appears to have stepped from the cartoon of the Beautiful Gate."

It would appear, however, that the above conjectures do not assign the production of these works to their true source; for the following letters from Sir Richard Gresham to Cardinal Wolsey (which are given by Sir Henry Ellis in his third series of "Original Letters"), prove that they were executed to the order of the proud churchman, who is therefore entitled to the credit of having been a munificent patron of the Flemish tapestry-workers:—

"Your Grace spake unto me for serteyn clothes of gold for to hange your clossett at Hampton Cortte: I have now cum viij peces, wyche I shalle bringe to your Grace the next weke God wyllynge.

"From London the ixth daye of March Ao xvcxxti.

"By your servytor,

"To my Lorde Cardynalls goode Grace."

"RICHARD GRESSHAM.

^{*} Leland's "Collectanea," iii. 295.

The second letter is as follows:—

"My Lorde,—Y' may pleasse your Grace to wette I have takyn the messures of xviij Chambres at Hamton Cortte and have made a Boke of them that your Grace shulld sette your hande. And wher as your Grace hade suche bessynes that I cowde nott speke with your Grace, and for the cawsse the Martte ys alle moste endyd, I can nott tarre no longer. Your Grace shall understond that I am departyd toward the parties of beyonde the See; and at my comynge thyder, God wyllynge, I shall cawse the sayd Hanggyns to be made with deligense a cordyngly. And wher as the said Hangyns wyll a mownte oon M1 marks and more, and the makyrs of them be but power men, and must have monye to fore hande for proveycion of ther stuffe, I shall laye howtt for your Grace a preste of money to them before hande, and at my comyng home I shall certify yor Grace what I have doon.

"Wrytten at London the xiiijth daye of Octobr Ao xvcxxti With the hande of your owne servitor,

"To my Lorde Cardinalles goode Grace." "RYCHARD GRESSHAM.

These tapestries formed a main ornament on the walls of the Exhibition, and a portion of one piece is given in plate 6. The gold thread and colours of these hangings are so faded and turned in colour, that it was thought better to give it in one tint alone.

The Harleian MS. 1419 gives a curious inventory of the tapestries at the Tower of London, Durham Palace, Windsor Castle, and other palaces of Henry VIII.; including, amongst others, the following subjects: Godfrey of Boulogne, the Three Kings of Cologne, the Emperor Constantine, St. George, the story of Hercules, Fame and Honour, the Triumphs of Divinity, the Stem of Jesse, King Solomon, the stories of Thebes and Troy, the Prodigal Son, Esther, the Siege of Jerusalem, Charlemagne, Hawking and Hunting, &c. Of these, the story of Hercules, the Prodigal Son, and the Siege of Troy, were evidently special favourites, as they are frequently mentioned in historical documents.*

Besides Mustian, the king's arras maker, this kind of work was carried on in the latter part of the same reign by Mr. Sheldon, a private gentleman, who established at Burcheston, in Warwickshire, a manufactory superintended by an artist named Robert Hicks, in which some pieces were made consisting of maps of English counties; and some fragments of these are mentioned in Walpole's "Anecdotes of Painting," and are said to have been preserved in his collection at Strawberry Hill. In the will of Mr. Sheldon, he mentions Robert Hicks as "the only auter and maker of tapestry and arras within this realme." Three of these large maps hang, in good preservation, in the hall of the Philosophical Society's Museum, York.

At the manufactory founded by Francis I. at Fontainebleau, Flemish workmen were employed. This establishment was kept up by his successor Henry II., and in the year 1597 Henry IV. is said to have re-established a manufacture of tapestry on the premises of the Hôpital de la Trinité at Paris, which had suffered by the disorders of the preceding reign. After this period it again declined till it was taken in hand by Colbert, the minister of Louis XIV., who founded the since celebrated manufacture of the Gobelins. It appears that in the reign of Francis I. two brothers, named Gilles and Jean Gobelin, introduced from Venice the art of dyeing scarlet, and established workshops on a large scale in the Faubourg St. Marcel of Paris. The undertaking was at first considered so hazardous, that it was called

^{*} The rebuilding of Troy by Priam is represented in a French MS. of the beginning of the fifteenth century, engraved in Shaw's "Dress and Decorations of the Middle Ages;" and it may give some idea of the manner in which such subjects were treated both in illuminations and in tapestries. The siege of Troy was also represented in one of the tapestries of the Painted Chamber; and this was taken down in the year 1800, and sold in 1810 for £10. It is further stated, that so lately as 1846 a piece of it was in the possession of Mr. Pratt, of Bond-street. M. Jubinal, in "Les Anciennes Tapisseries Historiées," gives descriptions, with numerous folio plates, of the most remarkable tapestries executed from the eleventh to the sixteenth century.

Folie Gobelin, but the excellence of its productions attained for it a complete success. In 1677, however, Colbert, by virtue of an edict of his royal master, purchased the premises, which he styled the Hotel Royal des Gobelins, and established there a great manufactory of carpets and tapestry. The celebrated Le Brun was appointed director-in-chief, and under his superintendence some much-admired pieces were produced, including the Battles of Alexander the Great (a set of which may be seen at Hampton Court), the Four Seasons, the Four Elements, and the principal events in the reign of Louis XIV. This establishment soon became the parent of similar manufactories at Beauvais and Aubusson, and they have all continued to flourish under the fostering patronage of the state, specimens of their costly and magnificent productions being abundant throughout Europe.

The prices of the Flemish tapestries in the reign of Queen Elizabeth are illustrated by a letter from Gilbert Talbot to his father, the Earl of Shrewsbury, dated 1576,* in which he says, "I have seen many fayre hangynges. Yo' L. may have of all prycesse eyther iis. a styck,† or vii grotes, iiis., ivs., vs., or vis., the styck, even as yo' L. will bestow. But there is of vs. the styck that is very fayre; but unless yo' L. send upp the measure of what depthe and bredthe you wolde have them, suerly they will not be to yo' L. lykynge; for moste of them are very shallow, and I have yet seene none that I thynke depe inoughe for a great chamber."

In the reign of Elizabeth were executed the series of ten tapestries of the destruction of the Spanish Armada, which were hung in frames upon the walls of the House of Lords until its destruction by fire in 1834. These were designed by Henry Cornelius Vroom, a painter of Haarlem, and were made in Flanders. A portion of one of the pictures was cut away to make room for a gallery for the trial of Queen Caroline, and is now in the possession of the Corporation of Plymouth.‡

The culminating point in the history of tapestry was unquestionably the employment of the genius of Raffaelle, at the instance of Leo X., to make designs from which were executed, at Arras, a series of pictures from the New Testament, for the adornment of the walls of the Sistine Chapel. These designs were at first limited to ten in number; to which a further commission for an eleventh piece (for the altar of the chapel) was added about the middle of the year 1514. Raffaelle received 434 ducats for his cartoons, which are thirteen feet high, by from seventeen to eighteen feet wide. When completed, they were sent to Arras, and the set of tapestries from them was finished under the superintendence of Bernhard van Orley, a pupil of Raffaelle, and ready to be hung up on the 26th December, 1519. The value of each of the tapestries was estimated at the time at 2,000 ducats. These precious works were carried off in the sack of Rome in 1526-7 by the Spaniards, but were afterwards restored by Montmorenci. They were again taken by the French in 1798, and it is stated were sold to a Jew at Leghorn, who burnt one of them to extract the gold from it. This is, at all events, the only explanation of the fact that the eleventh tapestry (the "Coronation of the Virgin") has disappeared. The other ten were purchased by Pius VII. in 1808 for 1,300 crowns, and in 1814 were hung in the upper apartments of the Vatican, where they remain, in a greatly dilapidated state.§

^{*} Lodge's "Illustrations of English History."

⁺ From the German Stück, a piece.

[‡] The whole series has been correctly engraved on a large scale by Pine.

[§] The original cartoons remained in the Netherlands until Rubens directed the attention of Charles I. to them, by which time four had disappeared. The remaining seven were bought by that monarch, and after his execution they were purchased by Cromwell for the English nation for £300; and, we need hardly add, are now preserved at Hampton Court, in the gallery built by Wren expressly for their reception. The subjects of the eleven cartoons were as follow:—1. Death of Ananias; 2. Christ's Charge to Peter; 3. Paul and Barnabas at Lystra; 4. Elymas the Sorcerer struck with Blindness; 5. The Conversion of St. Paul; 6. Paul Preaching at Athens; 7. Stoning of St. Stephen; 8. Miraculous Draught of Fishes; 9. Peter and John at the Beautiful Gate; 10. Paul and Silas in Prison; 11. Coronation of the Virgin. The fifth, seventh, tenth, and eleventh of these are missing; and as the tapestry of the last has also been destroyed, its design is only known by old engravings.

There were other sets of these tapestries executed at Arras from the same cartoons; and one set in particular (probably the second) is supposed to have been made expressly for King Henry VIII. It descended as royal property to Charles I., and on the sale of his effects, was purchased for the Duke of Alva by the Spanish ambassador. It afterwards passed through various private hands, and a few years since was purchased, through the intervention of Chevalier Bunsen, for the Royal Museum of Berlin.* The other Arras copies from Raffaelle's designs are at Mantua, Milan, and Dresden.

When Charles I. obtained possession of the cartoons, he allowed at least five of them to be used for the production of other tapestries at the works established at Mortlake, in Surrey, in which he took especial interest; and several of the tapestries there produced still exist in the mansions of the English nobility. Duplicates of these tapestries were contributed to the Exhibition by the Duke of Buccleuch and Mr. Miles, of Ford Abbey. (See plate 6.) There is one (that of Elymas the sorcerer) at Hampton Court, which is described by Dr. Waagen as faded in colour, but displaying great merit in execution.† There are some tapestries from Raffaelle's cartoons in the Crystal Palace at Sydenham.

The piece engraved in the present work is from the set belonging to Mr. Miles.

The manufactory at Mortlake, above alluded to, was established by Sir Francis Crane, in 1619, with the assistance of a grant of £2,000 from James I. The designs were originally supplied from abroad, but subsequently an artist named Francis Cleyne, or Klein, a native of Rostock, in the duchy of Mecklenburg, was engaged; and in 1625 Charles I. bestowed £100 a year upon this artist, which he enjoyed until the breaking out of the Civil War. ‡ The king in the same year commuted a grant which he had before made to Sir Francis Crane of £1,000 a year, into a sum of £2,000 annually for ten years; this money being granted "towards the furtherance, upholding, and maintenance of the worke of tapestries, latelie brought into this our kingdome by the said Sir Francis Crane, and now by him and his workmen practiced and put in use at Mortlake, in our countie of Surrey." By the same document the king ordered the payment of £6,000, due to the establishment for three suits of gold tapestries. Charles gave a further proof of his interest in the matter by purchasing the whole of this great establishment from Sir Richard, the brother and successor of Sir Francis Crane; and, like all other royal property, the place was seized during the Civil War. The works however were still carried on, and in 1651 the establishment contained one room 82 feet long by 20 feet broad, in which were several looms, and another about half as long, with six looms.§

After the Restoration, Charles II. displayed much interest in the subject, and in 1663 an act was passed to encourage the linen and tapestry manufactures of England, and to restrain the great importation of foreign linen and tapestry. The king endeavoured to revive the works at Mortlake, which had fallen into decay, and employed Verrio to make some designs, but his efforts appear to have failed; and perhaps the latest notice of the existence of the establishment is to be found in Evelyn's "Mundus Muliebris" (1690).

