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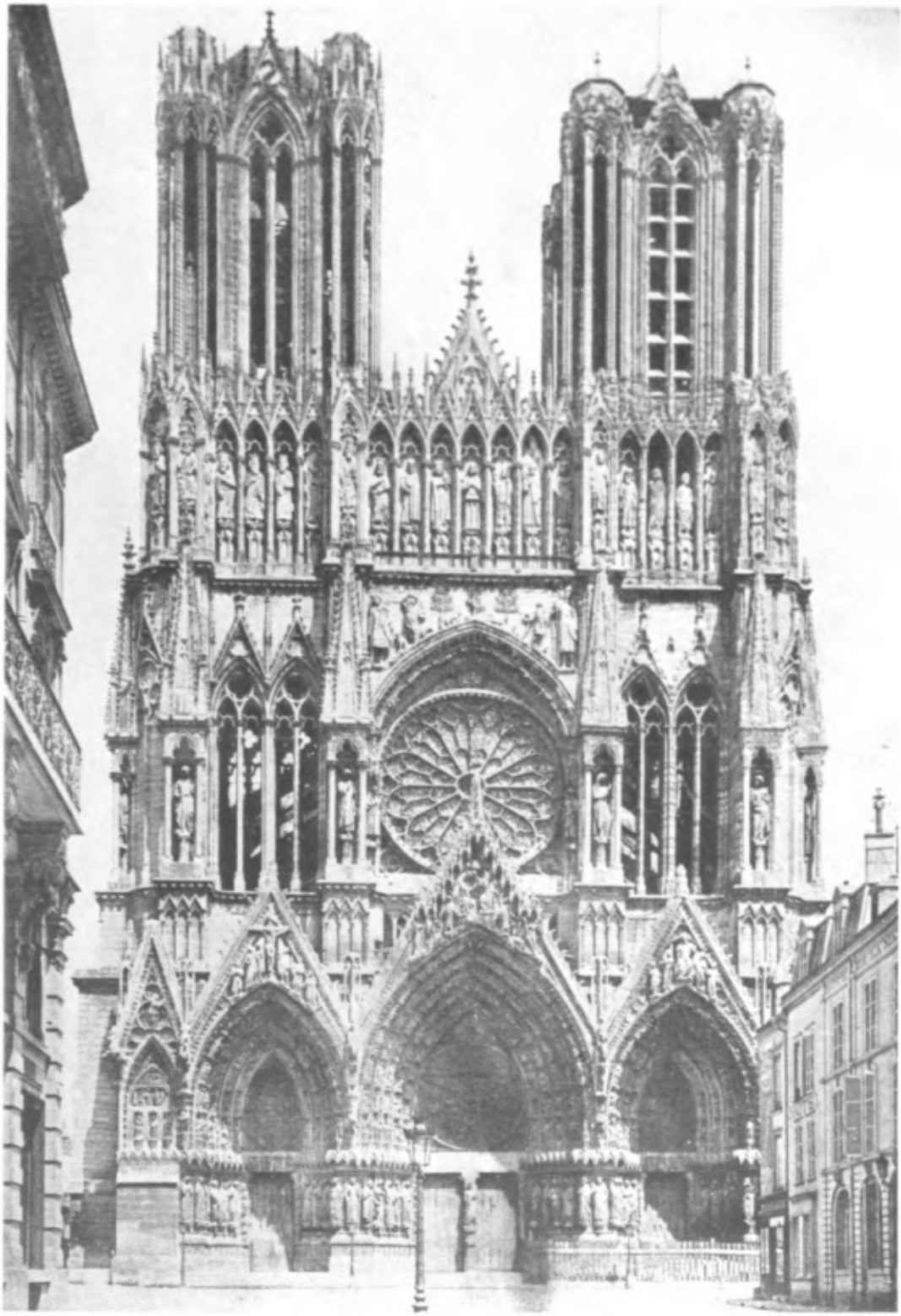

West Front of Reims Cathedral, 1208–1380

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A
HISTORY OF ORNAMENT

ANCIENT AND MEDIEVAL

BY

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WITH 400 ILLUSTRATIONS

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TO

MY STUDENTS

IN GRATEFUL RECOGNITION OF THEIR INTEREST AND DEVOTION WHICH FOR THIRTY-THREE YEARS PAST HAVE MADE TEACHING FOR ME A CONTINUOUS PLEASURE

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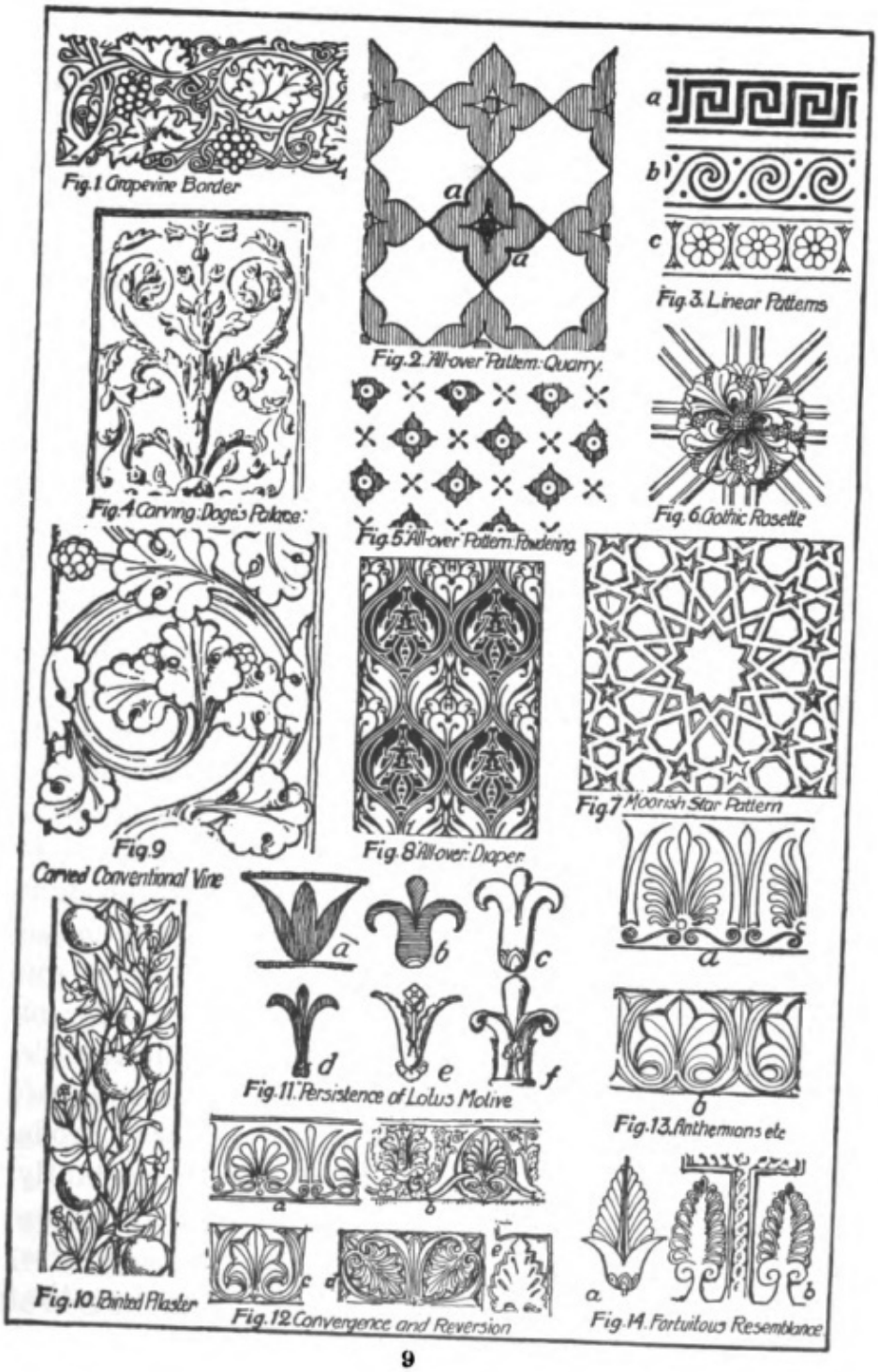

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15. Primitive dagger-handle. 16. New Zealand "tiki-tiki" motive. 17. Maori spear-head. 18. Papuan face-motives. 19. Basketry forms. 20, 21. Peruvian animal motives. 22. Maori and Hawaiian carvings. 23. Brazilian grass-cloth patterns. 24. Papuan frigate bird forms. 25. Maori flute ornament. 26. from Brazil.

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then begins to appropriate for decorative use fetish and totem forms (Figures 20, 21, 24, 28) and adds to these other nature forms, which it eventually uses as pure ornament, with little or no regard for magical intent. Figure 16 shows in *a* an apparently conventional ornament thus derived from the New Zealand totem-figures of women shown in *b*, which represent the pedigrees of New Zealand chiefs in the female line. The technic of wood-notching has converted these figures into the ornament known as the tiki-tiki-tangata.

It seems likely that both theories are measurably correct and must be jointly invoked to explain the beginnings of ornament. The discovery and development of motives originating in technical processes and the development of nature-forms through animistic impulses have probably been concurrent. It seems quite clear that nearly all spirals, zigzags, plaids, lozenges, and many other geometric motives, have originated in the processes of weaving, plaiting and string-lashing. Even the fact that modern savage tribes call these motives by the names of animals, winds, etc., does not prove their animistic origin. Thus in Figure 23 the Indians of Central Brazil call *a* the tunny-fish pattern, *b* the lizard pattern, and *c* and *d* bat-patterns! All four patterns were probably technomorphic in origin, and received these names as afterthought explanations of their origin

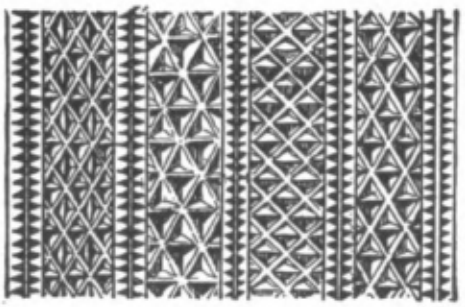

Fig. 29. Detail from Maori Paddle in Plate I, 21.

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FIG. 30. WAR-DRUM HEAD, JAVA.

land in the south. Second only to these in interest is the art of the Hawaiian, Friendly or Tonga, Samoan and Fiji Islands. Basketry, weaving and wood-carving are the chief artistic industries of these peoples; their pottery is unimportant. Animism is everywhere in evidence in these products: clubs, spears, paddles, stone-headed adzes, often designed for ceremonial and not practical use, are covered with patterns invested with fetishistic or totemistic meanings. Many of these patterns may, however, have had a technic origin in basketry, wood-notching, etc. (Figure 29; Plate I, 11, 15, 21, 23).

The patterns in Figure 24 (p. 23), are all derived from the frigate-bird's head; they are from the Papuan Gulf of New Guinea. The very similar pattern in Figure 25—a pattern scratched on a Maori (New Zealand) flute—is claimed by Haddon [2] of Cambridge as having a different origin, as the art of New Zealand appears to be wholly disconnected from the northern Polynesian styles, and the frigate-bird does not otherwise figure in Maori patterns. Figure 22 shows a variation of the tiki-tiki pattern from New Zealand, and two narrow borders from Hawaii, both carved in wood. In Plate I, No. 7 is a specimen of New Zealand tattooing, an art

[2] A. C. Haddon, "Evolution in Art," London, 1895.

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Plate II, 8, 11, 13). According to W. H. Holmes this is due to the derivation of all American pottery from primitive processes of building up the vessel with successive spiral coils of clay "rope," which process in turn is derived from coiled basketry (see Plate II, 12, a Washoe basket-bowl). This theory is borne out by the occurrence of many basketry patterns in Bolivian and other pottery. But the Peruvian spirals in Plate II, 14, may be derived from the coiled snake (II, 16). The spiral is common in Pueblo pottery; Fig. 31 *a* shows an example, which curiously resembles an ancient jar (reversed) from Budmer in Bosnia, illustrated in Hoerner's "Urgeschichte." The spiral *b* is an enlarged detail from the jar in Plate II, 8. In the same plate the illustrations 5 and 8 offer curious analogies to early Greek pottery-ornamentation. Such resemblances, probably wholly fortuitous, have given rise to many speculations as to the origin of the ancient American civilizations.[3]

Fig. 31. *a*, Pueblo Jar; *b*, Detail from Plate II, 8; *c*, Prehistoric Jar from Bosnia.

The modern American Indians, especially those of the

[3] All of the illustrations in Plate II are from sketches made in the American Museum of Natural History in New York, which possesses a superb collection, in its Anthropological section, of examples of primitive art, both American and foreign.

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Southwest, are clever potters and particularly skilful in basketry. The blankets, baskets and beadwork of many other Indian tribes are rich in decorative suggestion, and will be increasingly valued as these arts tend to disappear with advancing civilization.

Fig. 32. Mexican Jar.

The examples shown in these figures and plates can by no means adequately illustrate the richness and variety of savage and primitive ornament; they can only suggest its general character. Every tribe has its own special products and patterns; to some extent they mingle and overlap through commerce and migration. They seem to have been but little modified in style by the contact of civilization, though this contact is apt to result in the disappearance of the native art and the substitution of manufactured foreign products.

Summary of Characteristics.

The main characteristics of savage art may be briefly summarized as follows:

I. Geometric ideals control generally both the distribution and details of the decoration.

II. Natural forms are invariably of magical significance. They converge towards the technomorphic treatment because the savage cares nothing for accuracy of representation, provided the type is recognizable; and

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by the inexhaustible fertility of the Nile mud. Herodotus rightly called Egypt "the gift of the Nile," which became to the Egyptians a source of endless symbols and cosmic-religious ideas. Within this valley the Egyptians were long untouched by foreign influences, and the apparent changelessness of Egyptian art is one of its most striking characteristics.

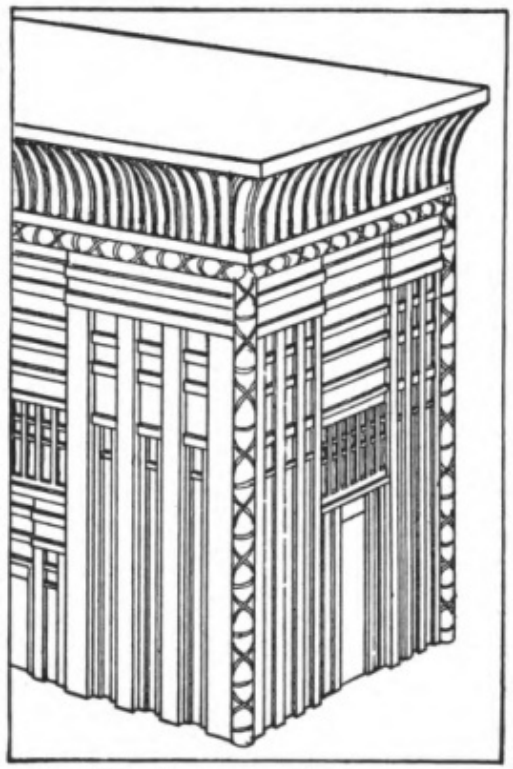

FIG. 33. DETAIL OF SARCOPHAGUS OF MENKAURA.

The government of Egypt was an autocracy, and society was divided into castes, with the priest-caste at its head. To this caste belonged the king, who was deified after death. The religion, grossly idolatrous in its lowest popular form, and polytheistic in its highest phases as understood by the educated priest-caste, possessed many lofty spiritual conceptions underlying its externally complex mythology. Particularly important were its solar deities Amen or Ra, identified with the sun; Osiris and his sister-spouse Isis or Hathor, and Horus their son. The ideas of death and immortality were conspicuous, making sepulchral art the most important

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2160 to 1788 B.C. IV, The New or Second Theban Empire, the 18th–20th dynasties inclusive, 1588–1150 B.C. This is the great age of Egyptian history, the most splendid in its temples and tombs, as well as in war and conquest. It followed a period of two centuries of artistic sterility under five foreign dynasties called the Hyksos or Shepherd Kings. V, the Saitic and Persian Period, comprising the dynasties 21 to 26 inclusive, and the Persian rule which began in 525 B.C.: from 1150 to 324 B.C. VI, the Revival or Ptolemaic Period, under the Macedonian Ptolemies and the Roman dominion: 324 B.C. to 330 A.D. The first half of this period was one of revived artistic activity after a long decline.

Prehistoric Ornament.

FIG. 34. PREHISTORIC SLATE PALETTE IN THE LOUVRE.

It is only within recent years that the pre-Pharaonic art of Egypt has become known by a sufficient number of examples to permit of assigning any dates or sequences of style. Discoveries at Koptos, Nagada and Abydos since 1893 have unearthed the products of long ages before the first dynasty—crude painted statuettes of earthenware, ivory pins and combs, spoons and rings, flint knives with ivory gold-plated handles, vases of pot-

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tween three and four thousand years, shows an extraordinary continuity and uniformity of character and spirit, in spite of the progress observable when it is closely studied. Egyptian art is marked by a highly developed decorative sense which rarely fails to employ both form and color in the most effective and appropriate manner. The influence of symbolism and of surviving traditions of magic is everywhere observable, though the symbolic significance of the forms used was probably by no means always a controlling influence in the design. In many cases it may not have been at all consciously present in the mind of the designer.

Sources and Motives.

The Egyptians employed both geometric and natural forms, the latter always more or less conventionalized. The geometric motives were no doubt chiefly of technic origin, the natural forms magical or symbolic. The conventionalizing tendency was always strong, even in purely pictorial and representative painting and sculpture, largely from the influence of heiratic formulæ and traditions in sepulchral and temple decoration. In ornament there is rarely any attempt to picture natural objects realistically. Thus the lotus (Figure 36, page 47), which appears in Nature as at *a*, is usually depicted in side-elevation, greatly simplified, as at *b* and *c;* and a dish of fruit is shown partly in plan and partly in elevation, the two combined in one representation (Fig. 35). Human figures are drawn

Fig. 35. A Dish of Fruit.

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Other Plant Forms.

The papyrus (Fig. 42) is the most important of these. Its straight, stiff triangular stem with four root-leaves wrapping its slightly swelling base, is imitated in the clustered shafts of many columns (Plate III, 11), and painted as a decoration on walls and on bell-capitals, often alternating with conventional lotuses (Figures 43, 45, Fig. 46). The stem bears a bunch of tiny flowers, forming with their stems a group of green filaments with reddish tops, growing out of a calyx of four leaves or bracts. These supply the suggestion for many bell-shaped forms in ornament (Figure 47), including the great campaniform capitals of huge columns like those of the Karnak hypostyle hall (Figure 43; Plate III, 10).[6]

Fig. 42. The Papyrus in Nature.

Fig. 46. Campaniform Capital, Karnak.

The daisy, convolvulus, grapes, and thistle occur in ornament; also other plant forms not always recognizable. Many rosette and leaf forms are probably mere conventional ornament types, not intended to portray particular plants. The spiked ornament of Figure 44

[6] In the "Grammar of the Lotus," Prof. Goodyear claims as lotus-forms a host of ornament motives and pictorial representations plainly derived from the papyrus. There are, it is true, many forms in which, by convergence, the two types are blended in one.

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is identified by Flinders-Petrie as well as Goodyear, as a lotus with the central sepal exaggerated. This does not seem convincing: it is too persistent and uniform a motive in late art, and too unlike the lotus to warrant this explanation without strong proof, and may represent some aquatic plant not now existent in the Nile valley. The palm appears in capitals during and after the XVIIIth dynasty, and is frequent in Ptolemaic and Roman work (Fig. 64, *c*, page 50; Plate III, 17).

Animal Forms.

The *vulture*, with widespread wings, symbolizing protection and maternal care, is a frequent and a splendid decoration of temple ceilings, and appears in many other applications (Figure 57; Plate III, 20, 23). The wings alone, with the sun-disk significant of Ra, are still more frequent, especially over the gateways or entrances of temples (Figure 58). The *uræus* or cobra is a symbol of death, hence of the royal power of life and death, and hence of royalty itself. It decorates the winged disk (Figure 58), the royal head-dress, and the cornices of certain buildings; especially in the Ptolemaic age, of the front screen-walls of the hypostyle halls (Figure 59). The *scarabæus* or beetle is rarely a purely ornamental motive, but appears isolated on mummy-cases and elsewhere, as a symbol of creation and life, and was the commonest of amulets (Fig. 53). It is occasionally found in late all-overs, as in Plate III A. The *head of Hathor* was used as a sym-

Fig. 53. *Scarabæus Amulet* (Reverse).

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bolic decoration on columns, especially in the Ptolemaic age (Plate III, 9). The *sphinx,* a symbolic compound of lion's body with human head (*androsphinx*) or a sculptured ram (*criosphinx*), was employed to line the *dromos* or avenue leading to a temple, and is occasionally found executed in bronze, basalt or diorite, of small size, perhaps as an amulet. But the sphinx belongs rather to sculpture than to ornament. ***Feathers*** appear not only in representations of great fans or royal insignia, but in the form of scale-like ornament or imbrications (Fig. 61, *b;* Plate III, 21, 22), which may be derived from the actual use of feathers in clothing. Figure 60 may represent fans, or highly conventional lotus forms.

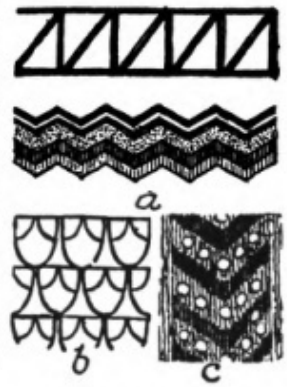

FIG. 61. ZIGZAGS; *b,* IMBRICATIONS; *c,* CHEVRONS.

Conventional or Geometric Motives.

These are of the greatest variety, and are used with consummate skill, sometimes alone, very often in combination with flower-forms, especially the lotus. Fig. 61 *a* illustrates one of many effective examples of the decorative use of simple straight lines. The *zigzag* occurs with great frequency; it is used often to represent water on the Nile, but may not always have had this significance. Associated with the zigzag is the *chevron* (Fig. 61, *c*). Opposed zigzags produce lozenges or diamonds, and occur in simple all-over patterns (Figure 50). It is quite likely that all these are primarily of

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its base, plainly derived from a bundle of reeds bound together. This torus was frequently carried down the corners of pylons and other enclosing walls. A winged disk invariably adorned the central part of the cornice over all temple doorways (Fig. 58).

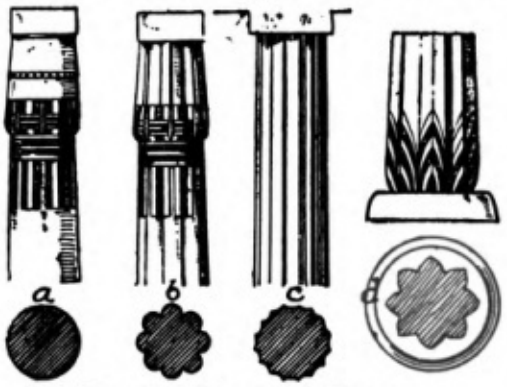

Fig. 63. Types of Columns.

Columns had shafts of three types: the circular or cylindrical, the clustered, and the polygonal or proto-doric (Plate III, 10, 11; Fig. 63, *a, b, c*). The fisrt two tapered upward in most cases, and sometimes had a slight swelling or convexity at the base (Fig. 63, *d*). The clustered shafts consisted of four or eight members (or rarely even more), which were sometimes cylindrical, sometimes formed with an arris or edge (Fig. 63, *d*). The so-called "proto-doric" columns had from eight to thirty-two sides, flat or slightly concaved; they are chiefly found in rock-cut tombs and a few scanty temple-ruins of the Middle Empire (Fig. 63, *c*).

The *Capitals* of columns were of the greatest variety, but divisible into a few main groups: the *bud* capital, single or clustered (Fig. 63, *a, b;* Plate III, 11); the bell-shaped or *campaniform,* single or compound (Fig. 64, *a, b;* also Figure 46 and Figure 43; Plate

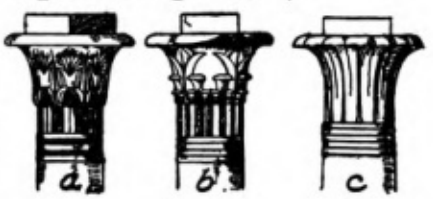

Fig. 64.

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III, 9, 10); the *palmiform* (Fig. 64, *c;* Plate III, 17); and the *Hathoric* (Plate III, 9). The bud-capital was the most common; the campaniform appears chiefly in the central aisles of hypostyle halls, as at Karnak and the Ramesseum; the compound campaniform, the palmiform and the Hathoric belong chiefly to the Ptolemaic age, which produced also various exceptional forms of which those in Plate III, 15 and 19 are examples. The bell capital was adorned with painted petals around its lower part, and with rows of flowers on erect green stalks. These are apparently survivals or elaborations of the green filaments of the papyrus-head from which this type of capital is probably derived[8] (Figures 43, 45, 47; Fig. 46; Plate III, 10). Indeed, many other features of the Egyptian columns point to the influence of papyrus origins. Every shaft, even when cylindrical, is bound by five or more bands at the top, a detail evidently derived from the binding of clustered supports such as bundles of papyrus stalks; the clustered shafts often have an edge or arris, like the triangular stem of the papyrus; the slight swelling at the base, swathed in leaves, with the upward taper, is a marked characteristic of the papyrus stalk (see Fig. 42); the

Fig. 65. Osirid Pier, Luxor.

[8] Prof. Goodyear in his "Grammar of the Lotus" and elsewhere sharply disputes this view, contending that this capital is derived from the seed-vessel of the rose-lotus. His authority is weighty, but his arguments not convincing. See *ante,* page 43, Note.

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dants, brooches and necklaces (Figures 55, *a*, 56;—but we have on mummy-cases and in pictures representations of necklaces and pectorals of great splendor (Figure 66). In all these the lotus, bud, and palmette are constantly recurring motives. The art of enameling was understood and practised with skill, especially for amulets. Glass was known, was used for vials and small objects, and was highly prized. Small objects like spoons and perfume-boxes were carved in wood, often in highly artistic designs (Fig. 67; Plate III, 25). Textile art was highly developed, linen being the chief material. The figured stuffs, hangings, etc., have perished, but the tomb paintings show us the designs once employed: some of these have already been illustrated (Figures 41, 48, 52; Plate III, 6–8, 12–14. Pottery and earthenware were produced in large quantities, and were articles of export, but the product did not compare either in grace of form or in decoration with the later ceramic work of the Greeks. Enameled earthenware was used for the finer bowls, platters, etc., and enameled tiles were early used in architecture, as around a door in the stepped pyramid of Sakkarah, but apparently not in buildings after the Hyksos period. Amulets and small ornaments were made of enameled earthenware, of cloisonné enamel on metal (gold or copper), of bronze,

Fig. 67. Carved Wooden Spoon.

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bulk of the product of the excavations carried on in Niffer (Nippur) the sacred city, in Warka, Mugheir, in Babylon, and in other places belonging to this empire. The plastic arts were apparently not in general highly developed. The most ancient examples of its architectural ornament known are the walls of Warka (Erech), formed with vertical reedings and panels, and covered with a simple mosaic (Fig. 68) formed of cones of terra cotta driven into their sun-dried brick facings. The flat exposed bases of these cones, enameled in various colors, form patterns of lozenges and zigzags, apparently derived from familiar matting-patterns. Flat tiles may have been used in other cases, but they have all perished.

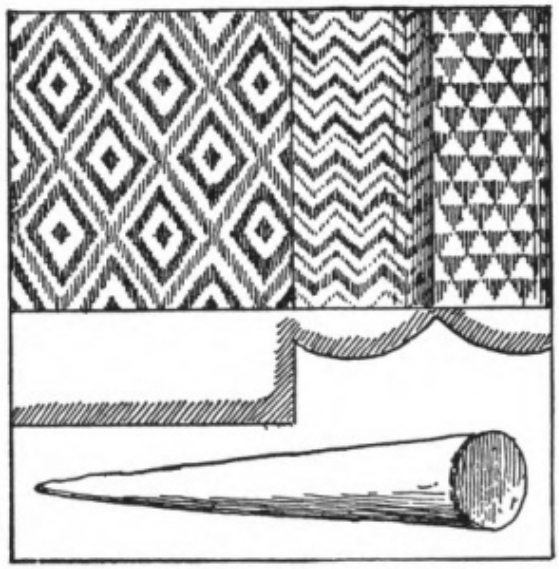

Fig. 68. Wall-Mosaic, Warka.

Assyrian Ornament: Origins and Motives.