In more recent times there has been no attempt in England to apply this beautiful but costly manufacture to any other purpose than to the production of carpets and similar articles.

The art of PRINTING coloured patterns on textile fabrics, as practised in modern times, is one which involves perhaps the highest degree of scientific knowledge, and the most

^{*} The number of tapestries in this set is not mentioned.

[†] For the above notice of these celebrated cartoons, and the tapestries executed from them, we are indebted chiefly to Dr. Waagen's "Treasures of Art in Great Britain," 8vo. 1854, vol. ii. p. 369, which is more precise and correct than other accounts of them.

[‡] Rymer's "Fædera," xviii. 112.

[§] See Dallaway's edition of "Walpole's Anecdotes of Painting."

ingenious application of mechanical arrangements, of any in the whole range of the industrial arts. Most of the colouring matters employed as dyes do not themselves produce a lasting colour: they require, therefore, the application of chemical salts and acids to render them fast or durable. These are technically termed mordants; and other substances known as discharges and resists are applied to the fabric, either to remove the dye in certain portions of the pattern, or to resist its application altogether in others.

Although the scientific principles which govern and regulate the employment of these materials have not been thoroughly understood until within the last hundred years, and are still receiving further illustration and practical improvement, similar bodies have been employed for a like purpose from the remotest antiquity. Pliny informs us that "in Egypt they stain cloths in a wonderful manner. They take them in their original state quite white, and imbue them, not with a dye, but with certain drugs, which have the power of absorbing and taking colour. When this is done, there is still no appearance of change in the cloths; but so soon as they are dipped into a bath of the pigment which has been prepared for the purpose, they are taken out properly coloured. The singular thing is that, though the bath contains only one colour, several hues are imparted to the piece; these changes depending on the nature of the drug employed: nor can the colour be afterwards washed out."*

According to Mr. Layard, the art thus practised by the Egyptians was known also to the Assyrians; and it has undoubtedly been employed in India and in China from a period beyond the reach of history.

Until the last century, India was indeed the chief source from whence Europe derived its supplies of printed fabrics. The word *chintz*, of Hindoo or Persian origin, signifies spotted or stained; and the material so called was chiefly produced in the province of Malabar, at a seaport town named Calicut, which has given the familiar name of *calico* to the cotton fabric there manufactured.

Dr. Royle observes that India possessed "all the raw materials for producing a great variety of colours. Some of these," he adds, "are of so conspicuous a nature—such as the large flowers and plants—that the desire to transfer these colours to their clothing must early have occurred to so civilized a people as the Hindoos. We know that they have long possessed and knew how to manufacture the several salts which have long been employed as mordants. The Indians were found exercising the art of calico-printing when first visited by Europeans." The Museum of the Société Industrielle at Mulhausen contains some very ancient and elaborate specimens of Indian textile printing.†

The importation by the East-India Company of the chintzes of Calicut, and other printed fabrics, excited much jealousy among the silk and woollen manufacturers of England at an early period; and from 1680 downwards various legislative measures have been passed for the protection of the English manufacturers. The slightest acquaintance with the literature and art of the reign of Queen Anne (1702—1714) proves the rage which then existed for Indian chintzes and similar exotics; and which would go far to justify the complaints of

^{*} Natural History, xxxv. 2.

[†] Some very interesting specimens of the printing-blocks and printed fabrics of modern India were displayed in the Great Exhibition of 1851, the latter evincing that high degree of taste in colour and design which characterizes all the artistic works of India. Dr. Royle informs us that "the cloth-printers at Dacca are employed to stamp the figures on cloth which is to be embroidered. The stamps are formed of small blocks of khutul-wood (Artocarpus), with the figures carved in relief. The colouring matter is a red earth imported from Bombay, probably the so-called 'Indian earth' from the Persian Gulf. Printing in gold and silver is a branch of the art which has been carried to great perfection in India, judging from the several specimens sent from very different parts, as well upon thick calico as upon fine muslin. The size which is used I have not found mentioned; but in the Burmese territory the juice of a plant is used, which no doubt contains caoutchouc in a state of solution. Printed calicoes of large size, and suitable patterns, are sometimes used for covering the floor in India; and of these some fine specimens from Ahmedabad, and from Mooltan, were sent to the Exhibition."—Lectures on the Results of the Great Exhibition, 8vo. 1852, vol. ii. p. 501.

native manufacturers. In 1700 Indian calicoes were absolutely prohibited. This measure, however, became practically a dead letter. High duties were then imposed upon such articles; and at length, in 1720 and 1730, the mere wearing of printed cottons was first entirely prohibited, and next allowed, if of British manufacture, solely on payment of a heavy duty. A far wiser spirit has prevailed during the present century, as the millions who now enjoy the inexpensive luxury of cotton prints can testify.

The history of calico-printing in Europe is somewhat obscure. We find, however, that in 1696 a small printing establishment was founded at Richmond, in Surrey, by a Frenchman named Maurillon. Early in the eighteenth century there was a large establishment for cotton-printing at Bromley Hall, Essex; and about 1786 the art took root in Lancashire, where it is unnecessary to say it has since attained its highest development.

From the fact that the first cotton print-works in this country were founded by a Frenchman, it might be inferred that the art came to us from France. But its modern history in France substantially dates only from the year 1789, when, under the auspices of Napoleon I., a large factory was established at Jouy by Oberkampf. This led to the formation of many similar establishments in Alsatia; and from that time to the present the art has been successfully carried on in that district, and other parts of France. Mulhausen, the chief seat of French calico-printing, is identified with the name of Daniel Kocchlin, who made vast improvements in the application of science to the various processes. The records of the Industrial Exhibitions of Paris amply prove his meritorious exertions, and those of his coadjutors and competitors, many of whom are honourably mentioned by Mr. M. D. Wyatt, whose work we have so often referred to, and whose intimate acquaintance with the industrial arts of France peculiarly qualifies him to award merit where it is due.*

As at Mulhausen, so, on a smaller scale, at Rouen, the trade of calico-printing has been steadily carried on; and the latter city has to boast of M. Perrot, who, besides other improvements, introduced the machine, named after him, the Perrotine, which we shall have to notice below.

Our space will not admit of any account of the various chemical substances employed in this art, nor of any lengthened description of its mechanical processes. Originally all the printing was done by means of wooden blocks worked by hand. The design having been drawn on paper, was transferred to the surface of a slab of sycamore-wood, about nine inches by five, fixed upon a block of deal, and was then cut in relief; certain ingenious contrivances, such as the introduction of copper lines, masses of felt, &c., in different parts, being resorted to, to prevent rapid wear, and to give broad masses of colour where required. These primitive blocks printed one colour only, and when charged with the colour spread upon an elastic surface, conveyed the impression to the cloth by the blow of a light mallet. This operation required much care to insure regularity in the pattern; and that it was very tedious and laborious is evident from the fact that no less than two thousand and sixteen separate blows of the mallet were necessary to print in three colours a piece of calico twenty-eight yards long by thirty inches wide.

Great indeed was the improvement effected when it was found by Nixon, in 1785, that the same effect of monochrome printing could be produced by subjecting the fabric to the pressure of a copper plate instead of a wooden block, engraved in intaglio instead of in relief; and the practical convenience of the operation was still further increased by engraving

^{*} M. Blanqui, in his "Letters on the Exhibition of 1851," observes that "Alsatia is a model manufacturing country; machine manufactures, spinning, weaving, printing establishments,—all are united there. It is the land of mechanists, designers, and chemists. Nowhere are dye-stuffs more skilfully used than in that district; nowhere are dyers' woods, madder, cochineal, orchil, &c. applied with more brilliancy or fastness. It is to Alsatia that Europe is indebted for its partiality to those light and graceful fabrics which nowadays decorate, at such small cost, all our dwellings, and which so economically clothe all women."

the pattern on the surface of hollow copper cylinders instead of flat plates; by which method the engraved pattern could of course be printed ad infinitum, by the mere revolution of the texture around the cylinder; thus avoiding the tedious repetition of printing from flat surfaces. It was of course necessary to adjust the dimensions of the pattern, or a certain number of repetitions of it, to the exact circumference of the cylinder, and one cylinder could only print a single colour.

The rapid wearing out of copper cylinders, and the incessant labour of reproducing them, was soon found objectionable; and the history of manufactures furnishes few more remarkable instances of the removal of obstacles than in this case. About the year 1808, Mr. Lockett, of Manchester, applied to cotton-printing the beautiful invention of Mr. Perkins for multiplying steel engravings. This process is now commonly applied to the production of dies; and its application to cylinder-printing may be briefly described as follows:—Instead of the large copper cylinder previously employed, the artist engraves in intaglio upon a smaller cylinder of soft steel one copy of the design, which is arranged to cover the whole surface of the cylinder, and which is then termed the die. This is hardened by Mr. Perkins's process, and, by means of powerful pressure, is made to transfer the pattern in relief to a similar cylinder of soft steel, called the mill. The latter being hardened, is in turn made to transfer the necessary repetitions of the pattern to a copper cylinder of the ordinary kind, which thus receives the design as from the hand of the engraver.*

Notwithstanding the application of metal-printing, the use of wooden blocks continued, and the Perrotine, already mentioned, was extensively employed. This machine consisted of three blocks, so arranged as to be brought to bear upon the surface of the cloth, which was passed over an iron beam in the form of a prism, the pressure being regulated by springs. The colouring material was applied to the blocks by brushes worked by machinery; and as compared with the original hand-blocks, the Perrotine effected a very great saving of labour. By a further improvement in machine block-printing, a number of blocks, sufficient to print a piece of calico lengthwise, were so arranged as to impress one colour on the cloth—a similar set adjoining them being made to print a second colour across the fabric; as many other sets being added as were necessary to complete the pattern. In this method the blocks had their faces downwards, and were worked by a lever.

The triumph, however, of the mechanical processes, as applied to calico-printing, is to be found in the wonderful and elaborate cylinder machines worked by steam, and capable, so far as the principle is concerned, of fully printing patterns of any number of colours at a speed of more than a mile an hour.

It is hardly necessary in the present work to describe these machines. It may be sufficient to state generally, that the various cylinders, differently engraved to carry out their respective purposes, are arranged horizontally; so that, in the course of their rapid revolution, their surfaces may become charged with the colours, mordants, discharges, or resists necessary to insure a perfect pattern; and which materials they receive from immersion in troughs placed beneath them. All the superfluity of these preparations is removed from the surface of the cylinders by a knife-like instrument, called the "doctor" (similar to that of the ordinary printing-machine). The "pieces" of the fabric to be printed are stitched together to any required length, and the cloth is subjected in succession to the action of the cylinders, the necessary pressure being supplied by large rollers or drums. Of course, the utmost nicety of arrangement is necessary to secure the marvellous accuracy and rapidity which characterize the process.

To quote the words of Mr. Bazley, President of the Chamber of Commerce at Manchester, †

^{*} See Holtzapffel's "Turning and Mechanical Manipulation;" also a paper by Mr. Perkins, in the "Transactions of the Society of Arts," vol. xxxviii.

^{† &}quot;Lectures on the Results of the Great Exhibition," vol. ii. p. 135.

"the calico-printer has, with magical skill and precision, kept pace with the spinner and manufacturer. From the hand of the block-printer all the forms of the beautiful flowers of the field have proceeded, charged with the mingled colours of the rainbow, decorating muslin or calico, and tempting an extension of production and of trade. But to the wonder-working cylindrical printing-machine may be attributed the great impulse imparted to this branch of industry, which, with its curious and exquisite construction, enables a man to perform the work that many hundreds of men might not be able to perform without it; for besides imparting the forms of the pattern to be produced, it impresses to the extent of eight colours at the same moment of time, and by further clever mechanical combinations, twelve colours will hereafter be simultaneously communicated." Amongst the principal promoters and improvers of cotton-printing, we may mention the names of Arbuthnot, Kilburn, Peel, Liddiard, Thompson, Fort, Hartman, Clayton, Hargreave, Greenway, Menteith, Hoyle, and Schwabe. It was estimated seven years ago that one seventh of all the cotton spun and manufactured in Great Britain was devoted to printed goods; and from the improvements in machinery above referred to, this proportion has since increased.

With regard to the amount of taste displayed in the printed fabrics exhibited in 1851, Mr. Bazley only expressed the general opinion at the time, in stating that, "for perfection in colour, and good taste in design, the foreign goods were generally regarded as most attractive." He was, however, justified in adding that there could be no question of the sound and improving position of the British print-trade; Manchester and Paisley have given striking proofs of progress in this respect; but there is still room for improvement in this important element of commercial success.

Mr. Ward, the author of a well-written volume published in 1851,* observes that "France has studiously cultivated the art of design, and advanced its professors to the rank of gentlemen. In England, on the contrary, with some exceptions, it has been degraded to a mechanical employment, and remunerated at weekly wages. France has in consequence a species of industry to which we have no claim—the production of designs for exportation. The demand for the latter is considerable, and has been rapidly increasing. Small as is the print-trade of France compared with that of England, there are in Paris ten times the number of pattern-drawers that are to be found in London or in Manchester. Some of these establishments are considerable, and employ from ten to fifteen designers each; and a talented designer receives from eight to ten thousand france a year;—more than twice the sum paid to similar talent in this country."

OWEN JONES.

^{*} The World in its Workshops, 12mo. p. 243.

ON THE

PRINCIPLES OF DESIGN APPLICABLE TO TEXTILE ART.

BY M. DIGBY WYATT, ARCHITECT.

-moderna-

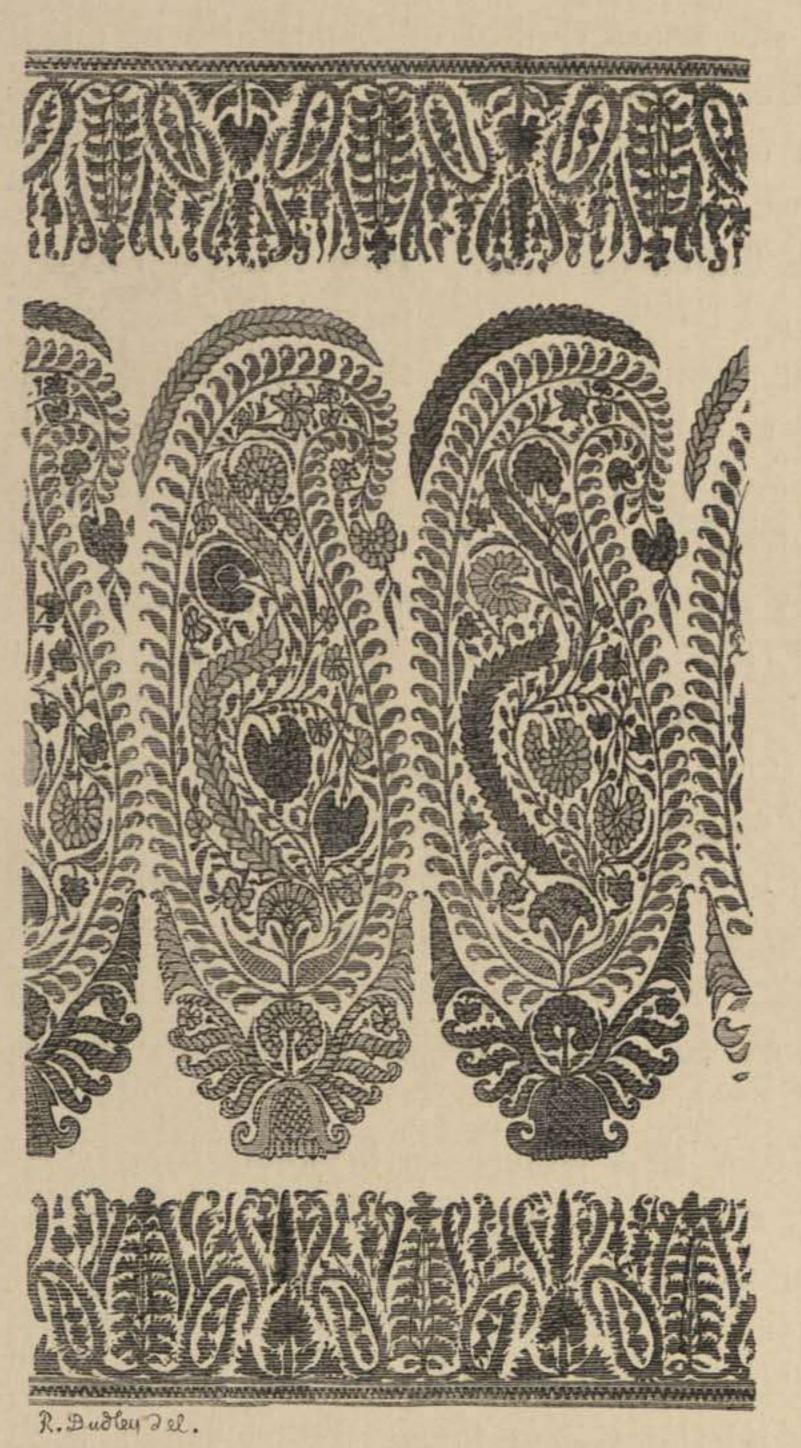
The objects and mission of the present work would obviously be but imperfectly realized if some endeavour were not manifested in it to utilize, for Manchester's particular behoof, the lessons derivable from a careful study and examination of the objects brought together in Manchester's "Great Exhibition," which bore directly or indirectly upon those industrial arts, the successful prosecution of which has rendered the great capital of Lancashire at once so celebrated and so opulent. In adopting the language of analysis, we are too often apt to raise barriers between elements, possessing so much in common, and gliding so imperceptibly into one another, that to separate is almost to destroy. Such is the case in the establishment of any arbitrary division between the Fine and the Industrial Arts. Technical perfection, the leading characteristic of the latter, is likewise an essential though subtle ingredient of success in the former; while, unless taste and refined judgment, which make up the only atmosphere in which the Fine Arts can fructify, preside also over the Industrial Arts, labour sinks from the dignity of a freely exercised intelligence, to the position of a coarse and repugnant, but nevertheless indispensable menial,—from the honoured friend of man, in fact, to become his household drudge and clumsy Calliban. Slight as may appear, at first sight, the connection between some of Raffaelle's sublimest conceptions and the staple productions of the loom, it would be no less impolitic than unjust to assert that there was none. But for the technical excellence acquired by the weavers of the Low Countries, those glorious cartoons which it is our pride to possess at Hampton Court, would most likely never have issued from the studio of him, whom it was but venial sin to christen "Il divino;" but for the golden harvest sown by the cunning weavers of Florence, and reaped by the Medicis and other great patrons of Art, Raffaelles might have lived in vain; and those glories of a magnificent age, the fast-fading shadows of which are alone left us to admire, might never have been summoned into existence.

One of the most obvious consequences and proofs of that coherence between Fine and Industrial Art, which has ever existed, but which it was reserved to the Manchester Exhibition to first worthily develop by placing the choicest examples of both in juxtaposition, is to be observed in the historical fact that the highest perfection in almost all branches has been invariably simultaneously reached. The inference which may be fairly gathered from this synchronous development is, that there exists between all the varied forms under which the creative power of mankind can be exercised, a relation of mutual dependence analogous to that which obtains between the various members of the human frame,—to each its separate function, but to all one common end and duty,—that of supporting the lofty organization with which man has been providentially endowed. So in a nation's powers of production, the

vital chain is made up of many links, any defect in but one of which endangers the breaking of that which keeps the whole together. It does not, however, follow that because we may have good reason for believing a certain harmony to subsist, essential to the perfect organization of two things apparently independent of one another, we must necessarily be able to trace out the precise nature and mode of maintenance of any such mysterious relationship.

To apply these generalizations to the subject under consideration, we must observe that any elimination of guiding principles in design, applicable to textile art, must be effected, firstly, by recognizing those general laws of beauty which apply to all surface treatment, from that of a picture by Titian, or an arabesque by Giovanni da Udine, to the arrangement of the cheapest possible cotton print or wall-paper; and secondly, by noticing the regulations as to the disposition of ornament entailed by peculiar conditions of textile manufacture.

The best writers on the subject have agreed, with reference to the first portion of our subject, that it is in the fabrics of the East, decorated either in the loom by weaving; by printing, embossing, or embroidering when woven; by plaiting, spangling, slashing, or in any other mode, that the best models for analysis and judicious imitation are to be found. With such the Manchester Exhibition was amply supplied, mainly through the liberality of the East-India Company; and it is to be hoped that the opportunity so afforded to the local designers, of studying the glowing and gorgeous but invariably beautiful Oriental stuffs, may not fail to have imparted to the artists of Lancashire and Yorkshire some considerable portion of that



Shawl Pattern, in which the palmette forms the principal feature. From the Museum of the Hon. E. I. Company.

sensibility of taste and eye, upon which, after all, probably more than upon any regularly recognized rules, the native designer relies for his happiest effects. Of his powers, very favourable examples are given in Plates IX., X., XI., XII., XIII., XIV., XV., XVI. Among these, No. XV., although not the most pleasing, is the most interesting, as being the fac-simile of a design for a shawl made by a Cashmerian artist. It exhibits the interminable "palmette" in triumphant flourishes no less prominently than does our woodcut, which also shows the usual mode of filling up the interior of the "palmette" with wayward lines and scattered flowers.