Assyrian decoration depended largely on naturalistic representation: human figures, bulls, lions and other animals appear frequently, not merely in the great sculptured pictures on the alabaster wainscot of palace halls, but in the subordinate decoration of buildings and

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in the ornament of minor objects. There was also a large group of motives derived from Egyptian art, greatly modified oftentimes in treatment but still recog-

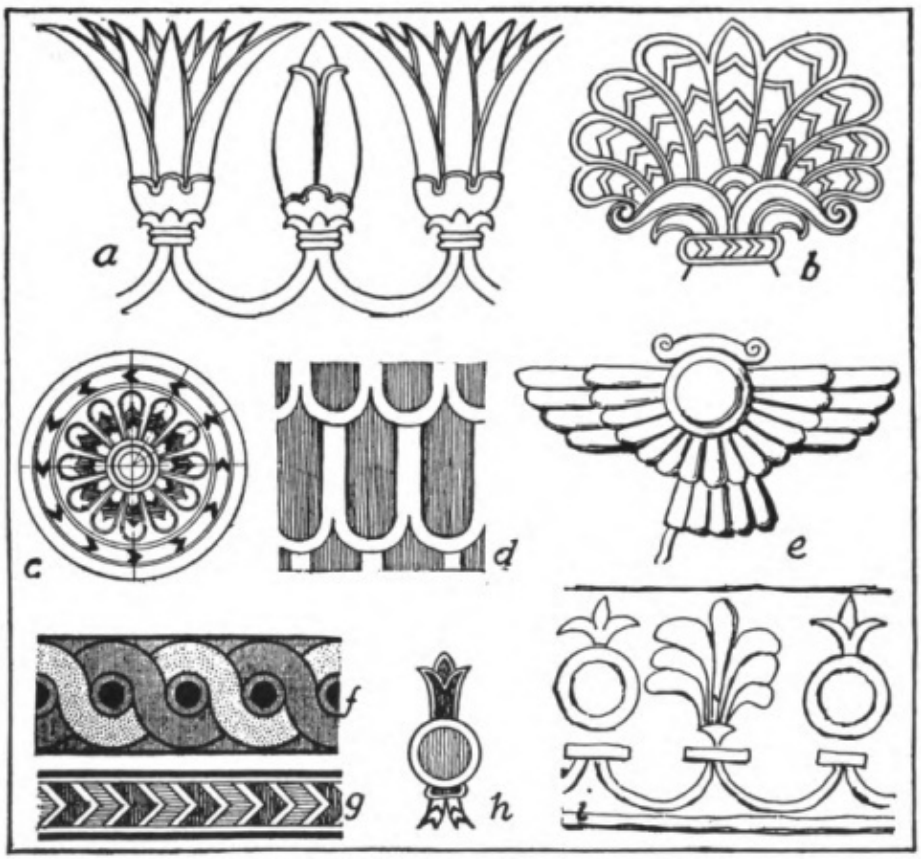

FIG. 69. ASSYRIAN ORNAMENT MOTIVES.

nizably Egyptian. Another class of motives are in dispute, but two facts seem clear: first, that the Assyrians originated little in the way of decorative motives; and, secondly, that whatever they borrowed underwent a transformation into something that is purely Assyrian in character.

The lotus (Fig. 69, *a*); lotus-palmette (*b*), and

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orate rosettes (Plate IV, 8). The lotus-palmette (Fig. 69, *b*) was often substituted for the lotus (Plate IV, 1) and used in borders; as an isolated terminal ornament (Fig. 72, *a*); as the chief detail of the Sacred Tree (Fig. 70, *c;* Plate IV, 2), and in many other ways, carved in alabaster-relief, painted on plaster, enameled on bricks, cast or engraved in bronze. In all borders, the units were connected by voluted bands, often curved into semi-circles or semi-ellipses (Figs. 69, *a,* 70) and frequently fastened together by links. This is a purely Assyrian device, and the organic linking of the units—no longer merely strung along a straight line as in most Egyptian examples—marks a decided decorative advance. Whether the frequent use of branching and opposed double volutes (Fig. 71), so common in Assyrian decoration, was derived from the volutes of the Egyptian trilobe lotus and lotus-palmette, or from the curled-over ends of the linked bands, is not clear and perhaps not important. The discussion as to whether the palmette in Assyrian art "is" a lotus or a

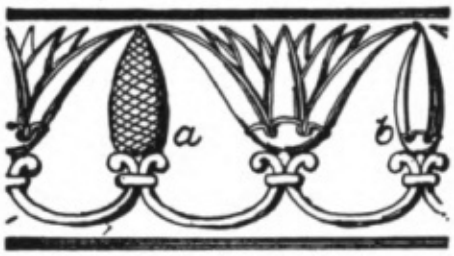

Fig. 70. *a, b.* Pine and Lotus Border; *c,* Detail of Sacred Tree.

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the palaces show how they were used, as mullions and as supports for pavilions. In these, as also in furniture, coupled volutes are favorite devices, and undoubtedly furnish the first step in the development of the Ionic capital (Fig. 71).

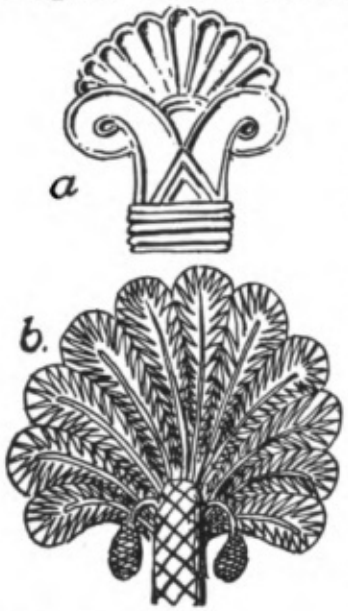

FIG. 72. *a*, TERMINAL PALMETTE; *b*, PALM-TREE, FROM A RELIEF.

Living Forms.

The human figure, grotesques or monsters, part man and part beast, and representations of animals, all play a large part in Assyrian decorative art; not merely in the great pictures in low relief which wainscoted the lower parts of the interior walls, but in more purely ornamental and symbolic compositions, sometimes carved in relief in alabaster, sometimes in flat color on tiles or plaster. The huge symbolic "portal guardians" —winged monsters with human heads and bodies of bulls—that flanked the arched gateways of the palaces and fortifications, are genuine decorative compositions of extraordinary power and remarkable execution. The details are highly conventionalized; five legs are shown, two appearing in front elevation and four in the side view; the hair and beard are curled into closely coiled spirals and the muscles exaggerated (Plate IV, 7). The winged lion and winged bull, as well as winged human figures representing deities, appear frequently

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in enameled earthenware tiles. The griffin (Fig. 73), a monster with a lion's or panther's body and the head and wings of an eagle, plays an important part in this decorative system of religious symbolism. It probably originated in Chaldea, and spread thence through Western Asia, to appear in Greek and Roman art in later

Fig. 73. Griffin or Monster, from a Relief.

years. In naturalistic pictures the forms and action of animals were rendered often with surprising realism; but these belong in the field of pictorial relief sculpture rather than of ornament.

Colors and Technic.

The Assyrian technic in the representation of nature never fell into the absolute rigidity of hieratic convention observed in Egypt. Within its far narrower field, it was excellent in execution, but less rich in variety of motive and pattern of ornament. The gamut of color was restricted: green, blue, yellow, black and dark red were the colors chiefly employed. The use of black in

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CHAPTER V

WEST ASIATIC ORNAMENT

PHRYGIA, LYDIA AND PERSIA

The northern half of Asia Minor, west of the river Halys, was occupied, during the centuries from the tenth to the sixth B.C., by the Phrygians, originally from

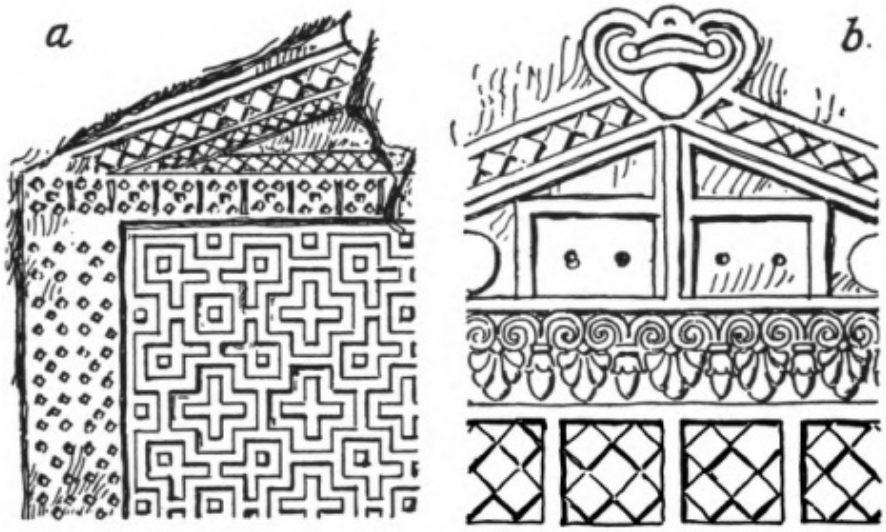

FIG. 74. *a*, PART OF FAÇADE OF "TOMB OF MIDAS"; *b*, DETAIL FROM TOMB AT DOGHANLOU.

Thrace; whose empire was overthrown early in the sixth century by the Lydians of the extreme western littoral. Along the Asiatic shore south of Lydia were the Caryans and Lycians. In all of these several domains there

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developed a material civilization which has left numerous remains, chiefly of tombs, though excavations now being made at Sardis and others that are still in the future may supply us with products of other arts as well as of architecture. The principal examples of ornament thus far to hand occur in the rock-cut tomb-façades, some of which, like the so-called Tomb of Midas (Fig. 74, *a*) and a tomb at Doghanlou (*b*) suggest textile design. This region has from great antiquity been noted for the weaving of rugs; other ornaments are clearly derived from wood-construction, while others again show Assyrian, Persian and Ægean influences.

FIG. 75. CAPITAL FROM NEANDREIA.

Several capitals and fragments of capitals (Fig. 75) found in Asia Minor, with branching volutes and with recurved petals, furnish the probable prototypes of the Greek Ionic capital and of certain details of the Persian capitals.

Persian Ornament.

The art of Asia Minor bears no comparison in splendor and variety with that of the great Medo-Persian empire of the Achæmenid kings—Cyrus, Cambyses, Darius, Xerxes and their successors. This empire, which began its conquering career in 608 under the Mede Cyaxares, and fifty years later attained greatness under Cyrus (559–529) and his successors, developed a grandiose architecture of palaces, halls, gates and

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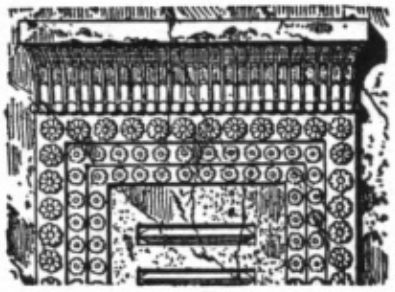
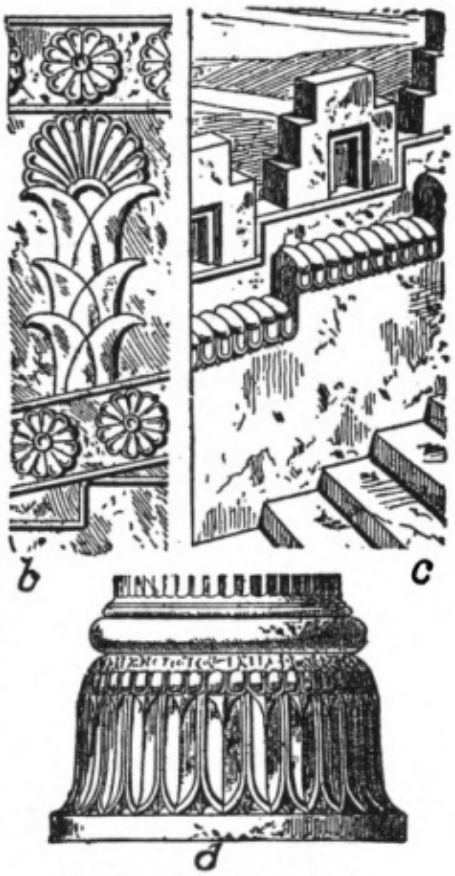
dentils of the Ionic order; they are found both in Persian (see Fig. 77, *a*) and Lycian architecture, in both of which they plainly reveal their origin in timber construction.



a

Persian Ornament Motives.

These were chiefly derived from Egypt and Mesopotamia; the lotus, lotus-palmette and rosette are those most frequently employed, but treated with details which differentiate them clearly from the Egyptian, Assyrian or Chaldean forms. In linear bands of lotus-palmettes and buds the units are connected by nearly semicircular loops instead of the flattened links of the Assyrian style (Plate IV, 14). Plate IV, 12, and Fig. 77, *b*, show the lotus palmette on a stem like that of some palms which grow by successive pairs of leaves rising one out of the



b *c* *d*

FIG. 77. PERSIAN DETAILS.

a, Architrave and Cornice from a Tomb; *b*, Rosettes and Palm; *c*, Stair Parapet; *d*, Column-Base, Persepolis.

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other; evidently, therefore, not intended at all for a lotus, but as a purely conventional plant-form, perhaps even a palm-tree. Spiral and voluted forms are also common, both in flat ornament (see Plate IV) and in the mighty grouped vertical volutes of the capitals of columns (Fig. 78). The Assyrian stepped parapet also appears in the decoration of the platforms and stairs of Persepolis (Fig. 77, *c*). From Egypt were derived the fluted cavetto cornice (Fig. 77, *a*) and the winged disk, converted into a winged ring encircling the figure of a god, Ahuri-Mazda (Fig. 79). The sculptural representations of warriors, winged lions and winged bulls were based on Assyrian prototypes. The wood-constructions of Media and Asia Minor gave the suggestions for the forked capital, the banded architrave and the dentil. The leaf ornaments on the bases (Fig. 77, *d*) and the shorter leaf-ornaments resembling eggs and darts (Fig. 77, *c*) are possibly remote derivatives from the lotus bud and from lotus bands; more directly, however, derived from Assyria, as is also the stepped-pyramid parapet. The bead-and-reel molding, which occurs in some

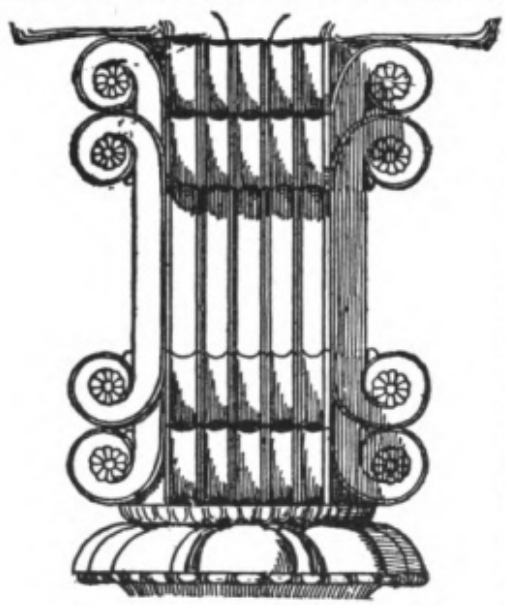

Fig. 78. Volutes of a Capital, Persepolis.

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ple heavy torus capitals. A notable architectural motive, frequently recurring in Mycenæan art, is that shown in Figure 81 (page 76) composed of a pair of semi-rosettes flanking a vertical rectangle. Its significance and origin are uncertain. On plaster and on pottery the circle, rosette and spiral wave or "Vitruvian scroll" are frequent, in various combinations (Figure 82); also a heart-shaped motive which was carried into Mycenæan decoration. The elaborate "key" or fret-pattern of Figure 83 is from a plastered wall at Knossos.

Fig. 80. Column from Knossos.

Of Cretan pottery comparatively little has survived, but the elaborate late Minoan vase from Knossos shown in Fig. 84 reveals a highly developed pattern of conventional leaf-forms. Fig. 85 from a sarcophagus found near Gortyna, shows a curiously conventionalized portrayal of marine plant-life. Figure 86 shows two all-over patterns from a large pottery ossuary; one resembles a common Egyptian pattern (see Figure 52); the other is peculiarly Cretan. The interior of the same ossuary is decorated with representations of waves, fishes and shells.

Fig. 84. Late Minoan Vase.

Mycenæan Ornament.

The art-products of the Mycenæan culture include those from Tiryns, Troy, Argos, Nauplia, Menidi and other sites,

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Fig. 91. Mycenæan Pottery, Spirals.