Playful and capricious as the usual clash of their highly decorative patterns may appear, at times the Indian designers assume a simplicity of geometrical treatment worthy of the ancient Greeks, and in such specimens as the beautiful piece of matting from the Museum of the East-India House (Plate XVI.), the greatest sobriety of taste is manifested. It is in patterns of this nature that the student may best recognize the expression of repose which is invariably conveyed by simplicity of geometrical arrangement, so studied that every line is, as it were, resolved into equilibrium by another confirming or opposing it. Thus the diagonal lines are bounded by rectangular ones of greater strength of tone, and the tendency of the diagonals to run out of the boundary of the matting is successfully corrected. Burke has rightly appreciated the

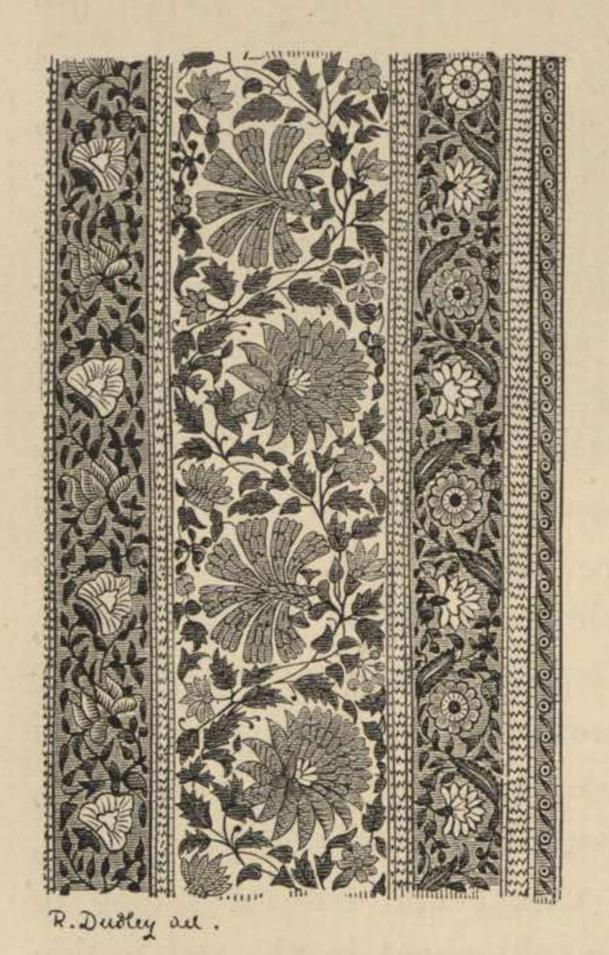
sublime effect of the unbroken repetition of simple forms; and the sense of tranquillity which is experienced in the "long-drawn aisle" of a Gothic cathedral, is felt from the

same source, though of course in a minor degree, when the eye rests upon a fabric covered with a well-distributed and balanced repetition of some elementary diaper. The same symmetry and simplicity of geometrical arrangement which give dignity and quiet to sculpture, as in the Minervas of the Eginetans, the Panathenaic frieze of the Athenians, the colossal kings of the Egyptians, the gods and genii of the Assyrians, the Christian saints and heroes of Rheims and Wells, induce unerringly, a sensation of quiet satisfaction when they are adopted as the basis of design for stuffs of greater or less richness.

The grandeur of the gold ground mosaics of St. Mark's at Venice, the Baptistery at Florence, Pisa Cathedral, Monreale, San Clemente, and Sta. Maria in Trastevere, &c., and of many of the early Italian fresco decorations, are dependent for their effect upon very much the same principles of treatment which characterize the majority of the kincobs and ordinary gold ground fabrics of the East. No one has paid more sedulous attention to these productions than Mr. Owen Jones, or has written with greater zeal and knowledge upon the subject. In an excellent article published in the "Journal of Design" (vol. v.), he thus sums up the leading peculiarities he had remarked in the usual surface ornamentation, not of India only, but of all countries over which the Moslem race had extended its sway; he found,—

- "1. That the construction is decorated; decoration is never purposely constructed.
- "2. That beauty of form is produced by lines growing out one from the other in gradual undulations; there are no excrescences; nothing could be removed and leave the design equally good or better.
- "3. That the general form is first cared for; this is subdivided and ornamented by general lines; the interstices are then filled in with ornament; which is again subdivided and enriched for closer inspection.
- "4. That colour is used to assist in the development of form and to distinguish objects or parts of objects one from another.
- "5. That to assist light and shade, helping the undulations of form by the proper distribution of the several colours, no artificial shadows are ever used. And,
- "6. That these objects were best attained by the use of the primaries on small surfaces, or in small quantities, supported and balanced by the secondary and tertiary colours on the larger masses."

These excellent observations of Mr. Owen Jones will be found to be admirably supported



Printed Calico, exhibited by the Hon.

East-India Company.

by our woodcut, which is taken from a beautiful block-printed calico in the Museum of the East-India Company, as well as by the various patterns given in Plates IX., X., XI., XII., XIII., XV. The principles thus first enunciated by Mr. Jones are all, it may be remarked, general ones, in the broadest sense; since, with the exception of the general aversion to the clear indication of shadows noted in "the principles," there is not one which can be disregarded by the cleverest painter or architect without marring the beauty of the decorative effect of his picture or building.

Mr. Jones's views have been thus indorsed and amplified by Mr. Redgrave, who, in his supplementary report "on design as manifested at the Great Exhibition of 1851," observes in reference to the garment fabrics exhibited by the East-India Company:—"These are almost wholly designed on principles presumed to be just ones; the ornament is always flat and without shadow; natural flowers are never used imitatively or perspectively, but are conventionalized by being displayed flat, according to a symmetrical arrangement; and all other objects,

even animals and birds, when used as ornament, are reduced to their simplest flat form. When colour is added, it is usually rendered by the simple local hue, often bordered with a darker shade of colour to give it a clearer expression; but the shades of the flower are rarely introduced. The ornament is usually geometrically and symmetrically arranged, flat, in simple tints, and bordered, as above described, with darker shades of local colour. The principle of colour adopted is often a balance of the complementaries with white, introduced to give points of expression, and to lead the eye to the symmetrical arrangement of the ornament." To these general dicta many more might be added, none of which should be lightly regarded by the designer for textile fabrics; as, for instance, that whenever an Indian launches out into a flourishing central feature for a shawl or elephant-trapping, he invariably corrects the tendency of his lines to run abroad, by surrounding the more complex forms with simpler ones, until the outside border, usually in vigorous tone or colour, running parallel with the margin of the piece of stuff, binds the whole, as it were, in one compact framework. Just in the same manner a skilful painter, in the composition of his picture, if he desires to counteract a daring arrangement of flowing line or powerful effect in the focus of his picture, will introduce vertical and horizontal lines, in solid but low tones, near the margin of his canvas; these he will make more or less prominent, according to the greater or less severity he



Specimen of Embroidery exhibited by the Hon. East-India Company.

aims at. In adjusting the strength, depth, and character of his frame, he will further act on the same principle with the Indian designer in the arrangement of the border and fringe to his shawl, making it proportionately rich, simple, or massive, according to the greater or less marked contrast he may desire to give to the forms and colours enclosed within it. Elegant illustrations of the happy introduction of rectilinear lines, in order to bring out and at the same time quiet, diagonal and curvilinear ones, are given in Plates IX., X., XI., and XIV., as well as in our woodcut, which is taken from a noble specimen of embroidery (gold on crimson) in the Museum of the East-India Company. It may be noticed in these and other examples, that where the ground of the fabric is

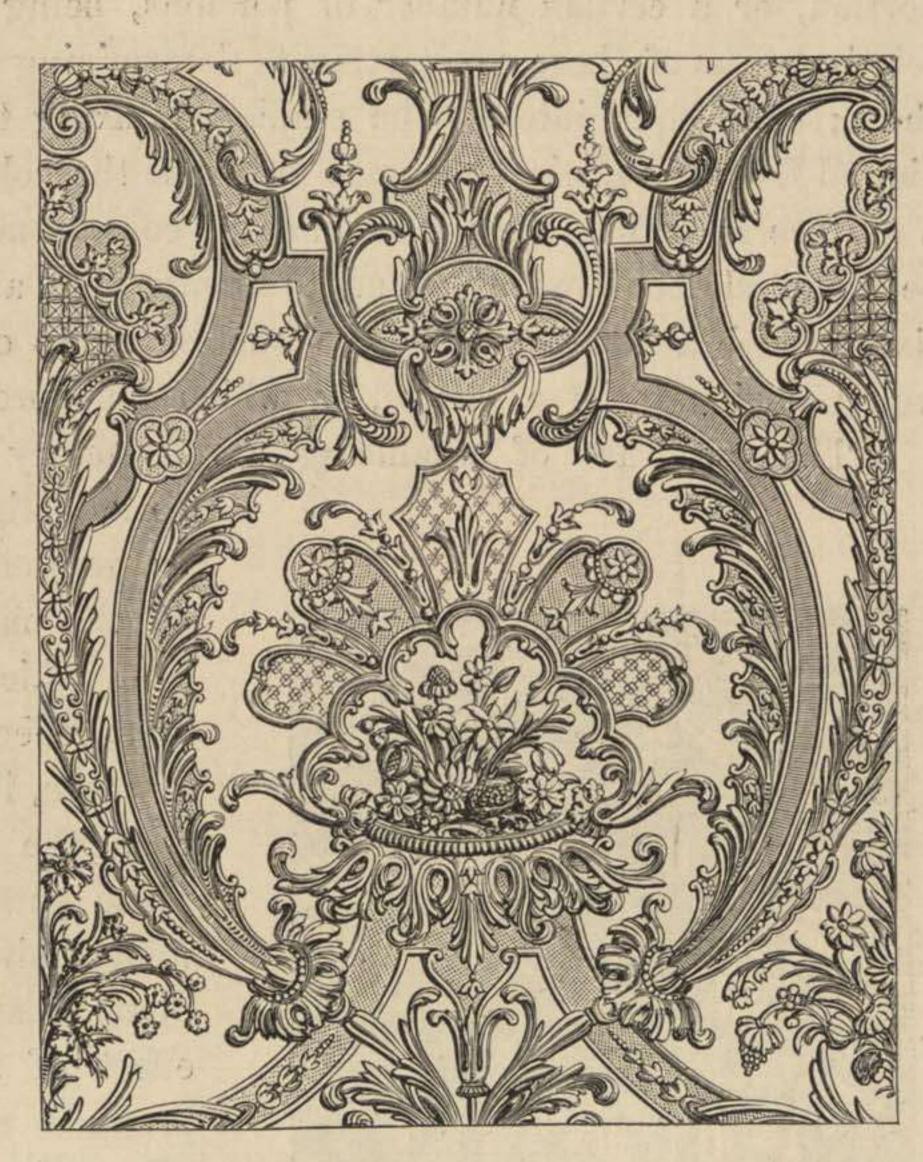
covered with an equally distributed diaper, the forms and tones of which are so balanced as to prevent any one form or tone asserting a dominance over the others, the border is reduced in importance, as in the charming specimen in the top right-hand corner of Plate XIV., growing more and more marked in contrast as the lines to be subdued are more and more vigorous, as in the example engraved in the bottom right-hand corner of the same plate. In these graceful contrasts and resolutions of form, in the skilful command of which the artist, to learn to be successful, must cultivate to the highest possible degree, not his intellect alone, but his eye and hand, every piece of Oriental stuff presents a useful and fruitful theme of study. Without the acquisition, by the English designer, of similar refinement in the perception of pure form, and in its truthful and correct definition, we cannot hope to rival, much less

surpass, the Eastern weavers. To this end it is that not the mind alone, but the hand and eye, should be most sedulously trained; for often and often, in designing, difficulties of composition, the solution of which in obedience to any recognized law the best judgment would shrink from precisely defining, are at once "resolved" by the rapidly-glancing eye and sweeping hand of the masterly artist.