Figure 88 shows patterns derived from basketry, singularly like many found on South American pottery; while in Figure 90, *a, b, c,* and Fig. 97, the representations of marine plants and animals reveal an instinct for the observation and imitation of Nature, of which traces are found in Cretan art, and which later, in Greek art, flowered into the superb sculpture of the Periclean age.

Besides the architectural forms already referred to, the motives characteristic of Mycenæan ornament are the zig-zag (Figure 87), spiral (Fig. 91); the running scroll; a heart-shaped motive (Figure 94) perhaps converging towards the cuttlefish (Figure 92); the rosette, both carved and painted (see Figure 89); the double-branched volute recalling the lotus trilobe (Figure 94, *c*); a peculiar variant of the guilloche (or the current scroll?) shown in Fig. 95, *a* and in the detail of Figure 89; and a number of unnamed motives, *e.g.*, the imbricated pattern from Tiryns in Figure 93.

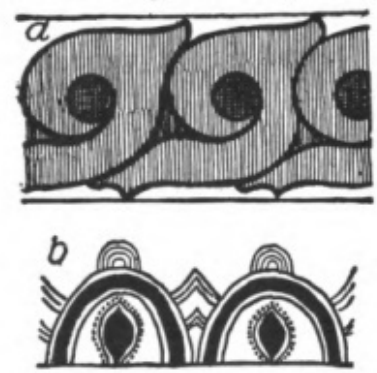

Fig. 95. *a*, Current Scroll, Tiryns; *b*, Vase Ornament, Mycenæ.

A somewhat similar motive in a linear repetition on vases, suggests an inverted egg-and-dart (Figure 95, *b*).

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Figs. 96 and 97 show various Nature-forms, apparently derived from marine life; Fig. 97 is a vase from Ialyssos bearing a squid as its chief ornament. The cuttlefish squid, dolphin (?), and sea-weed are common, besides many forms like those in Figure 90, *d,* Figs. 96 and 97, impossible to identify. On the so-called "Mycenæ buttons" —thin plates of gold stamped or *repoussé* in low relief, appears the peculiarly Mycenæan motive of a band winding in and out around small eyes or round dots, with excellent decorative effect (Fig. 98).

Fig. 96. Plant-Forms, Mycenæ Pottery.

The lotus and the multiple scroll, so common in Egyp-

Fig. 97. Squids, on Mycenæan Vases.

tian decoration, appear frequently, as in a slab from a tomb-ceiling in Orchomenos,[2] in the band from a wall-

[2] Figured in P. & C., "Histoire de l'Art"; Sturgis, "History of Architecture," vol. I, 125; Tarbell, "A History of Greek Art," page 55; Marquand, "Greek Architecture," page 155.

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originators in art; they carried and exchanged, and freely counterfeited, Egyptian and Assyrian or Babylonian wares and stuffs. The detail from a silver

FIG. 100. MYCENÆ SPIRAL ALL-OVERS; *a*, GOLD INLAY ON SWORD; *b*, BRONZE STELE.

platter in Figure 106 is plainly an imitation of Egyptian work. Sidon was for a long period under Egyptian rule. The Phenicians were skilful weavers, dyers and bronze-workers. Solomon's temple at Jerusalem was largely of Phenician workmanship, and the accounts in I Kings, vii, 13–45 and I Chronicles iii, 15–iv, 17 prove the Phenicians of 1000 B.C. to have been capable of casting large objects of "brass" (bronze), such as the columns "Jachin" and "Boaz" and the huge "laver" borne on twelve oxen.

FIG. 114. CYPRIOTE STONE STELE.

Distinctive Phenician ornament motives are few.

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The most characteristic is a species of palmette springing from the concave side of a voluted crescent (Figures 108, 109, *a*, *c*), derived from the Assyrian palmette with horns, converging with the Phenician crescent, symbol of the goddess Astarte. It persists into Greek art of the fifth century B.C. appearing as a vase band-motive (Figure 109, *b*).

FIG. 115. CYPRIOTE LOTUS, FROM VASE.

Cypriote Ornament.

Cyprus was an important *entrepôt* of Phenician commerce, and its art is peculiarly interesting because of the mingling of Egyptian, Ægean, Phenician and early Greek influences which it betrays. In general character it resembles sometimes the Mycenæan, sometimes the Phenician. Its principal motives are the lotus, almost grotesquely transformed from the Egyptian type (Figure 112, also Fig. 115); the lotus palmette in several variant forms, one the Phenician palmette with upturned volutes (Figure 111), and others such as those in Figure 113 and Figure 114, used as finials or cap for steles and pilasters. A curious design, compounded of palmettes, trilobes and horns is that in Figure 111 from a sarcophagus in the Metropolitan Museum in New York, from Amathus; in a variant form which may be a lotus and not a palmette, it ap-

FIG. 116. CYPRIOTE ORNAMENTS ON VASES.

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FIG. 117. PHENICIAN VASE FROM JERUSALEM.

pears also in Figure 110, apparently related to the Assyrian Sacred Tree (see Fig. 70, *c*). It will be observed that this entire composition recalls the primitive Egyptian design of Fig. 34. The type constantly reappears in Asiatic art. Rectangles, lozenges, and checkerings applied even to the central sepal of the lotus betray the persistent influence of primitive basketry patterns (Fig. 115, in which note also the swastikas). The lotus is always ungraceful in Cypriote art. The recurved or voluted sepals in Figure 112 and Fig. 115 are closely related to the branching volutes in Fig. 116, the lower ornament in which—a four-petaled flower—is probably, like the checkers, lozenge and triangle of Fig. 115 and Figure 112, a reminiscence of primitive pottery and basketry (see Chapter II).

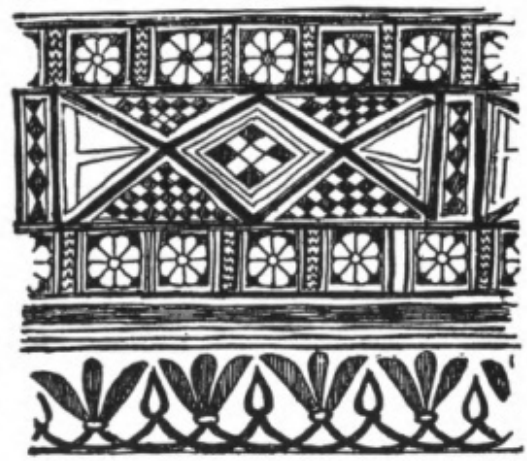

FIG. 118. DETAIL FROM CYPRIOTE VASE FROM ORMIDIA (MET. MUSEUM, N. Y.).

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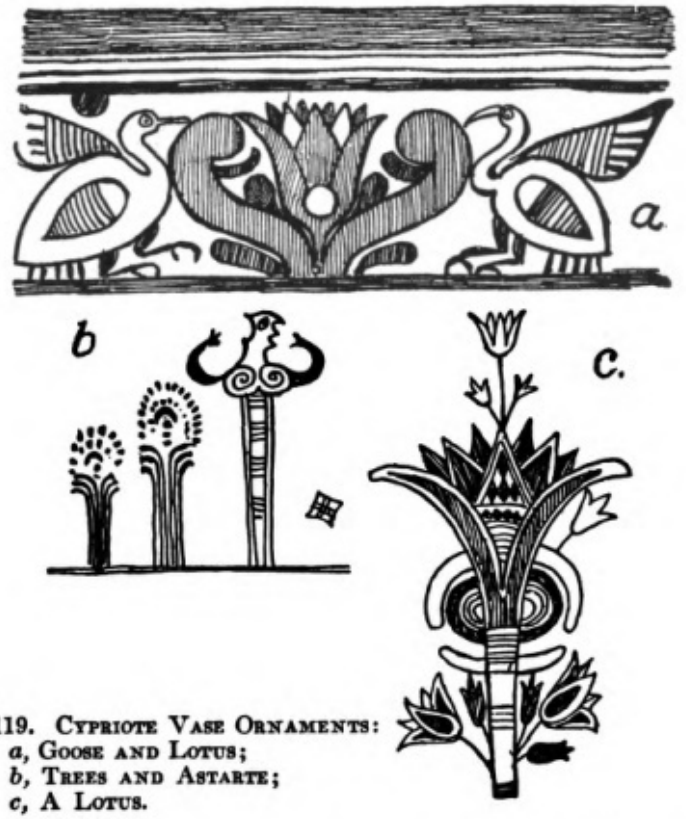

FIG. 119. CYPRIOTE VASE ORNAMENTS:
a, GOOSE AND LOTUS;
b, TREES AND ASTARTE;
c, A LOTUS.

This survival appears also in the splendid Phenician vase from Jerusalem (Fig. 117) and the Cypriote vase from Ormidia (Fig. 118)—the latter in the New York Metropolitan Museum. Animals, human figures and plant forms appear on vases—the horse, goose (Fig. 119, *a*) and bull, and caricatures of the human form (Fig. 119, *b*).[3] The swastika or fylfot appears occasionally as a minor detail, probably as a solar symbol, as in Fig. 115. The affronting

[3] Compare the queer plants beside the figure (is this Astarte?) with those from Mycenæ, in Fig. 96 and Figure 104.

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of two opposed birds or beasts on either side of a central shaft or column, as in Figure 110, preserves or repeats a common Asiatic (Assyrian, Mycenæan, Hittite, Phenician) symbolic motive, of which probably the earliest examples is the prehistoric Egyptian slate-carving shown in Fig. 34. Whether the goose, horse, swastika, etc., are solar symbols, is a question not yet certainly answered. Fig. 119, *c*, from a Cypriote œnochoë in the Metropolitan Museum, illustrates the singular mixture of lotus and other forms frequently met with in Cypriote art.

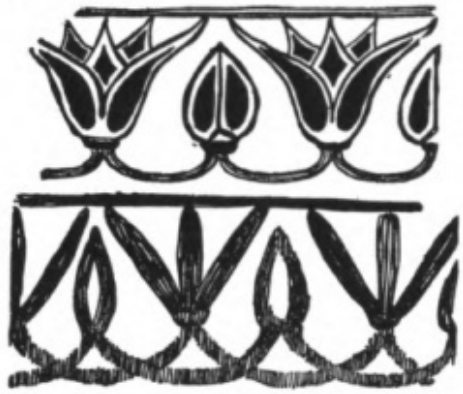

Fig. 120. Lotus-and-Bird Borders on Rhodian and Melian Vases.

The ornament of Rhodes (Kameiros, Ialyssos, etc.) and of Melos, is a later development from the Mycenæan, less mixed with Egyptian and Assyrian forms than the Cypriote. It is found chiefly in pottery remains, covering the period from the ninth century B.C. down to historic Greek art, thus supplying a connecting link, though a slight one, between the Hellenic and pre-Hellenic cultures. Examples are shown in Fig. 120 of a Rhodian lotus-band (above) and a Melian (below), the latter an almost exact duplicate of that on the Cypriote vase from Ormidia shown in Fig. 118. Comparison of both with the Mycenæan jars of Figure 88 and Fig. 117 sufficiently demonstrates the interrelation of these three phases of pre-Hellenic art.

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Fig. 121.—Greek Vase, "Fine" Period. (Naples Museum)

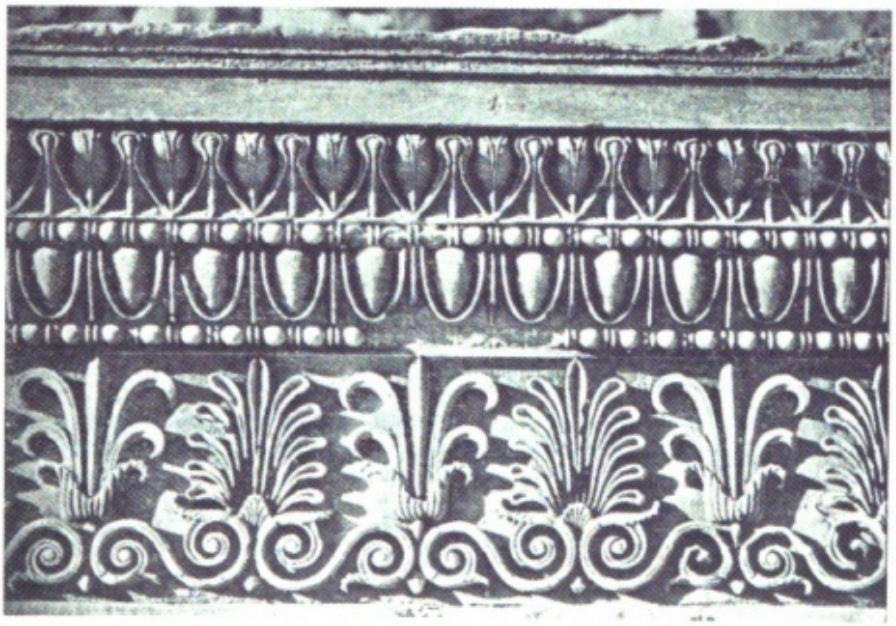

Fig. 121A.—Anthemion Band and Cap Moldings, from the Erechtheion

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Fig. 122. Greek Palmettes, from a Vase

Fig. 123 Greek and Assyrian Ornament - Links

Fig. 131 Greek Frets

Fig. 141 Scroll: Apulian Vase

Fig. 127 Carved Runceau from Miletus (Late)

Fig. 135. Varieties of Anthemion Motive

Fig. 137 Greek Vine Pattern

Fig. 132. Guilloche

Fig. 138. Elementary Rinceau on Vase

Fig. 136 Varieties of Lotiform Motive

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the architectural details were executed in terra-cotta and painted, much like the vases.

The Motives.

These constitute an alphabet of only moderate extent. The greatness of Greek ornament lies in the variety and originality of the combinations of these few fundamental forms, and the elegance of the results, rather than in the number of the primary motives. So nearly endless are the variations of these, that instances of exact reduplication of any ornament on different objects are almost unknown. Even such forms as the Doric capital, or the egg-and-dart molding, are never exactly alike on two different buildings.

Fig. 124. Geometric Elements.

In framing any list of motives, it is difficult to draw the line between related forms and to determine when it is proper to distinguish them as really separate motives, and when not. With regard to certain nature-forms, also, there may be differences of judgment as to whether they should be accounted as ornament or as sculpture or painting. We

Fig. 125. Nature-Forms.

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4th centuries B.C. are due, first to the innate artistic spirit of the people; and secondly to the use of terra cotta vases as gifts and prizes. They were regarded as works of art, and the painters who decorated them were proud to sign their works. The decoration of these vases was executed with a bold, free hand which the published illustrations generally fail to reproduce. Special care and attention were bestowed upon the form, proportions and silhouette of these vases, in spite of their humble material. A singular elegance of shape characterizes nearly all of the Greek pottery; the profiles are composed of exquisitely subtle curves harmoniously blended. The chief among many types are the *amphora,* a tall two-handled (or three-handled) jar for wine (Fig. 128, *e, g*); the *œnochoë,* a large-bodied wine-vessel; the *hydria* (*i, l*), a wide-mouthed water-jar; the *lekythos* (*b*), a small slender-necked vase for perfumes or for votive and funereal uses; the somewhat similar *alabastron,* usually of alabaster (*d*); the *krater* (*f*); a cup or jar with a spreading mouth; the *kylix* (*k*), a broad, dish-like vessel (these two types merge into one another); the *rhyton* (*c*), a drinking horn, shaped often like an animal's head; the *aryballos* (*a*), and various other forms.

FIG. 129. GEOMETRIC VASE, SÈVRES.

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Development of Motives.

In an important group of early archaic vases the decoration consists of successive bands alternately of ornament and pictures (*e.g.*, the Dodwell vase, *a* in Fig. 128). Another group, in the so-called "geometric" style,[4] are adorned with bands of parallel lines, zigzags, curious frets, concentric circles, stars or flowers, swastikas irregularly disposed, and checkered patterns imitated from basketry or textiles (Fig. 129). In others, mostly from the islands or from Asiatic Greek factories, Oriental influences are evident; lions, sphinxes and gazelles, horses and the solar goose are pictured upon them, and in the ornament proper the lotus and lotus-palmette are common (Fig. 130; this may possibly be a Rhodian vase).

As the potter's art advances, the fret, wave and anthemion are increasingly used and developed into the greatest possible variety of forms. The fret occurs in several varying types; the *simple fret* as in Figure 131, *a* (page 94), the *compound fret*, formed by two intersecting lines of alternate "keys" and "humps" crossing to form a series of swastika motives (*ib.*, *b*); the *rosetted fret* in which the key-motive alternates with

Fig. 130. Early Vase; Rhodian?

[4] Called also "Dipylon style," "Dipylon vases," because of the number of vases in this style exhumed near the Dipylon gate in Athens.

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a square or round rosette (Plate VI, 5, 9); the *oblique fret,* and the *double fret* (Figure 131, *c*). All these were drawn free-hand, usually in such manner as to make the black stroke and red background of about equal thickness.

Fig. 132a.

The spiral wave was not, as has been frequently asserted, a representation of water, and hence always placed at the foot of the vase: it was used as a border alike above and below the picture or vase-painting, as a variant of the fret, from which it was probably derived (Plate VI, 1, 3; Fig. 132 a).

The Anthemion.

The *anthemion* is the most important and most beautiful of all Greek ornament motives. Its origin can be clearly traced back through Phenician and Assyrian forms to the Egyptian lotus and lotus-palmette.[5] Its resemblance to the blossoms of the honeysuckle, recognized by the Greeks in its name *ἀνθέμιον,* is a fortuitous resemblance or an afterthought, more noticeable in the late examples than the earlier, and is not an explanation of its origin. In the Assyrian lotus-and-palmette borders (see Plate IV), the units are connected by linked voluted bands; the Greeks substituted for these the double-curved or S-scroll (Figure 123), introducing thereby a wholly new element of grace and rhythmic movement into the composition (see Plates V and VI). They also curved the "petals" of the palmette in vari-

[5] For an exhaustive discussion of this derivation, cf. Goodyear, "Grammar of the Lotus" (London, 1891).

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ous ways, elaborated the connecting scrolls, and refined their forms and combinations in an extraordinary variety of ways, creating out of the somewhat monotonous and lifeless Oriental palmette an entirely new and exquisitely beautiful ornament (Figs. 133, 134). Fig. 134 represents diagrammatically a few of the principal types of Greek anthemion bands—single and double, opposite and alternate, vertical and oblique; the anthemion *open* as in *a, c, d* or *framed* as in *b, e,* almost always alternating with a contrasting motive derived from the lotus,

Fig. 133. Anthemion with Voluted Scrolls; from a Vase.

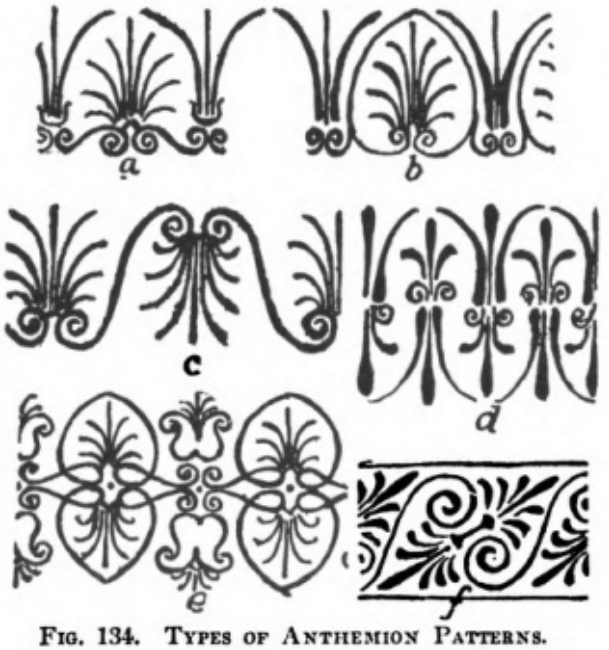

Fig. 134. Types of Anthemion Patterns.

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Spirals and branching scrolls are common in the details of pottery-decoration, especially the spirals of the wave or Vitruvian scroll; but the branching scroll as

FIG. 139. EVOLUTION OF EGG-AND-DART.

an independent motive is never used except in late *rinceaux*. The scrolls of anthemion frames and links sometimes branch twice or even three times, as in Fig. 133, but never more than this.

Alexandrian and Apulian Pottery.

The Alexandrian age brought in a new taste for magnificence in all branches of art, and the pottery of the late fourth and early third centuries reflects this changed spirit in the excessive elaboration of the decoration. The coloring was enriched and varied, all parts of the vase were covered with pictures and ornament, in which branching scrolls played an important part. Simplicity and grace of movement were lost in the complexity of multiplied spirals and fantastic details. The potter's art was developed in new manufacturing centers in southern Italy (Apulia and Campania), which became celebrated for the size and splendor of the vases they produced. The handles were made especially impor-

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tant, and modeled heads and figures were often introduced into the decoration. Fig. 140 illustrates one of these Italo-Greek vases, and in Plate VI and Figure 141 (page 94) are shown some of the complicated details common in this pottery.

Fig. 140. Apulian Vase; Sèvres Museum.

Architectural Ceramics.

Painted terra-cotta ornaments were long used on buildings of stone or wood, though stone and marble displaced them on the more important buildings from a very early date. Moldings, especially crown-moldings on cornices, antefixæ, acroteria and ridge-tiles were the chief of these ceramic ornaments. They display many of the motives and patterns of pottery-decoration, in modified form and richer coloring, in which green and yellow were used as well as red and black: frets, anthemions, the egg-and-dart, guilloche and scale-motive are the commonest decorations. Similar ornaments were later painted on marble and formed an important element in Greek architectural ornament.

Books Recommended:

List follows next Chapter.

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are shown in the lower part of Plate VI. Of the bronze gates, grilles, lamps and other adjuncts of these buildings we have no remains.

The painted ornament of architecture comprised (*a*) molding ornaments (Figure 142, page 113); (*b*) ceiling-panels (Fig. 143); (*c*) solid color applied to triglyphs (blue), metopes (red) (Plate VI, 33), and sometimes to walls and possibly columns; (*d*) the painting of the woodwork of the interior ceilings; (*e*) mural pictures on the interior walls. Of *d* and *e* no remains are extant. We do not certainly know the exact tones of the colors used in *a, b* and *c,* owing to the faded condition of such vestiges of color as still exist. Modern restorers usually represent them as somewhat brilliant (Plate VI, 33–35): perhaps they were less intense than these representations would indicate.

Fig. 143. Painted Panel, Ceiling of Pleroma, Parthenon.

With the development of the Ionic style in the sixth and fifth centuries, carved ornament assumed greater importance and took on increased richness and variety, which reached the highest point of splendor in the Alexandrian age, especially in Asia Minor, and gave birth in the fourth century to a variant form, the Corinthian, in which the capital of the column was the most important and ornate feature (Plate VII, 14). The carved egg-and-dart and "water-leaf" molding ornaments

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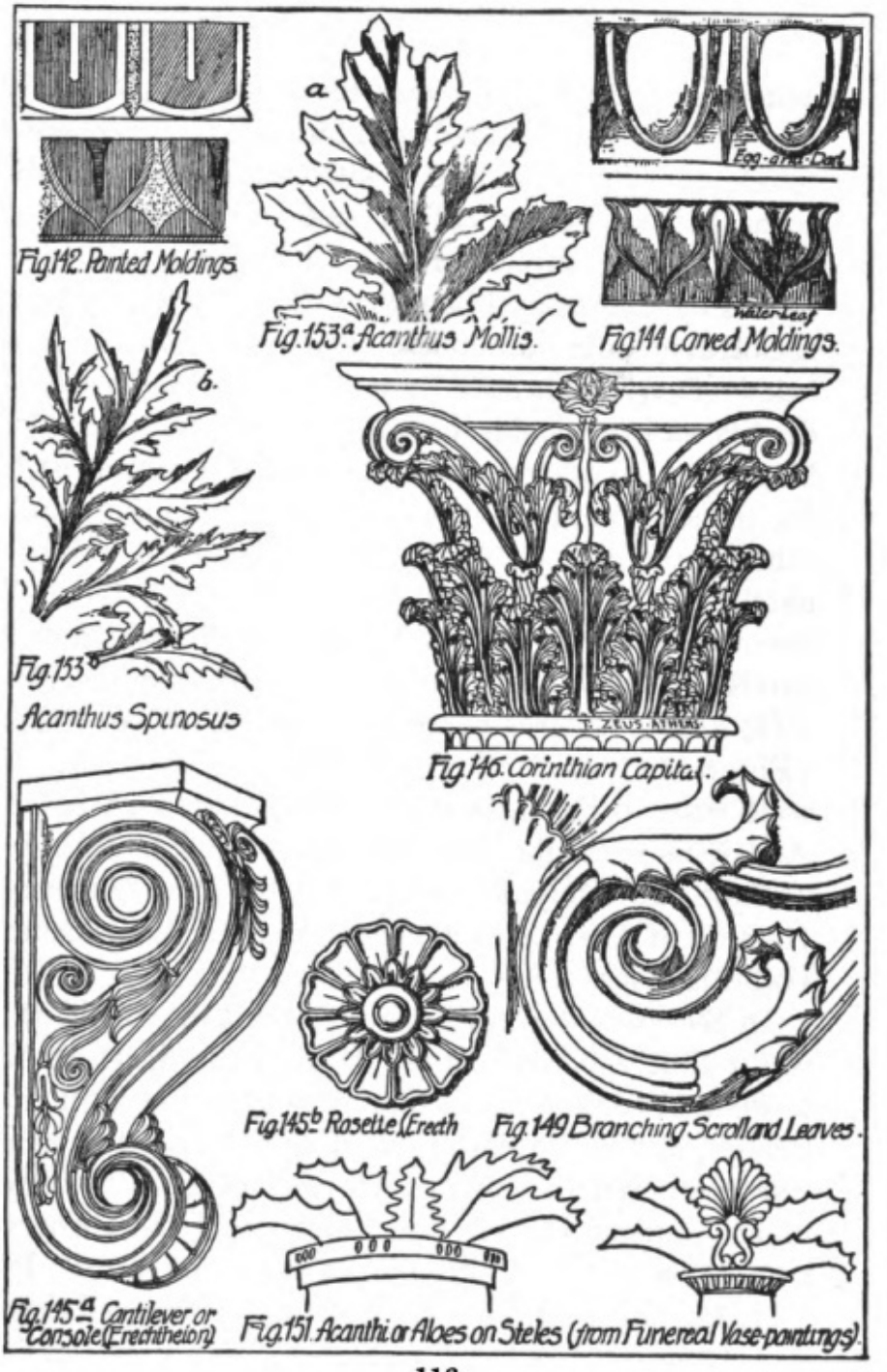

Fig. 142. Painted Moldings.

Fig. 153a. Acanthus Mollis.

Fig. 144 Carved Moldings.

Fig. 153b Acanthus Spinosus

Fig. 146. Corinthian Capital.

Fig. 145b. Rosette (Ereth

Fig. 149 Branching Scroll and Leaves.

Fig. 145a. Cantilever or Console (Erechtheion)

Fig. 151 Acanthi or Aloes on Steles (from Funereal Vase-paintings).

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Carved Details.

In nearly all the carved ornament we may trace the imitation and elaboration of painted ornament derived primarily from pottery-decoration. Let us first consider the moldings. Five chief motives occur in their decoration by carving: the bead-and-reel for small bead-moldings; the egg-and-dart on convex profiles; the "water-leaf" on cyma-reversa moldings; the guilloche on torus moldings (Fig. 147); and the anthemion on the high Ionic cymatium or crown-molding. All but the first and fourth are carved elaborations of the painted molding ornaments described above as themselves derived from pottery-motives, or from pottery directly; the bead-and-reel is an importation from Asia Minor and may have been derived, *via* Asia Minor and Persia, from the Egyptian papyrus-bundle molding. All these carved ornaments were designed and executed with extraordinary skill and care, and their beauty and perfection have seldom been approached and never surpassed in later ages. Apart from the beauty of their decoration, moreover, the Greek moldings are remarkable for the refinement of their profiles, composed of curves as subtle and delicate as the silhouettes of the

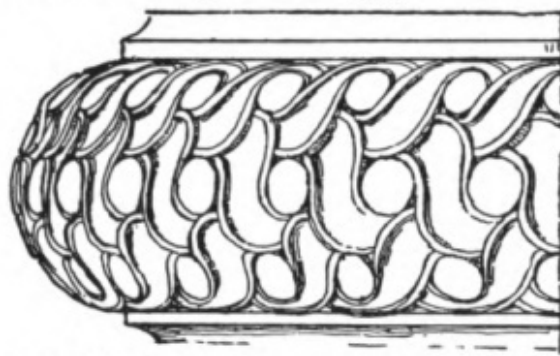

Fig. 147. Carved Triple Guilloche on Torus of Ionic Base.

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verged to form the carved echinus of the Ionic capital. One form of this foliated capital, shown in Fig. 148, is probably a prototype of the high bell or basket of the later-developed Corinthian capital.

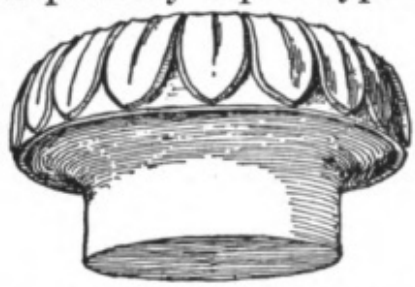

Fig. 148. Cap from Aegæ.

The fully developed capitals of the Erechtheion are among the most elegant forms in classic architecture, and were executed with extraordinary perfection of detail. The high necking adorned with a carved anthemion is peculiar to this one building (Plate VII, 7).

The Carved Anthemion.

This was, next to the capitals, the most characteristic motive in Ionic decoration. Its origin in the anthemion bands of painted vases has already been explained. The technic of carving brought about a number of modifications of detail, such as the ridging and furrowing of the stems, leaves and scrolls, the elaboration of the "lotiform" motive (Plate VII, 4), and the introduction of the acanthus leaf (or in some cases apparently the leaf of a thistle or aloe) to mask the junction of fluted scrolls where they branch (Figure 149). The most celebrated example of the carved anthemion is that which adorned the north and west sides of the Erechtheion, and which is much like that on the neckings of the columns (Figure 121 A; Plate VII, 11).