It is but seldom that English designs for textile fabrics fail through careless or slovenly drawing of the details of ornamentation; their faults more frequently arise from want of judgment and taste in scheming the general effect to be aimed at. Apart from the special conditions of manufacture, and the application of the article manufactured (to which we shall presently allude), the first and most important consideration in starting a design is the determination of the scale upon which the ornamental forms, whether altogether conventional or approaching to direct imitation of nature, are to be defined. The artist who designs such tapestries as are represented in Plates V., VI., VIII., VIII., or who paints a picture to be constantly viewed in a room of average size, has his scale at once given him by those average dimensions; but that is not the case with the designer of patterns for garment fabrics. Hence the selection of subjects, and the settlement of the scale upon which such hangings for internal decoration as are represented in the two woodcuts, and which exhibit a common

by the Italian weavers of Oriental stuffs, is



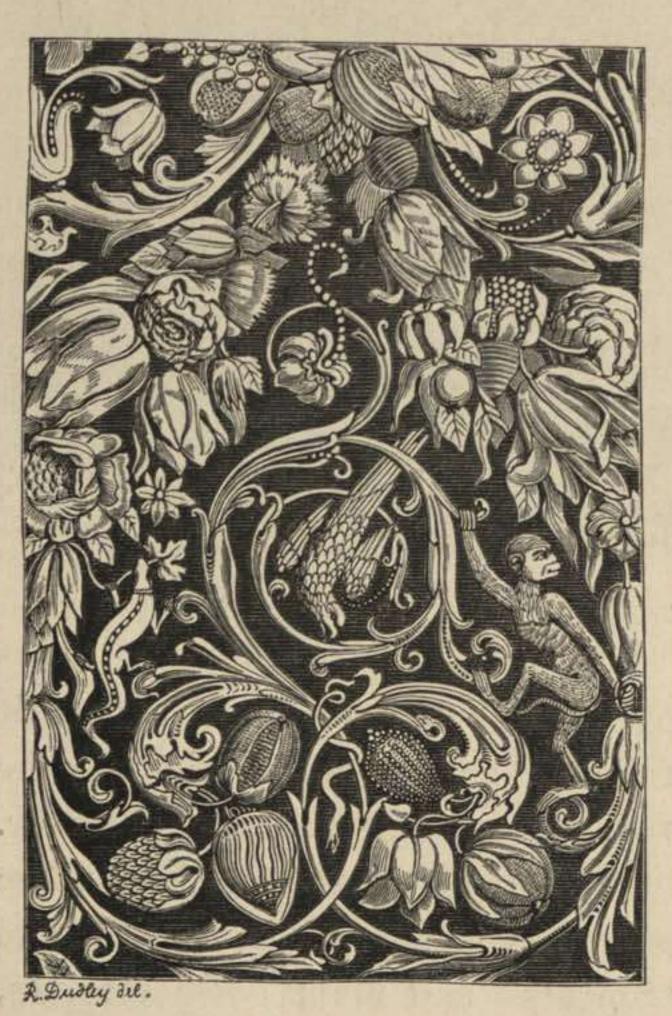


Embossed, gilt, and painted Leather Hangings, exhibited by F. Leake, Esq.

comparatively easy. Of these Italian originals, for the most part Venetian, some agreeable examples are engraved in Plate VIII. The distance from which a garment fabric may be seen varies of course incessantly with the relative positions of the wearer and the observer. The artist has consequently to provide patterns which shall be effective and ornamental both when seen from a distance and when closely inspected. To do this he has to adopt the expedient of fixing upon as large a scale as may be convenient for his "repeats" and main compartments, so as to secure his patterns looking well at a distance; and then he has to divide, subdivide, and fill up his compartments with more or less minute work, according to the elaboration he

thinks suitable to the material, and the probable class of wearer; so that his ornament may be visible and harmonious when brought close to the eye. As a general rule, when the "motives" of the design are derived from nature, the flowers, fruits, shells, crystals, or other natural objects, should either be represented of their true size, or as greatly and equally diminished; for if they are portrayed as larger, the effect is inevitable vulgarity; and if only slightly smaller, the pattern always appears meagre and weak, misleading the eye, which accepts the objects as a modulus of dimension, and falsifying the true size of adjoining forms. When the reduction is considerable, it is so obvious as no longer to mislead, and littleness and prettiness hang together in art, as certainly as diminutives and affection in language. Having settled his scale of pattern, the designer has next to make his option between two modes of filling up the space he proposes to decorate. He may either treat the ground of his material as the canvas upon which he scatters his forms and colours, allowing the original ground to dominate, or he may so subdivide his surface as to get rid of his ground altogether. The one system we may designate as the Pictorial, and the other as the Mosaic. In the pictorial system the surface serves as a ground, upon which are painted lines, figures, foliage, or any other objects which may be conceived as appropriate to express the intention of the artist. These lines or patterns are so arranged as to leave a considerable portion of the ground colour predominant, either by uninterrupted line or quantity of surface, throughout the whole composition. In mosaic compositions, on the contrary, the whole surface is subdivided, each portion, or a certain number of portions, being arranged to consist of different colours; the relative areas of these compartments determining the intensity of the colours to be employed upon them; or, if equal intensity be employed, fixing the general effect and tone of the whole, when viewed from a sufficient distance to cause the colours to blend with one another. Thus, when a a surface is divided into a number of compartments, the aggregate areas of which destined to be coloured deep blue are equal to twenty-four, and the areas arranged to be tinted red equal to six, at such a distance from the surface as to cause those colours to fuse, the result produced would obviously be a purple, in which blue predominated in the proportion of two to one.

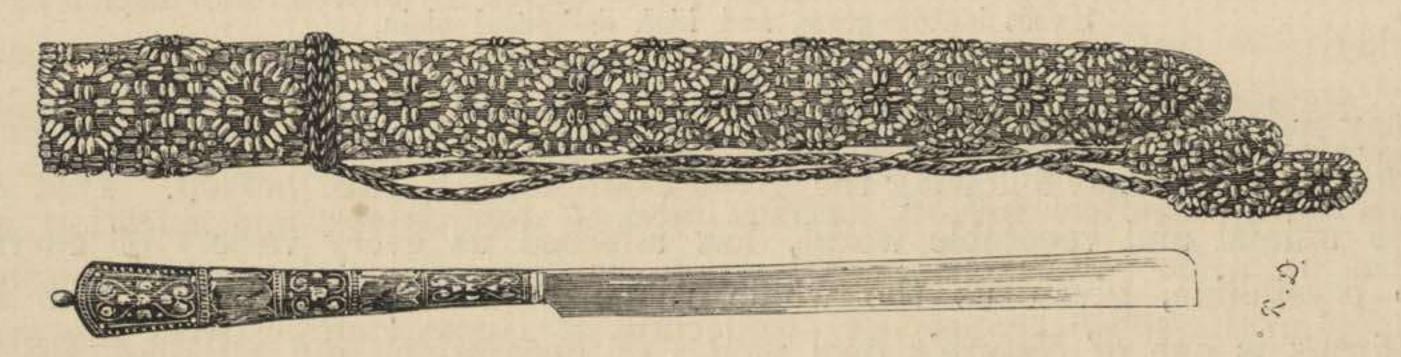
The great art of producing a satisfactory general effect in mosaic patterns consists in



Stamped, gilt, and painted Leather Hanging, exhibited by F. Leake, Esq., and illustrating a pictorial arrangement of pattern.

so adjusting the size of the compartments to the violence or gentleness of the contrasts, as to produce an effect of the merging of the tints at that point of distance from which the object is usually viewed. Where a brilliant effect has to be produced, the merging or focal distance, if we may use the expression, should be greater than the distance from the eye of the spectator to the plane surface. Where, on the contrary, a tranquil or unobtrusive diaper is required, the merging or focal distance should be shorter; so that if, for example, the effect of the union of the tints at the merging point produces a russet brown, and it be desired to realize an effect of simplicity, the spectator may receive an impression but little differing from that which would be conveyed to the senses by a plain tint of the same colour. To the first-mentioned, or pictorial class of decoration, belong all trail patterns in stuffs, most brocades, the majority of Pompeian decorations, and those compositions in which flowers or other objects are distributed over a field of uniform tint; such, for instance, as the old stamped, gilt, and painted leather hanging we have engraved, and which was exhibited by F. Leake, Esq.

Under the head of Mosaics, we may class almost all patterns depending upon a collocation of different separate materials, such as inlaid pavements, arrangements of encaustic tiles, Turkey or Persian carpets, and the great majority of Oriental patterns. This mosaic principle of distribution is not ungracefully shown in the beautiful knife-sheath we engrave.



Knife, with embroidered Sheath, illustrating a mosaic arrangement of pattern.

In many distributions of ornament over plane surfaces, a combination of the two principles takes place, the whole area being divided into compartments of various colours; thus constituting a mosaic subdivision; while each compartment has upon it some pattern which is complete in itself, but so subordinate to its ground colour, that it scarcely interferes with the general mosaic system of arrangement.

Plates X. and XVI. illustrate the mosaic method of distributing surface decoration; Plates VIII., IX., XI., XII., the pictorial; and Plates XIII. and XV. the mixed or compound system. In Plate XIII., the effect of running down the black ground in the central compartment of the border has a singularly happy effect. That appearance of bloom, arising from the tolerably equal balance of brilliant colours in small masses on a mosaic system, is happily exemplified in the compartments adjoining that through which the black ground runs. Where it is desired to maintain and assert the drawing of a pattern, it is well to adopt a pictorial treatment, and preserve a distinct basis in one uniform tint; but where a richlydecorated blaze of colour is alone wanted, it can be best obtained by the "mosaic" arrangement. Upon whichever of these two systems the designer for textile fabrics proceeds, he should never forget, in working out his ideas, Mr. Owen Jones's golden rule,—"that the secret of success, in every work of ornament, is the production of a broad general effect by the repetition of a few simple elements: variety should rather be sought in the arrangement of several portions of a design, than in the multiplicity of varied forms." It is in strict subordination to this rule, that the finest Oriental, Classic, Byzantine, Mediæval, and Renaissance textile fabrics were designed; and it is only by attention to it in the present day that good taste can be satisfied. The same able artist and writer has so succinctly embodied his own and others' discoveries and studies, in reference to the laws of colour, in his admirable essay on the subject read at the Society of Arts, that it would be an unnecessary recapitulation to dwell upon them in this brief essay.

For a somewhat similar reason, the author abstains from touching upon many of the general principles which should determine form in textile, as in other branches of the decorative arts, having attempted to define them with some precision in a corresponding essay, forming also one of the series on the results of the Great Exhibition of 1851, and read at the same society on the 28th of April, 1852. Since the date of the publication of that essay, the tendency of the chief directors of taste has been, as it appears to the author, to tie the decorative artist's hands somewhat too dogmatically. The result will be that, unless corrected by the sallies of a graceful fancy, our productions will grow dry and arid. It is no less requisite for success in the decorative art, to teach conditions under which a close approach to the direct imitation of nature may be made, than it is indispensable to lay down the law that, under a majority of conditions, the sweets of nature can only be properly culled and rendered under a highly conventional form—" Ars est celare artem;" and the aspect

of too great rigidity in elementary geometrical treatment is almost as fatiguing to the cultivated eye as entire inattention to conditions of symmetry would be displeasing. In the works of Nature herself, the happy medium, at once the greatest order and most auspicious license are to be found.

"Within these limits is relief enough— Sweet bottom-grass, and high delightful plain, Round rising hillocks, brakes obscure and rough."