The commonest application of the carved anthemion band was to the high cymatium of the Ionic cornices.

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(aloe?) on the flat top of a square or round stele (Figure 151, page 113). With the increased vogue of carved decoration the painted stele-heads disappeared and the carved type was elaborated into a remarkably beautiful design, especially in the fourth century, to which belong the fine examples in Plate VII, 13, 15.

The Acanthus.

The acanthus is a common plant in Greece and Italy, related to the common burdock (Fig. 152). The variety known as the acanthus spinosus offers, by its formally regular growth and its crisp, crinkly and prickly leaves, excellent suggestions for decorative conventionalization (Figure 153, *b*). The date of its first appearance in Greek ornament is uncertain; it began to be quite frequently used, however, by the latter part of the fifth century B. C., as a covering leaf to mask the branching scrolls of carved anthemions, as in the example from the Erechtheion (Figure 149). These earlier examples suggest the thistle and the aloe quite as much as the acanthus; but this may be merely fortuitous resemblance. Another early example is shown in Fig. 154, probably the earliest type of the Corinthian capital—found in the ruins of the Apollo temple at Phigalæa

Fig. 152. Acanthus Leaf (above); Burdock (below).

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(Bassæ) in Attica, but now lost. With the development of carved ornament the leaf was more and more highly elaborated, almost always in association with volutes or spiral scrolls, chiefly applied to one or another of four decorative uses: the anthemion-band, the Corinthian capital, carved stele-heads, and the carved rinceau. The last three were executed with especial richness of detail in the Alexandrian age.

The Corinthian Capital.

This, the richest of all capital-types, developed only gradually into the final form which the Romans adopted

FIG. 154. EARLY CORINTHIAN CAPITAL FROM BASSÆ.

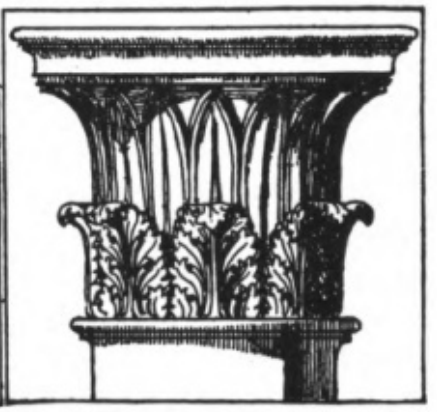

FIG. 155. CAPITAL FROM "TOWER OF THE WINDS," ATHENS.

and made their own. Contemporary with the over-elaborate "Lysicrates" example in Plate VII, 14, we find the much simpler form from the "Tower of the Winds" shown in Fig. 155. A capital from the Tholos of Epidauros shows an approach towards the later form from the Temple of Zeus at Athens (Figure 146), which dates from 170 B.C., and furnished the prototype for the

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Fig. 156. Etruscan Terra-cotta Cresting.

ried to a remarkable, and in some cases an extraordinary, degree of elaboration and splendor. Sculpture, on the other hand, was never a characteristic medium for the

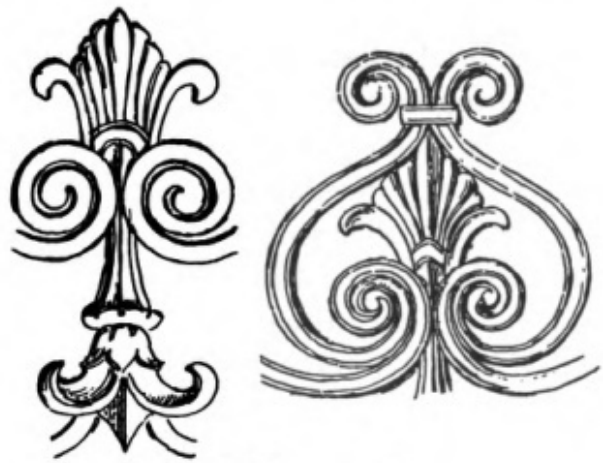

Fig. 157. Etruscan Details.

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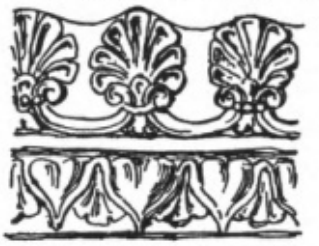
expression of the Roman genius. Roman ornament lacked somewhat of the refinement and restraint of the Greek, but was more varied and more flexible. It was eminently adapted to the purposes which it had to serve, and is well worthy of study for its elegance and versatility of design.



FIGS. 158 AND 159. ETRUSCAN TERRA-COTTA BORDERS.

Etruscan Ornament.

Before the conquest of the Greek states introduced Greek art into Roman life, the Romans depended mainly upon the Etruscans for such forms of art as their modest requirements called for. This singular people, whose race-origin and early history are still shrouded in obscurity, possessed an architecture of their own betraying a certain remote kinship with the Greek, but crude and undeveloped artistically. Their frequent use of the arch, and the character of their ornament, so far as it appears in their works in bronze and gold, suggest an Asiatic influence, chiefly Phenician, possibly *via* Carthage. Their ceramic art, especially in its later phases, was based on Greek models. The Campana collection of terra-cotta reliefs in the Louvre, belonging to the first century B.C., show much technical cleverness in adapting Greek pictorial subjects, and even the painted scroll ornaments on late Greek and Campanian vases, to modeling in relief. The ornamental borders

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FIG. 160. DETAIL OF A PILASTER.

of these reliefs retain a curiously Asiatic character (Fig. 159). In Figs. 156–160 a number of typical Etruscan forms are shown. Painted terra-cotta ornaments, such as were used on the wooden superstructures of their temples, are preserved in the museums of Italy; they strongly resemble others found in Pompeii and southern Italy, which are very likely of Etruscan workmanship. These represent the highest development of Etruscan architectural decoration, but plainly exhibit their Greek derivation. The cap shown in Fig. 161 illustrates the crudity of native Etruscan details and

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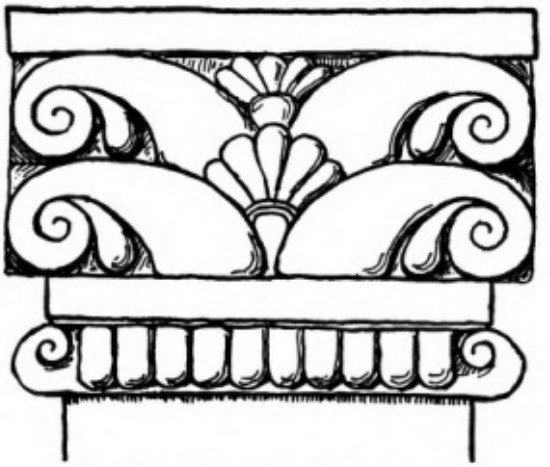

Fig. 161. Etruscan Pilaster Cap.

strongly suggests a Phenician or Oriental influence.

The Etruscans were skilful bronze-founders, and appear to have practised also at an early period the art of *spheirelaton* or sheet-metal hammered into relief on a base of carved wood. The fine bronze chariot in the Metropolitan Museum at New York appears to be a product of Etruscan work of this sort of the seventh century B.C.

Etruscan jewelry and filigree were often of great beauty—brooches, pendants, chains, etc., of gold sometimes set with gems. Some of it is possibly, however, of Greek manufacture (Fig. 162).

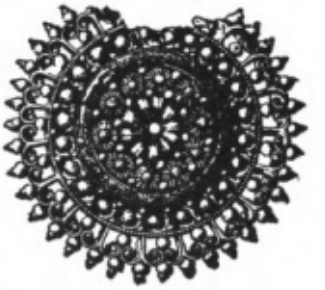

Fig. 162.

The pottery of Etruria was unimportant compared with that of Greece. The most interesting of its products were black vases

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mentally different from that of Egyptian or Greek architecture, in which stone or marble was the only material, and temples the chief subjects of architectural design. In these the decoration, other than painting and free sculpture, was of necessity an integral part of the construction, or at least incorporated in it or executed directly upon it. With the Roman system, a large part of the ornament was, equally of necessity, ap-

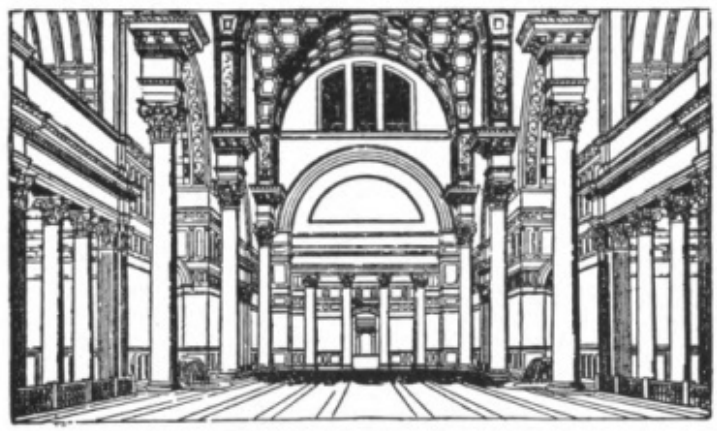

Fig. 163. Tepidarium, Baths of Caracalla.

plied ornament, executed after the completion of the massive structural frame or core of the building (Fig. 163). This is the system which has prevailed, and must prevail, in all styles and in all regions in which the chief building-materials are coarse or undecorative in themselves, or in which, even where stone and marble abound, the exigencies of building require the use of the commoner and coarser materials for the main fabric of the edifice. It is the system in general use in modern practice, and is entirely reasonable and artistically proper, in spite of the objections raised against it by certain

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certain classes of structures, and reliefs in panels, spandrels and other defined spaces; (4) the chromatic effects of colored marbles and granites in columns, wainscoting and pavements; (5) mosaic of glass or marble in floors and ceilings; (6) stucco-relief in delicate patterns, often combined with (7) mural painting in brilliant colors, and (8) bronze work on ceilings, in grilles and doors, and in decorative adjuncts like tripods and candelabra.

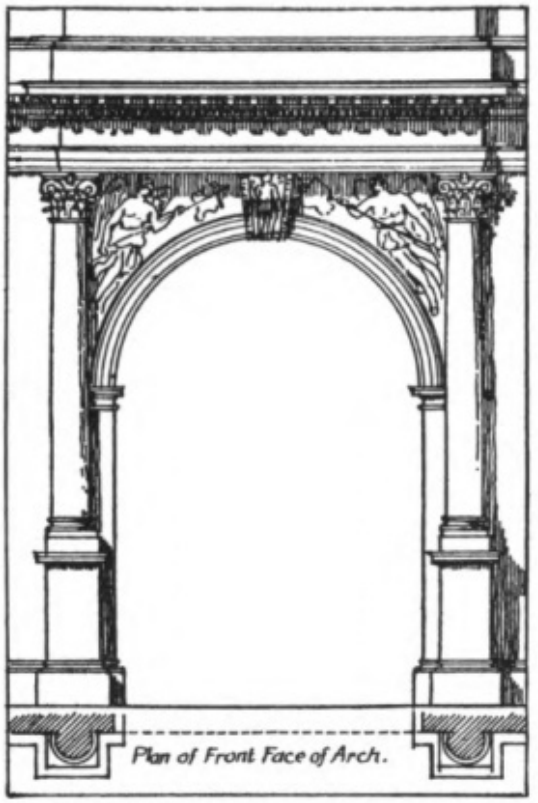

FIG. 164. ROMAN ARCH (ARCH OF TITUS).

Architectural Features.

The remarkable variety of the Roman buildings and structural devices lent itself to a corresponding variety of decorative effects in which the purely decorative use of various structural features played a prominent part. Pilasters and engaged columns with their entablatures, pediments over doors, windows and niches, recessed arches and deep ceiling-panels were the chief elements of this pseudo-structural decoration. The combination

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of the arch—adorned with its archivolt and keystone—with engaged columns carrying entablatures (Fig. 164) was the most important of these decorative devices, and has been in more or less constant use ever since Roman times. In the later Imperial age, and particularly in the provinces, as at Spalato in Dalmatia

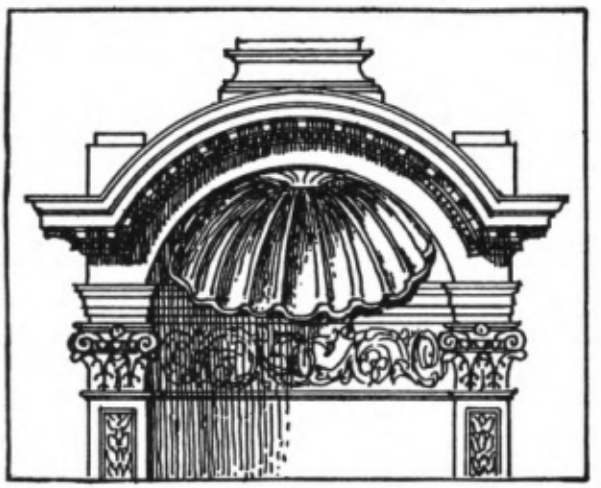

FIG. 165. NICHE-CAP, BAALBEK.

and in Syria at Baalbek and Palmyra, there was, under the Antonines and later emperors, a remarkable increase in the variety of these decorative applications of architectural features. Curved and broken pediments, colonnettes on brackets, spirally fluted columns, and niches with shell hoods are among the features most widely used. Some of these works have a singularly modern look, as if of the Palladian Renaissance, which, indeed, independently re-invented many of these devices thirteen hundred years later [1] (Fig. 165).

[1] This use of structural forms as mere decoration has been condemned as "sham" and "false" design by certain purist critics, who contrast it unfavorably with the "truthful" architecture of the Greek and Gothic builders.

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Conventional Ornament.

In developing the details of this system the Romans were obliged to employ Greek artists and to begin with Greek models for the most part. The Greek orders, the Greek fret and anthemion, molding-ornaments, rosette, acanthus-leaf and rinceau, were appropriated, but not without radical modifications. With such stupendous

FIG. 166. FRAGMENT FROM TEMPLE OF VESPASIAN, IN VILLA ALDOBRANDINI.

aggregations of buildings as the Romans raised in their cities both in Italy and abroad—structures often many-storied and of vast dimensions—figure-sculpture was out of the question as the chief decoration, not so much on account of its enormous cost as because it would have been wasted and ineffective. Carved conventional ornament, on the other hand, with its repeated units, (Fig. 166) enriches such buildings without requiring

But even in Greek architecture there are analogous "shams," like the pseudo-structural paneling of the Greek pteroma-ceilings, while the useless false gables and the rich wall-traceries of Gothic art are perfect examples of the purely ornamental use of forms primarily structural. The fact is that in all advanced stages of art the structural forms of earlier stages have been similarly turned to decorative account.

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that semi-isolation and that nearness to the eye which are essential for the best effect of figure sculpture. Plastic ornament was carried by the Romans to the highest perfection of appropriate design, of rich effect, and often of exquisite execution. Moldings were combined and profiled with the greatest care, though the profiles were generally less subtile than those of the Greek moldings. In monumental buildings nearly all

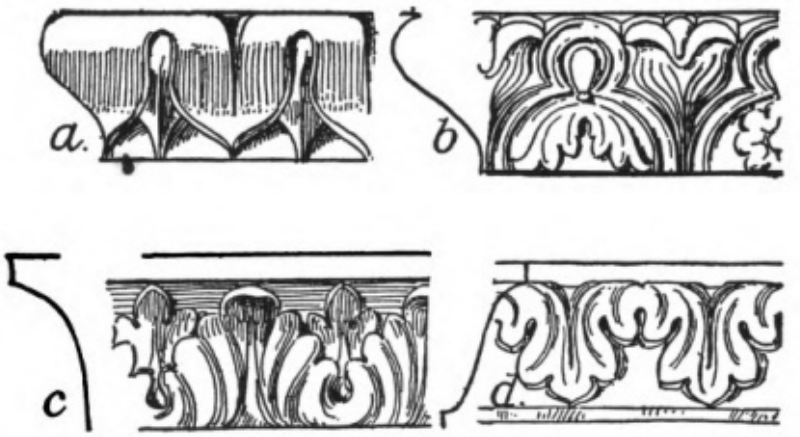

FIG. 167. ROMAN MOLDINGS.
a, SIMPLE WATER LEAF; *b*, ENRICHED WATER LEAF; *c*, *d*, ACANTHUS LEAF ENRICHMENTS.

the moldings were enriched by carving, the ornamentation being more elaborate than in the Greek prototypes —sometimes, indeed, too minute for the best effect, but almost always appropriate and beautiful (Fig. 167).

The general effect of all this decoration was one of great dignity and splendor. The striving for magnificence sometimes led to offenses against good taste, and the execution is occasionally coarse, but such offenses are rare, and beauty, refinement, delicacy and charm frequently characterize even the grandest works.

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The Orders.

The most conspicuous adornment of Roman buildings was effected by the use of columns and pilasters with their entablatures, in one or more of the so-called "Five Orders"—the Tuscan, Doric, Ionic, Corinthian and Composite (Plate VIII). In reality there are but

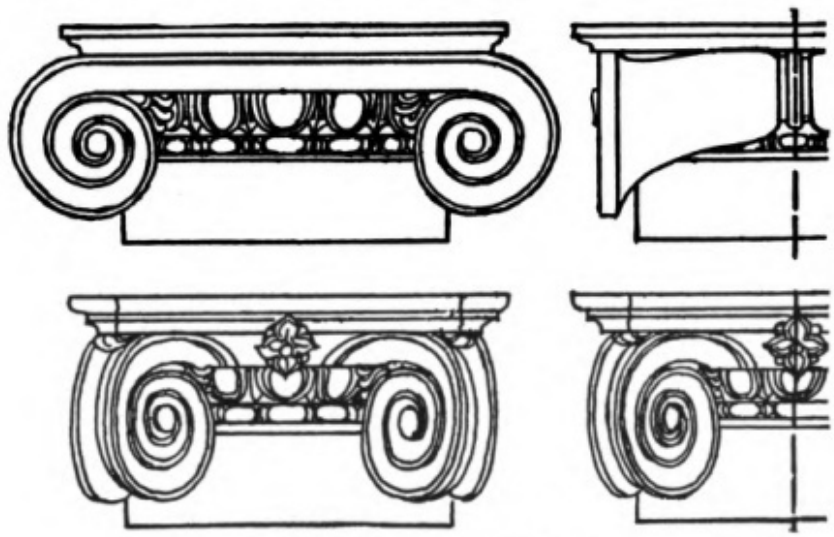

FIG. 168. ROMAN IONIC CAPITALS.

three, the Tuscan and Doric being mere variants of one type and the Composite and Corinthian of another. Upon their so-called Doric column, which was really an enriched and refined form of the Etruscan (Tuscan) column, the Romans placed an entablature derived from that of the Greek Doric order, with its triglyphs and mutules. The Ionic was but slightly varied from the Greek Ionic type of Asia Minor. The capital occurs in two forms: one following the Greek model, but with a straight band between the volutes, on the front and

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rear faces, instead of a depressed curved band (see Plate VIII, 3); and the other with four double volutes at the angles of the abacus, in order to make the four faces of the capital alike; this is sometimes called erroneously the "Scamozzi Ionic" (Fig. 168). The Corinthian, an elaboration of the Greek Corinthian but

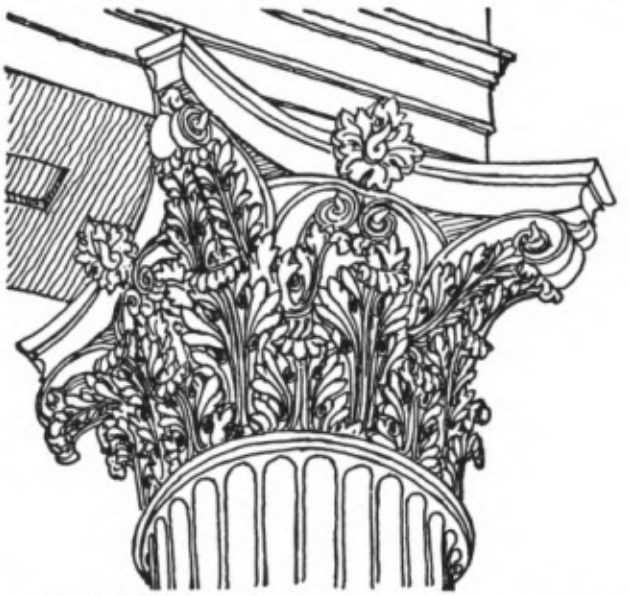

FIG. 169. CORINTHIAN CAPITAL, TEMPLE OF MARS ULTOR.

with a special type of cornice, is the really distinctive Roman order. With the Greeks it had been a mere variant of the Ionic; the Romans developed its capital into a type generally recognized as one of the most beautiful ever devised. In its most perfect examples, as in that of the Pantheon, the Temple of Castor and Pollux and the Temple of Faustina, it consists of two rows of erect acanthus-leaves surrounding and concealing the lower two-thirds of a bell-shaped core on which rests a

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molded abacus with concave sides. The upper part is concealed by sixteen spiral volutes which spring in branching pairs from eight *caulicoli* or leaf-nests, set between the eight leaves of the upper row. These volutes meet in eight pairs under the four corners of the abacus and under rosettes at the centers of its four sides (Fig. 169, Figure 174; Plate VIII, 4, 6). The details of this type are endlessly varied; in late examples animals and human figures sometimes take the place of the

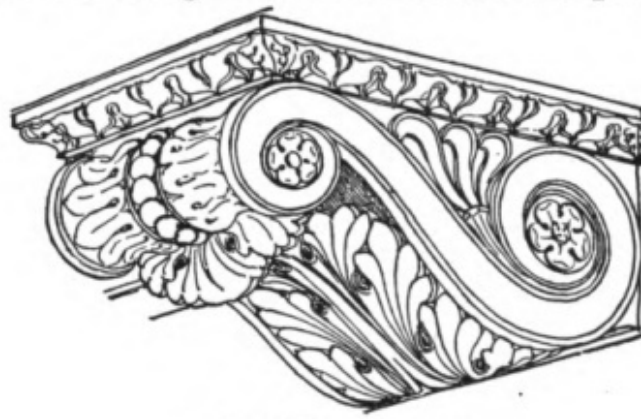

FIG. 172. MODILLION.

corner volutes. The Composite capital, having volutes only at the angles, and larger than in the Corinthian, may be considered an inferior variant of the Corinthian, though sometimes very splendidly carved (Plate VIII, 2, 7; Figure 170). It somewhat resembles a four-faced Ionic capital placed upon the lower part of a Corinthian capital. Pilaster caps show a greater variety of design than capitals of columns (Plate VIII, 8; Figure 171).

To these improvements upon the Greek order they added that of a special type of base, an elaboration of the Attic base, consisting of two tori separated by two

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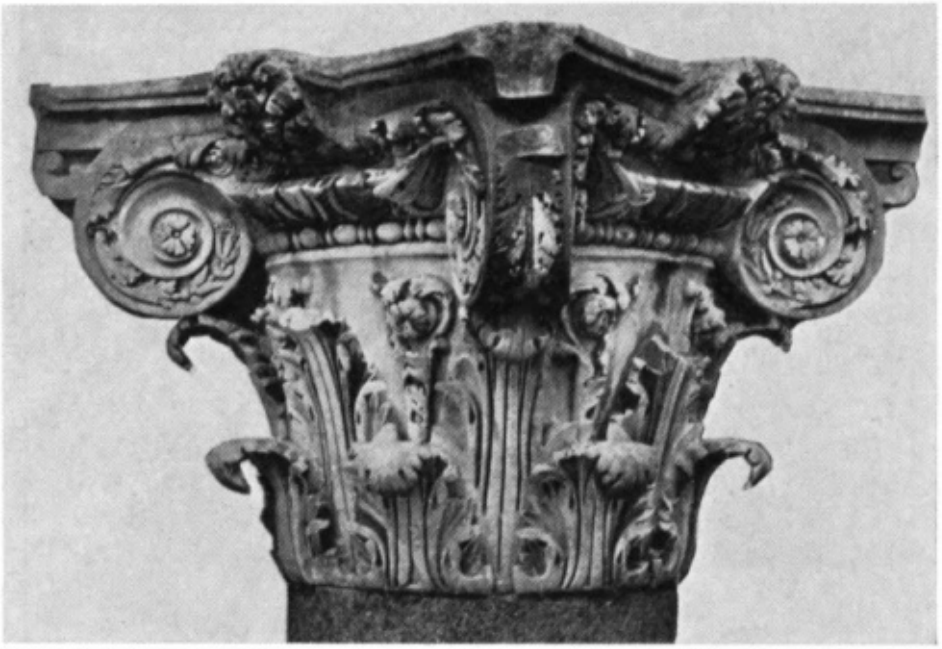

Fig. 170.—Composite Capital (Lateran Museum, Rome)

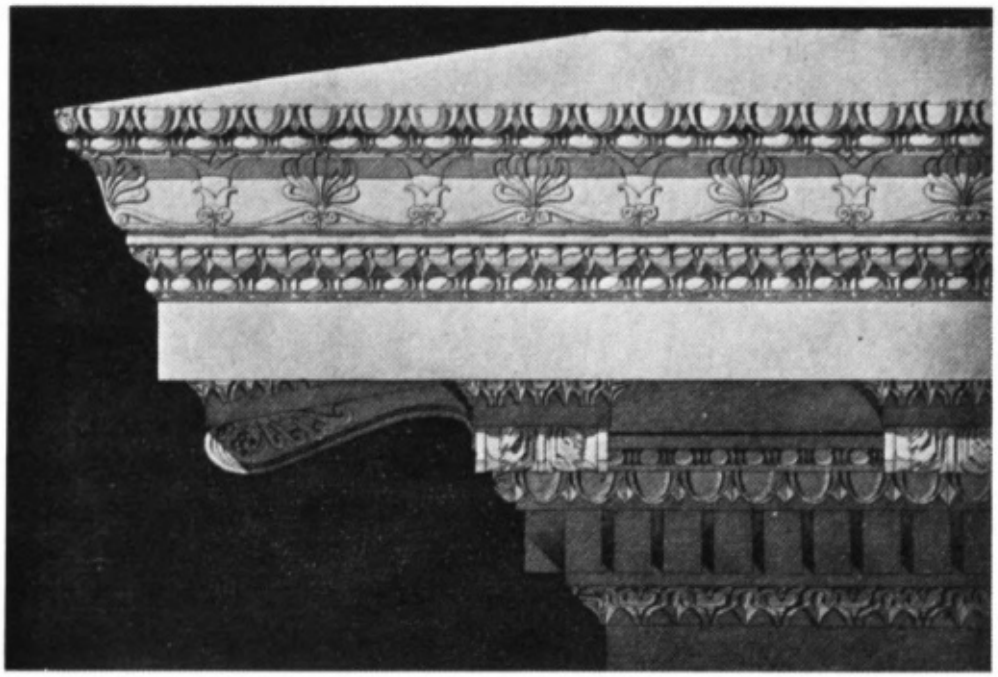

Fig. 173.—Restoration of Cornice, Basilica Æmilia (from Drawing by R. H. Smythe)

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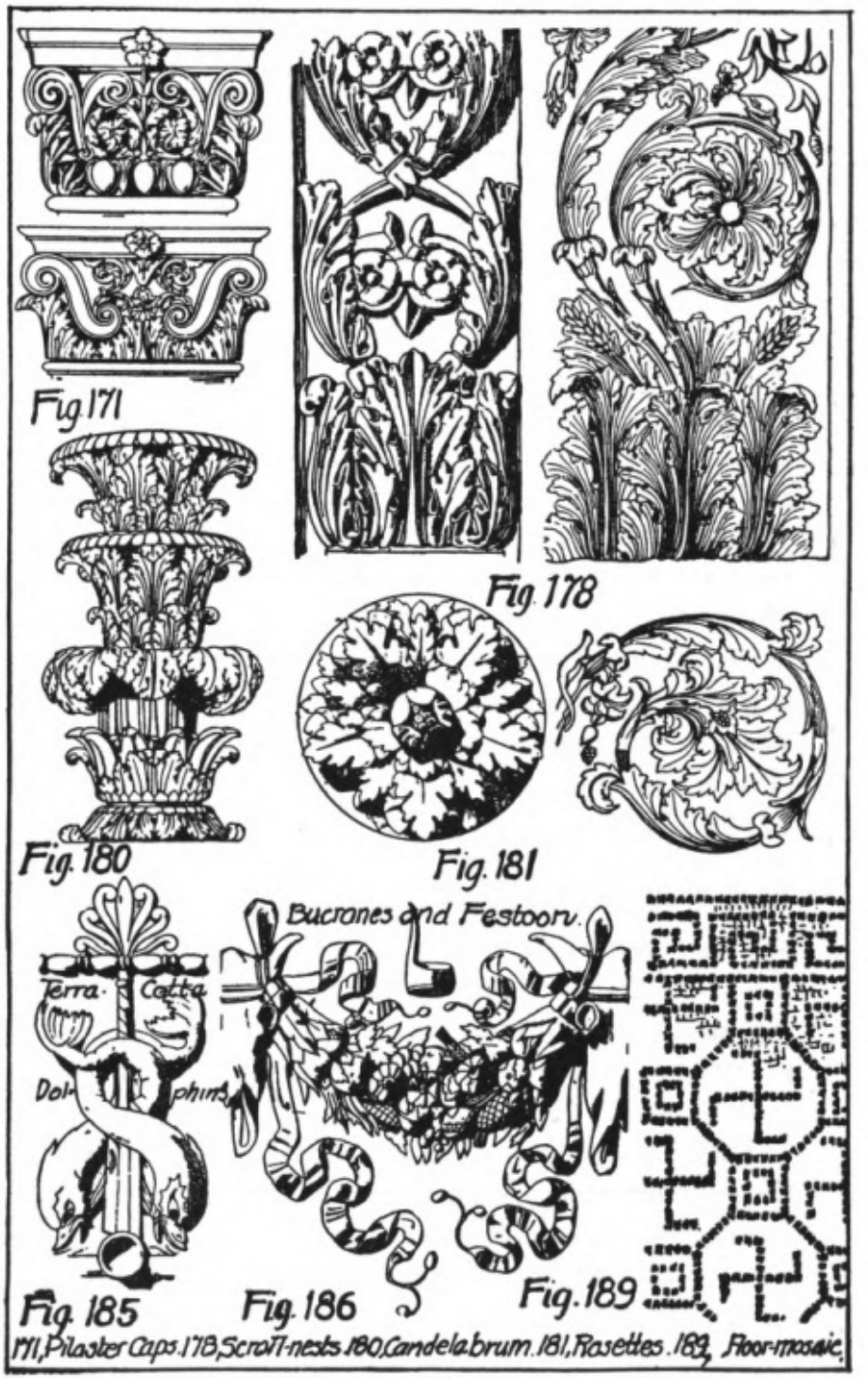

171, Pilaster Caps. 178, Scroll-nests. 180, Candelabrum. 181, Rosettes. 189, Floor-mosaic.