"We may moreover be satisfied," as Mr. Dyce well observes,* "that in the employment of geometrical forms, we are but following the great example of Nature herself. That same Nature which, in the animal and vegetable world, has afforded us every variety of curvilinear form, has, in the crystalline, given us the whole range of rectilinear form. The repetition of geometrical forms is one of Nature's own modes of decoration, and although the repetition is generally accompanied by a gradation depending upon, and adapted to, the curving of the surfaces to which the pattern is applied, as, for instance, in the scales and spots of serpents and fishes, yet the principle of repetition is there, and if the surface were flat, instead of curved, it is reasonable to imagine that the forms would be developed with as much regularity and uniformity as one of Nature's own artists, the little bee, displays in the series of regular hexagons of which the honeycomb consists."

The artist whose mission is limited to designing for textile fabrics may, with no less profit than delight, "consider the lilies of the field," and, as Spenser sweetly sings,—

"Through contemplation of those goodly sights,
And glorious images in heaven wrought,
Whose wondrous beauty, breathing sweet delights,
Do kindle love in high conceited sprights,"—

learn to extract the honey from the flowers, and to sift those elements of grace which make the face of Nature lovely, from those marring and discordant influences which too often fester midst the busy haunts of men. Nature's book, which is ever open, is the best and truest, for she—

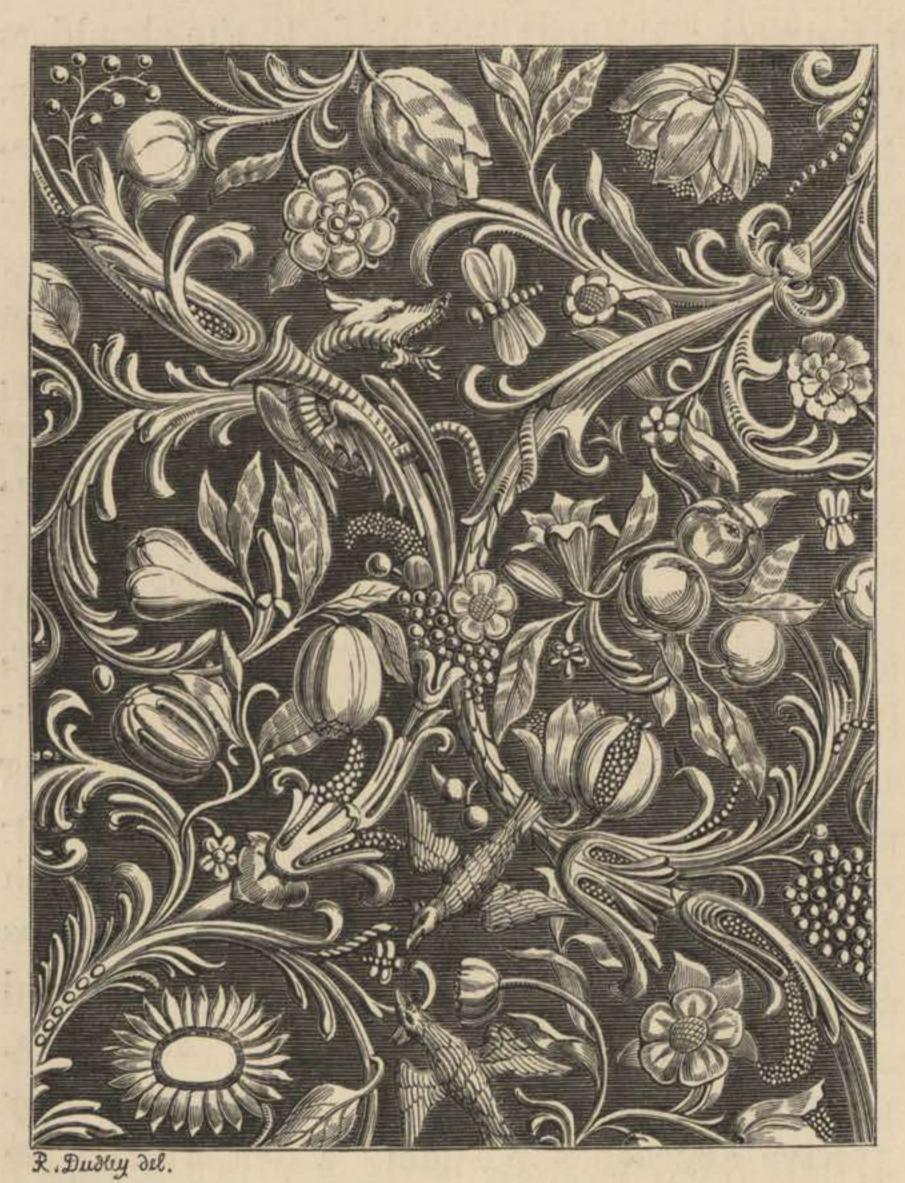
—"is made better by no mean,
But Nature makes that mean; so o'er that Art
Which you say, adds to Nature, is an art
That Nature makes."

Hitherto the general principles upon which we have dwelt, although essential to the textile art, are yet all fundamental elements in the production of agreeable impressions upon the brain, through the eye, by any medium. This identity arises partly from the community of organization in respect to the receipt of such pleasurable emotions which pervades mankind, and partly from that mysterious connection which subsists between those varied children of the common parent, Nature—the different branches of the great family of beauty; for, as Mr. Dyce remarks in the admirable lecture from which we have just quoted, "The arts of ornament and the fine arts are both traceable to the same sentiments and tendencies of our being: the one kind strives to embellish the realities of life, the other endeavours to give us pictures of some higher condition of humanity; yet this difference only holds good with respect to two of the fine arts, viz., painting and sculpture; for ornamental design is not only an essential element in the third of the fine arts, but gives to it those very qualities on which its claim to be regarded as one of the fine arts depends."

We now turn briefly to the second portion of our subject,—the *special* conditions which affect design as applied to textile fabrics. So long as draperies, like carpets, table-cloths, blinds, rugs, and wall-hangings, are supposed to remain perfectly flat, their treatment comes under all the general rules which can affect surface-decoration of any kind; but when, like stockings, gloves, waistcoat-pieces, and some other garment stuffs, they are made to follow

^{*} Lecture on ornament, to the students of the London School, published in the "Journal of Design," vol. i. 1849.

closely the form of the figure, the problem becomes more difficult; since, in addition to the necessity of providing that they shall be in themselves decorative, it is indispensable that they shall enhance, and not mar, the beauty of the forms they are designed to cover. How often are patterns so contrived that a great gash seems to run right across and deep into a lady's bosom; that one end of a scroll is to be found on one side of a shoulder, and the remainder can only be found far down on the other; that spirals falling on comparatively flat portions of the body, seem to heave up in bumps where bumps ought not to be; and that curved lines, bent to and fro over swelling and undulating forms, are not only ruined as far as their own beauty is concerned, but, as if in revenge, they distort the graceful curves they cover. Sometimes a garment—silk—will be worn, brocaded with what is considered to be a splendid pattern—say in black and red, and often in equally violent but less harmonious contrast. What is the consequence? When the lady stands against any dark objects, the black in the dress unites with the dark background, and the form she assumes, when seen from any distance, is that of a misshapen red skeleton. Again, the same pattern may be, and is frequently made in two tints, which may or may not harmonize, but one of which is, what the French call a couleur fuyante; and the other, an advancing colour. When that is the nature of the contrast, no amount of conventionality in the pattern will keep it flat, and every surface is consequently distorted by the colour, supposing the form to have been



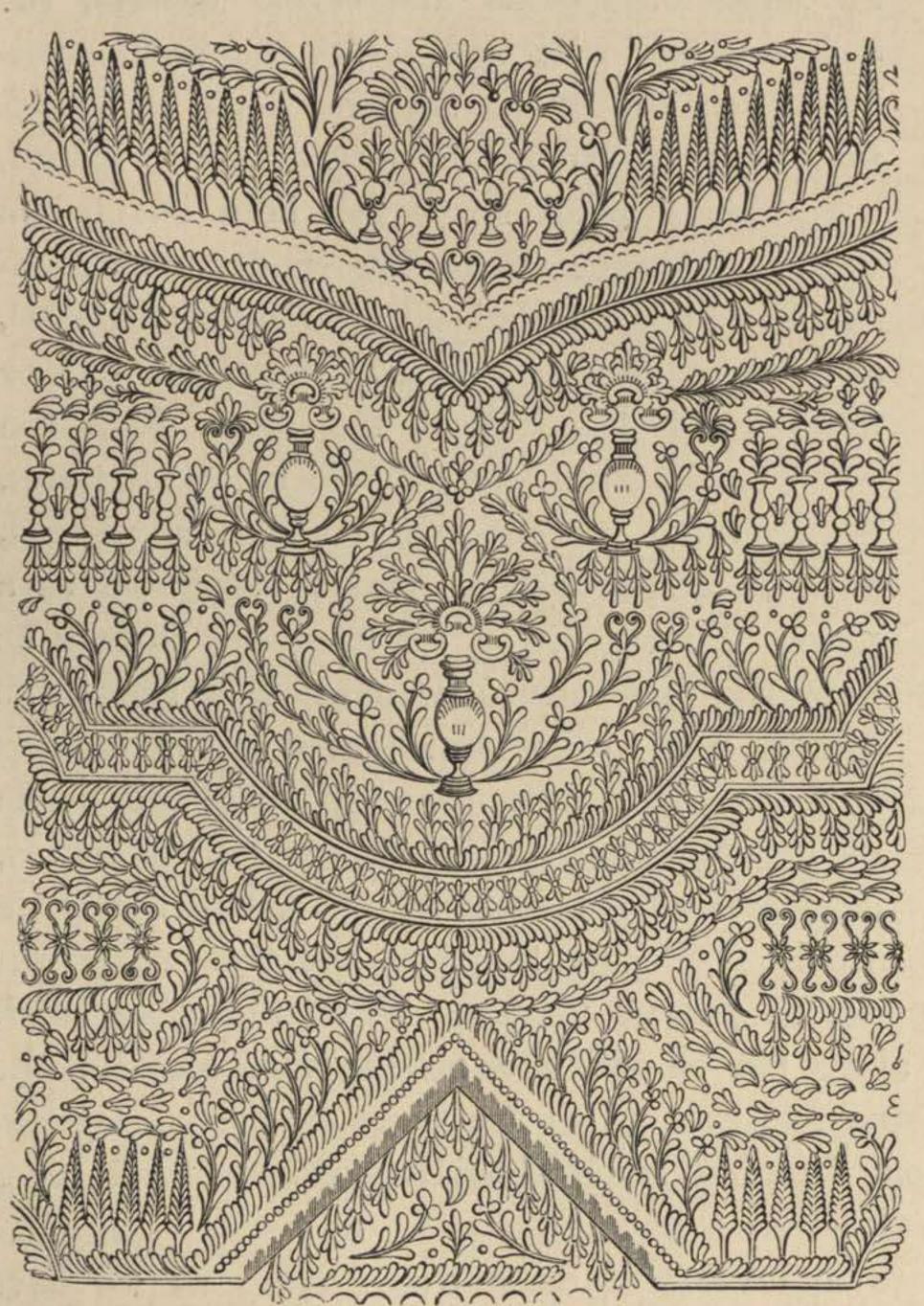
Specimen of a pattern appropriate as a wall-hanging, but inappropriate for a garment fabric; from a stamped, gilt, and painted Leather, exhibited by F. Leake, Esq.

really well designed. Occasionally, a gentleman's trousers are either cross-barred, or chessboarded, or have, by way of decoration, a Greek fret of the severest character, which is evidently far too rigid to allow the knees to be bent, on any account whatever. How often, in mousseline-de-laine and barège dresses, the stripes—lengthwise and across the stuff—symbolize too vividly the skeleton hoop that sustains and puffs out the skirt. Lately, indeed, a barbarous broad stripe has been adopted of the most violent description (a dress so decorated is known technically, the author believes, as "en quilles"), cutting, apparently, one or more great trenches in the dress, from the waist to the feet. As example is, at all times, better than precept, we engrave a pattern, which, though by no means unsuitable as a mural decoration, or for furniture, so long as kept flat and vertical, would neither bear to be folded, nor to be drawn over any undulating surface. If folded, not only would the bends of the fold disturb the sweeps of the curves, as foreshortened in perspective, but the parts would not come together, and that which was

really full of design and invention, would appear to possess neither. If, on the other hand, drawn over any surface, the eye would run along the spirals, and all the modelling of the surface it covered would be lost. Those patterns fold best which are made in shortish repeats, and with uniform diapers or powderings. Long hanging stuffs should, however, in all cases terminate with margins at top and bottom.

Such misconceptions of the proper nature and value of decorative drapery as we have glanced at were unknown in the best days of art, or, if not altogether unknown, were at least

only indulged in to heighten the effect of some masquerade or caricature. The Indian peasant winds around her body the graceful saree or doputta, of one simple colour, or at most spangled with delicate spots, and embroidered or woven with strong colours only at the ends, which hang loose;—the prince shines resplendent in his kincob, covered with a very small and delicate pattern only. The Grecian lady's chiton and tunic were embroidered at the hems, and her peplon at the hem and angles alone: dresses and mantles embroidered all over were the attributes of immodest women. In the best times of the Middle Ages, the robes were either plain or covered with small diapers and powderings, the finish and effect being given by the splendid aurifrangia or orphreys, which took the place of the gorgeous Roman lacinia. With the frivolity of Richard II. good and simple fashion was abandoned, and the reign of fantastic stripes and vulgar diapers set in. From them we have been set free only during the brief period in which that lover of art, Charles I., with his artist friends, Rubens, Vandyke, Dobson, Hilliard, and Oliver, instituted a partial reform. Experience, then, no less than reason, shows that no violent contrasts either of form or colour are supportable in the patterns of drapery intended to sit close to the figure. Enriching a hem or selvage, or carrying a delicate pattern down the corsage when worn smooth in front, and even continuing the same kind of pattern down the front of the skirt, and making the bottom flounce rich, is about all that may be tolerated; the true theory being, that the pattern may be made more and more lively in proportion as it clings or hangs freely. Again, in this the Indians are our safe guides. Their best shawls, when folded, just give a collar of enrichment about the neck; the part that binds to the shoulders is plain, while, as the remainder hangs loosely down, it is made as gay as the heart can desire. A very great improvement in ladies' dress has taken place of late years, owing to the prevalence of the practice of selling dresses, gowns, mantles, &c., by the piece instead of by the yard. By this means the manufacturer is enabled to arrange his rich parts where they



Front of a Mexican Mocassin, from the Ashmolean Museum, Oxford.

will tell, and to keep those portions quiet which are designed to develop the shape. When a lady could buy her dress only by the yard, she was reduced to the alternative either of choosing one that would look well above her waist, or below it; what suited the one would scarcely suit the other, and hence came an infinite variety of contrivances to trim the whole into something reasonably agreeable. The Venetian, Florentine, and Milanese dames of the fifteenth and sixteenth centuries were fine mistresses of the art of costume, and it is to be hoped that Titians, Paris Bordones, Raffaelles, Sandro Botticellis, and Veroneses, may have afforded some hints which will not be lost sight of by the manufacturers of Lancashire and the West Riding. From humbler sources, however, many important lessons were to be derived. In many of the old tapestries, for example, such as those which formed a portion of the Soulages and Hampton Court collections (one from each is engraved in Plates V. and VI.), many very elegant patterns for textile fabrics were to be found, and many sug-

gestive arrangements, more particularly in the ladies' dresses, for the graceful decoration of robes and mantles. Plate V. especially confirms what we have alleged respecting the advantage of concentrating powerful effect and ornament upon hems and edges. Reason as well as good taste suggests a binding to those parts most likely to become worn and frayed. The attentive student at Manchester might even have dived deeper than the old tapestries, and yet carried away some profitable knowledge. The pattern we engrave from a Mexican mocassin in the Ashmolean Museum at Oxford (see p. 80), is much more carefully designed than many a Berlin wool pattern of infinitely greater pretension.

The upper part follows the flap, which turns over on the instep. The vase with its rude "anthemion," makes a good central feature on the most conspicuous part of the foot,—the sweeping border beyond pleasantly recalls the line of the border of the turn-over flap, while the *chevron* carries down the eye to the ground, marking the precise line of the tread as the foot reaches the ground. It has obviously been carefully studied with reference to the form it covers, and the same can be but seldom averred of many of the ornamental designs of the present day.

Another important consideration with the artist should be the nature and texture of the material for which his design is intended. For thick and warm fabrics it must be evident that a fully covered ground, with plenty of reds and yellows, purples and greens, must be as acceptable as cold colours and feeble drawing would be repugnant. When a material is of a light and gauzy character, those regulations as to the maintenance of flatness, which are essential to the success of a carpet or portière may be altogether relaxed, and that flimsiness and airy transparency which form the beauty of the fabric will only be enhanced. Of this many of the French muslins printed by Gros Odier and Depouilly offer the happiest evidence, and the printers of Glasgow and Manchester have very successfully followed in their track. With a common print it is well to have a thoroughly covering pattern, as in that instance the surface texture of the stuff is not worth preserving; but in a silk or satinet the reverse is the case, and it would be a wanton sacrifice of a certain source of beauty to cut up too much, and hide, the glossy face the manufacturer labours so hard to obtain in the greatest purity. The nature of the folds made by any kind of drapery should not also be without its influence on the pattern. In cases where, as in cottons, the folds are small, crinkled, and close together, the patterns should be, and almost always are in Indian goods, as small as possible; in the case of thick woollens and velvets, in which the folds are rounded and less angular, a larger



Pattern taken from a portion of an Indian Carpet, exhibited by the Hon. East-India Company.

scale may be adopted, and more forcible contrast both in the forms and colours. If lines are introduced into the decoration of fabrics liable, like window and bed curtains, to be folded and drawn into gathers, those lines should not be too symmetrically arranged, as the folds would necessarily ruin the symmetry, left visible only here and there, and the effect produced would be one of less regularity than if the lines had been disposed in capricious angles, as in the woodcut we engrave. This, indeed offers quite a model pattern for a fabric likely to be frequently gathered into irregular folds; for while the brightly-coloured roses dot the pattern with sufficient regularity, and the green leaves

and dark lines of the stems fill up the ground, without leaving any open spaces or flaws, a series of plaits might be taken out in any direction, and the pattern would look but little the worse for the operation.

Another rule should be observed, which especially affects designs for ribbons, muslin curtains, and lace, and fancy edgings,—it is, that parallel to every selvage, but not at the extreme edge, a firm line of colour should be run, as powerful in tone as the average of the colours made use of in the design. This line serves the threefold purpose in a ribbon, of apparently marking and strengthening the selvage; of contrasting with, and restraining all diagonal or other lines, which, from their direction, have a tendency to rush out at the edges, and of marking the form and folds of the ribbon when tied upon, or otherwise relieved against, a dress of either a harmonizing or contrasting colour.

Such are a few, among the many, points which should, the author believes, receive the careful attention of manufacturers, and that not for the sake of the buyers only, but for that of the makers and sellers as well. The pecuniary results involved in the maintenance and advance of textile art in this country are so stupendous, and the social and political complications that would inevitably supervene if any serious check was to be encountered, either through the activity of any foreign country or the supineness of our own, that every thinking man must feel it his bounden duty to contribute all that lies in his power to the progress of that branch of industry which gives bread to so many millions of his countrymen. Not alone in an æsthetic, but in a material point of view, Manchester is to be congratulated upon having brought together, for the instruction of the teeming population of the northern and midland districts, the finest mingled exhibition of art and art-industry which the world has ever yet beheld.

We cannot better conclude these few remarks, than by indorsing the truth and justice of Mr. R. N. Wornum's excellent observations, in his prize essay on "The Exhibition of 1851 as a Lesson in Taste;" viz., that "universal efforts show a universal want, and beauty of effect and decoration are no more luxuries in a civilized state of society, than warmth or clothing are luxuries to any state. The mind, as the body, makes everything necessary that it is capable of permanently enjoying. Ornament is one of the mind's necessities, which it gratifies by means of the eye. So it has been discovered to be again an essential element in commercial prosperity. This was not so at first, because, in a less cultivated state, we are quite satisfied with the gratification of our merely physical wants; but in an advanced state, the more extensive wants of the mind demand still more pressingly to be satisfied. Hence, ornament is now as material an interest in a commercial community, as are the raw materials of manufacture themselves."

THE RESIDENCE OF THE PARTY OF T

B. Waring, Direct

Day & Son, Litles



F Bedford Photo

PLATE 2



F.Bedford, Photo et lith.

J B Waring Direx!

Day & Son, Lith to the Queen.

PLATE 3.









F Bedford, Photo, et. lith.

J. B. Waring, Dirext

Day & Son, Lith to the Queen.

PLATE 4. TEXTILE ART Day & Son, Lithes to the Queen J. B. Waring, Dirext F. Bedford, Photo et lith.

1. BAPTISMAL CLOTH, THE PROPERTY OF MISS JANE CLARKE.

LADY LYTTLETON .





THAPESTEY IS THE CHIMETERS TROM THE



FLEMISH TAPESTRY, AFTER RAFFAEL'S CARTOON _THE MIRACULOUS D



F Bedford, Photo, et lith.

J. B. Waring, Dirext.

Day&Son, lathe to the Quoen.

FRENCH TAPESTRY, 18TH CENTURY. SCENE FROM DON QUIXOTE.
THE PROPERTY OF HER MAJESTY THE QUEEN.

INDIAN SADDIE CLOTH _ MUSEUM OF THE HONNE EAST INDIA

F. Bedford, Photo. et lith

Day & Son, LithFisto the Queen



F. Bedford, del et hth.

J.B. Waring direx "

TEXTILE ART. PLATE 11.



F.Beaford, del. et lilh.

J. B. Waring, dirext

Day & Son, Lithrs to The Queen

GOLD EMBROIDERY IN VELVET INDIAN
MUSEUM OF THE HONBLE EAST INDIA COMPANY



F. Bedford, Photo. et lith.

J. B. Waring Dirext

Day& Son, Lith Pato the Queen.

PLATE 13. TEXTILE ART

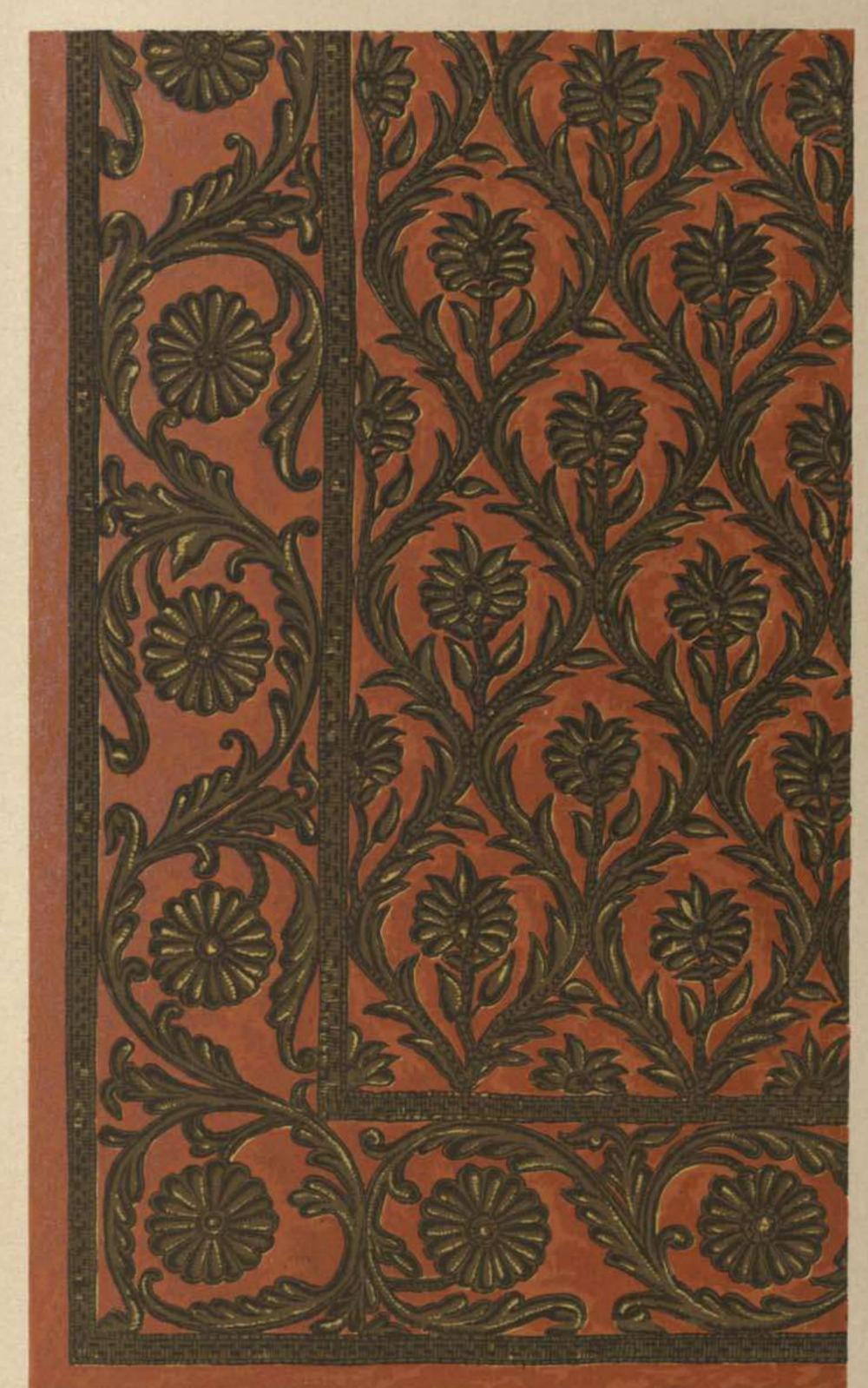
F. Bedford, Photo. et lith.

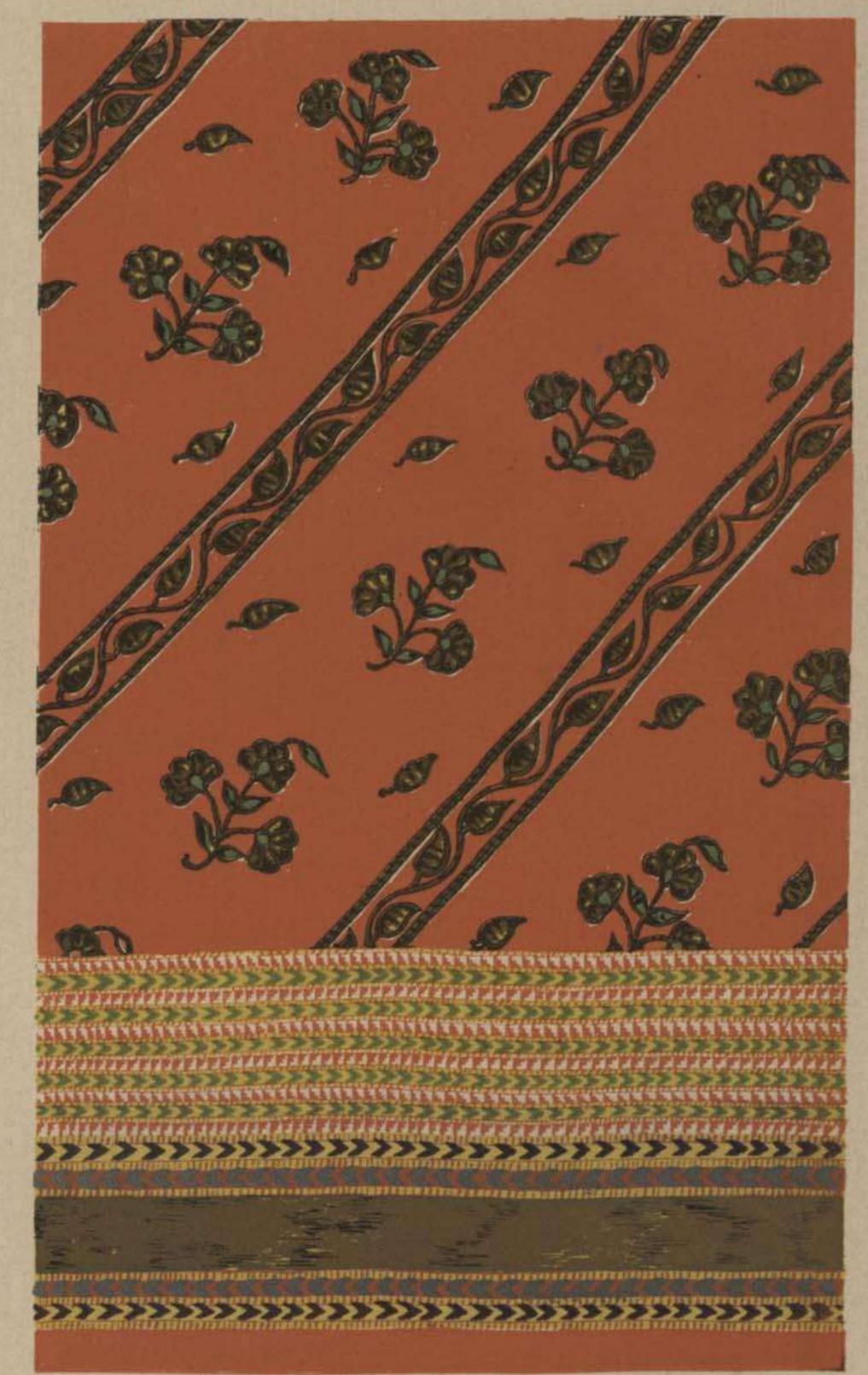
J.B. Waring Dirext

Day& Son, Litte to the Queen









F. Bedford, Photo. et lith.

J.B. Waring, Dirext

Day& Son, Lather to the Queen



FAC-SIMILE OF A NATIVE INDIAN DRAWING FOR A SHAWL.
FROM THE MUSEUM OF THE HONBLE EAST INDIA COMPANY.

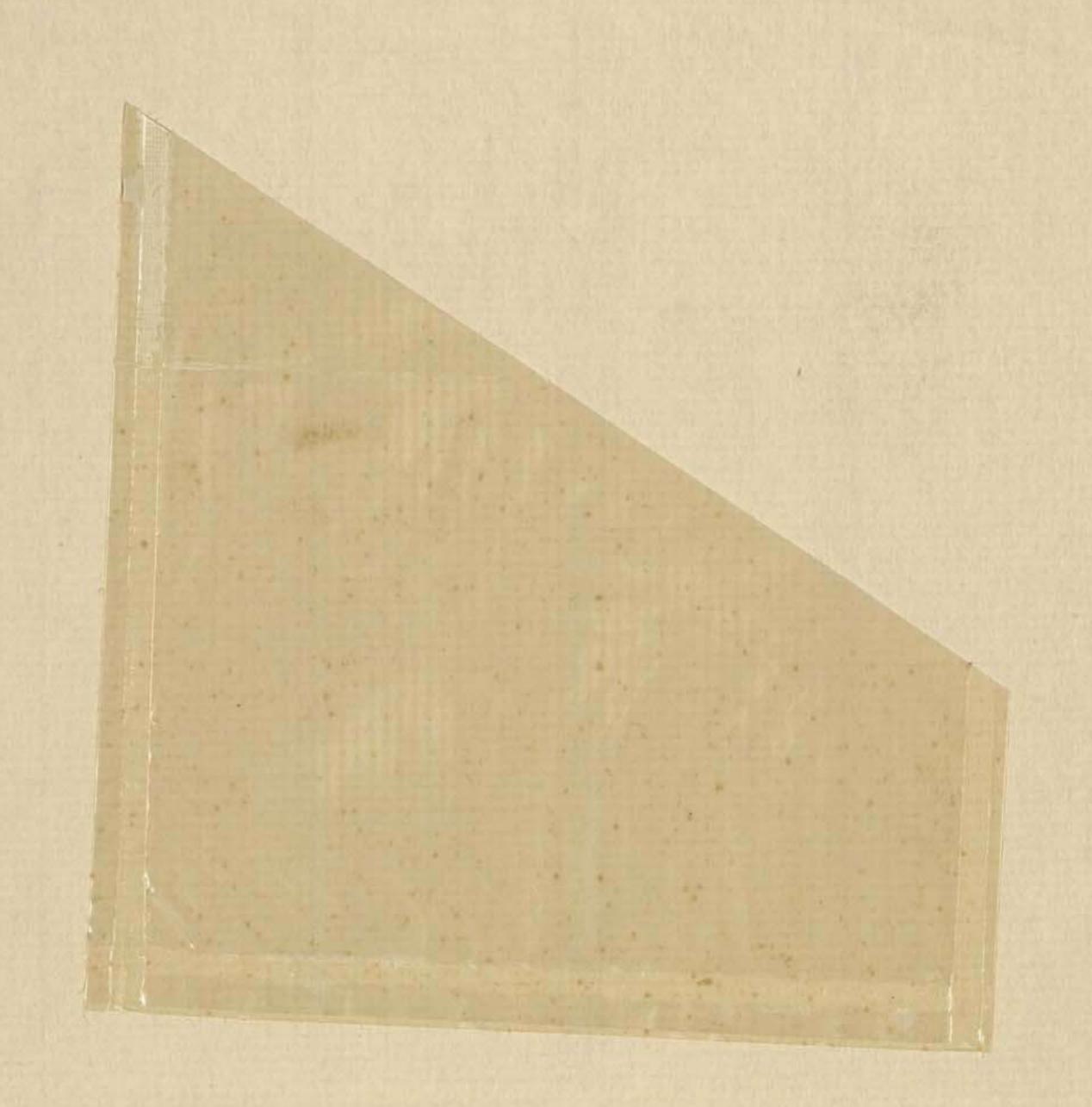


F. Bedford, Photo. et lith.

The second second

J. B. Waring, Dirext

Day & Son, Little to the Queen.



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