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FIG. 174.—ORDER OF TEMPLE OF CASTOR AND POLLUX, ROME (CAST IN METROPOLITAN MUSEUM, NEW YORK)

FIG. 175.—RESTORATION OF ARCH OF CONSTANTINE, ROME (MODEL IN METROPOLITAN MUSEUM, NEW YORK)

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themion and rinceau supplying the motives for the greater part of it. If we add to these the rosette, festoon or garland,[1] and the use of symbolic and grotesque forms, and note that the acanthus-leaf in an endless variety of modifications, was worked into every possible detail, we have the key to the greater part of this ornament. But with these few fundamental motives the Roman artists developed a quantity and variety of designs which for richness and appropriateness of effect and extraordinary flexibility of application have never been surpassed. Some of it is heavy and over-wrought; but the beauty and refinement of the great majority of examples entitle them to high praise.

The Acanthus.

This constitutes a type rather than a particular form of leaf. As compared with the Greek type, it is less massive, less pointed, more minutely modeled; it suggests a larger, thinner, more flexible and more complex leaf, with well-developed "eyes" at the bases of the lobes and "pipes" or ribs curving from these to the base of the leaf (Fig. 176). The standing leaves in the figure may be compared with the natural *acanthus mollis* in Figure 153, *a* (p. 113). There are many leaves in nature which are divided in much

Fig. 177. Types of Acanthus.

[1] Or "swag," as it is often called by English writers.

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branching is concealed by an elaborate *caulicolus* or wrapping-leaf, which springs from a calyx-like cup-flower at its base. Such spaces as would otherwise be

FIG. 179. RINCEAU, FORUM OF TRAJAN.

left bare are often filled with subordinate scrolls and tendrils, and in rare instances animal life is introduced in the form of birds, mice and insects (Plate IX).

FIG. 182. RINCEAU, FROM TEMPLE OF THE SUN.

While some examples of the rinceau are heavy and overcrowded, as in the example from the Temple of the Sun (Fig. 182), others are remarkable for their deli-

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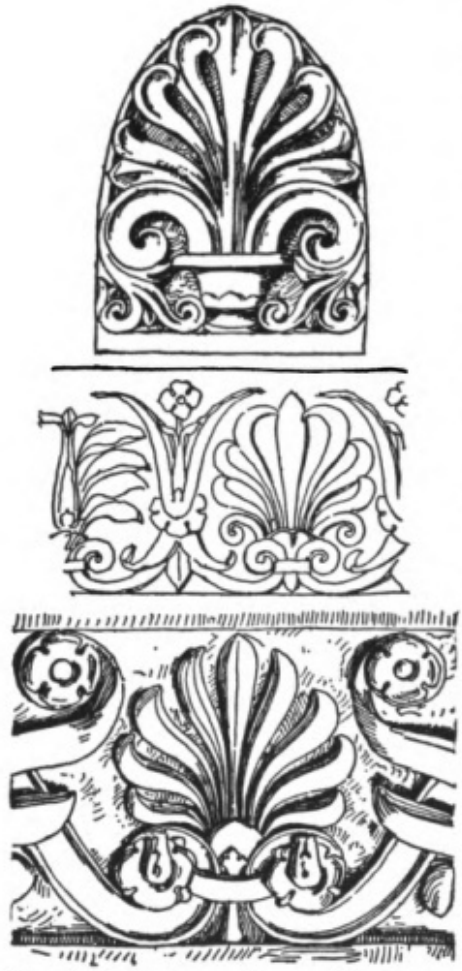

FIG. 183. ROMAN CARVED ANTHEMIONS.

divisions of the architecture below. An early and elegant example of vault-paneling is seen in the soffit of the Arch of Titus (80 A.D.). The panels were in most cases simple geometric forms—squares, octagons, "lozenges," etc.; the sides of each caisson were molded and the fields of the panels adorned with splendidly carved rosettes or with mosaic patterns, or else left plain (Fig. 184).

Ceiling decoration in stucco is treated in a later paragraph (page 161; see Figures 187 and 201).

Figure Sculpture.

Figure sculpture played a far less important part in the decoration of Roman buildings than in the Greek monuments. The reasons for this have been already touched upon (page 138). Nevertheless the splendid decorative value of the figure was not ignored, but was availed of in many decorative reliefs of high artistic excellence. The Romans were especially successful in the sculpture of symbolic grotesques and of infant fig-

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ures (genii and *amorini*). By a *grotesque* is meant an artistic combination of heterogeneous Nature-forms, as in Fig. 195, where an infant figure is provided with wings, and terminates in a superb acanthus scroll in place of legs. The festoon or "swag" and garland, bound with fluttering ribbons representing sacrificial

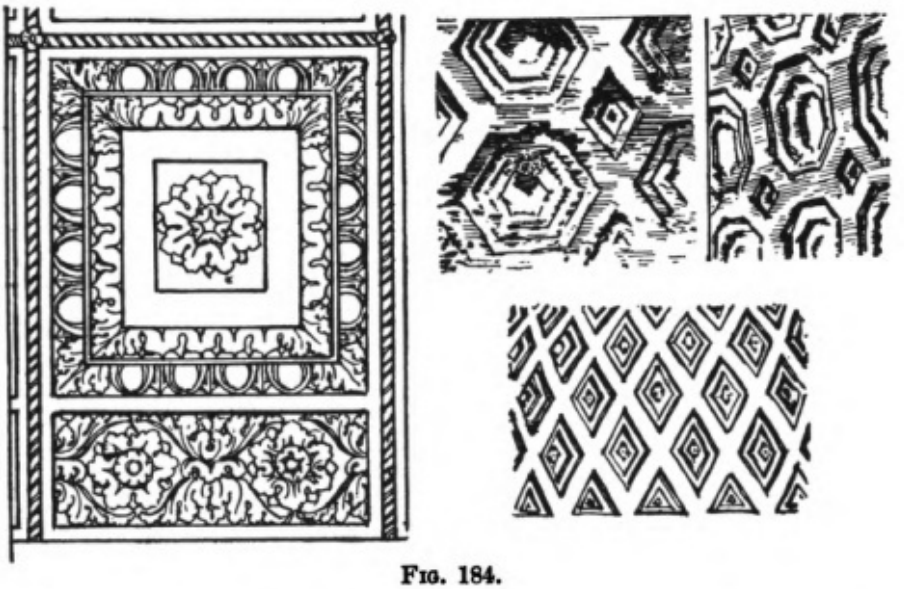

Fig. 184.

fillets (Figure 186; Plate VIII, 3, 6); the *bucrane* or ox-skull, likewise a sacrificial symbol (Plate IX, 7); the dolphin and steering-paddle symbolizing Neptune and water (Figure 185); the Imperial eagle, and trophies of arms and armor, are common in Roman decorative art.

The most beautiful of Roman relief decorations are perhaps the charming reliefs modeled in plaster on the ceilings and walls of houses and thermæ, as noted in a later paragraph.

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Fig. 187.—Stucco Relief; Tomb on Via Latina

Fig. 188.—Stucco Relief, from a Roman House (in Museo delle Terme)

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or mosaic. Marble was used in large panels of various colors in circles, squares and simple geometric forms; but as with the wainscoting, most of these pavements have disappeared to provide materials for the floors of Christian basilicas. That of the Pantheon may be in part original, and fragments of the floor of the Basilica Julia have also been preserved.

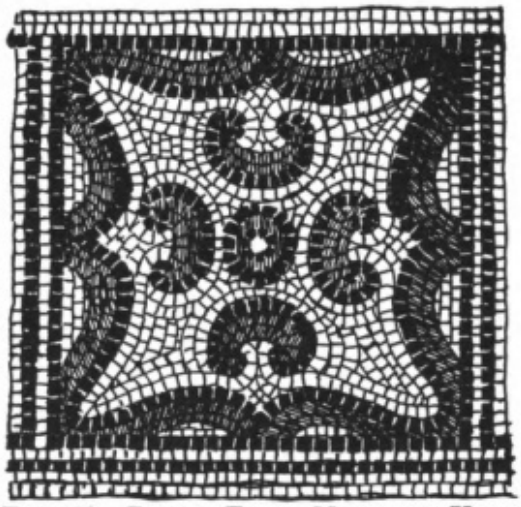

Fig. 190. Detail, Floor, Mosaic, in Villa Italica, Seville.

Mosaic floors were paved with minute *tesserae* or roughly squared fragments of colored marble, tile or other material, set in patterns usually of a plain field with a decorative border in the larger rooms, though in smaller rooms all-over patterns were not uncommon (Plate XI, 9, 11, 12). Outside of Rome, in Asia Minor and in other remote provinces as well as in Pompeii, elaborately pictured floors were executed in tesseræ of variously colored marbles. The most famous example from the House of the Faun in Pompeii is now pre-

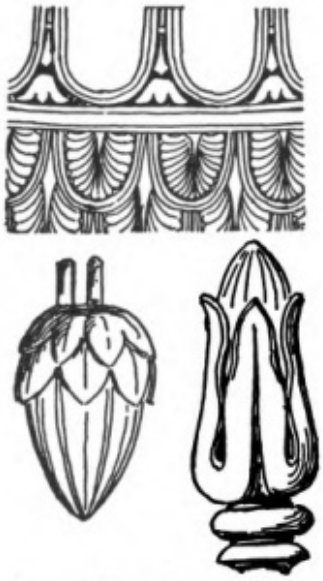

Fig. 193. Ornaments, Bronze and Gold.

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served in the Naples Museum (see page 182). Figure 189 illustrates a floor pattern of "swastikas" from a house in Pompeii. There are some fine examples in the Museum of Constantinople. Fig. 190 shows a detail of the mosaic floor of a Roman villa near Seville, Spain.

Furniture and Utensils.

Whatever furniture was of wood has perished; but the more important and permanent objects in the equip-

FIG. 194. UNDER SIDE OF SILVER VASE, HILDESHEIM TREASURE.

ment of houses were of marble and bronze, and of these, together with the smaller utensils and furnishings in bronze, we have many examples in the various museums. As, however, the great majority of these are from Pompeii, they will be briefly discussed and illustrated in the following chapter on Pompeiian art. Plate X and Figures 191, 192 and Figs. 193, 194 show illustrations

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Fig. 191.—Marble Vase, Naples Museum

Fig. 192.—Roman Vase (from Cast in Metropolitan Museum, New York)

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ments in relief, reveals the same excellent taste and fine workmanship observable in Roman works in bronze and marble (Plate X and Figure 193).

FIG. 195.

Books Recommended:

As before, ANDERSON and SPIERS, BAUMEISTER, JACOBSTHAL, KACHEL, VULLIAMY. Also, F. ALBERTOLLI: *Fregi trovati negli Scavi del Foro Trajano* (Milan, 1824); *Ornamenti diversi Antonini* (Milan, 1843); *Manuale di varii ornamenti . . . e framenti antichi* (Rome, 1781–1790).—J. BUEHLMANN: *The Architecture of Classical Antiquity and the Renaissance* (New York, 1900).—G. P. CAMPANA: *Antiche Opere in Plastica* (Rome, 1851).—J. DURM: *Baukunst der Etrusker; Baukunst der Römer* (Darmstadt, 1885).—G. EBE: *Die Schmuckformen*

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of the earthquake they were mostly low buildings, unlike the more lofty and monumental architecture of most other cities; secondly, that they represent the relatively early Roman art of the first century, previous to the time of Domitian, and not of the later and more splendid Imperial age. Yet in the matter of decoration there is less difference of style than one would expect from the work of the same age in the Capital (*e.g.*, the

FIG. 196. IONIC CAP, CORNER VOLUTES.

House of Livia and the frescoes in the Museo delle Terme) or even of a later period as seen in the Villa of Hadrian.

The ornament of Pompeii will be discussed under four heads: (1) Architectural detail; (2) Mural decoration; (3) Mosaic; (4) Furniture and utensils. It will be seen that in all these divisions, while the motives are essentially Roman, there is a freedom, a lightness of touch and delicacy of treatment, which suggest Greek workmanship, and which are probably due to the persistent strain of Hellenic blood in the population of all Southern Italy.

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Architectural Detail.

The Orders were handled with great freedom, whether executed in cut-stone, or, as more frequently, in rubble or brick finished in stucco. The Doric order was often of the Greek rather than of the Roman type; the Ionic capital usually had doubled corner-volutes and a very slight projection or width as compared with both Greek and Roman types (Fig. 196), and the Corinthian

FIG. 197. POMPEIIAN MOLDINGS.

capital was considerably varied, both in the number and character of its leaves. The Roman type of acanthus is not found, a more bluntly crinkled leaf being preferred. The Doric columns had no bases, those of the other orders often lacked plinths; the moldings differed from the Roman, in having profiles more varied and delicate, with an almost feminine refinement (Fig. 197). The entablatures have for the most part perished. The few fragments that remain intact show the same characteristics in varying from the fashions of Rome and in refinement of detail. A common Pompeiian feature was the filling-up of the lower part

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of the flutings of stuccoed columns, to prevent the chipping and marring of the fragile arrises; sometimes a convex "flute" or bead inserted in this portion protected without quite filling the fluting, and this has become a common decorative device of modern architecture.

All this Pompeiian architecture of rubble and stucco was embellished with color, of which traces still remain. Even capitals were painted and the carved and molded

Fig. 198. Carved Pompeiian Rinceau.

details were adorned in like manner. One house is known as the *Casa dei capitelli colorati,* the House of Painted Capitals, because of the perfect preservation of the color on its stucco or cement capitals; but it was originally but one of hundreds so adorned. Figure 198 illustrates the elegance of detail in a carved rinceau in stone.

Mural Decoration.

In this field the Pompeiian remains are unrivaled. The chief means of decoration was by painting on stucco; the use of rich marbles, whether for construction

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Fig. 198.—Pompeiian Wall Decoration; Third Style

Fig. 200.—Pompeiian Wall Decoration; Fourth or Florid Style

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FIG. 201.—POMPEIIAN STUCCO RELIEF; FROM THE STABIAN BATHS

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material in exterior architecture; but given a scarcity of marble and of good building stone with an abundance of soft tufa and of *"pozzolana"* for the making of cement-stucco; given also the necessity of a rapid rebuilding of almost an entire town after the earthquake of 63, and it would be hard to imagine a more artistic and satisfactory result than the Pompeiians produced in a few short years with rubble, stucco and paint.

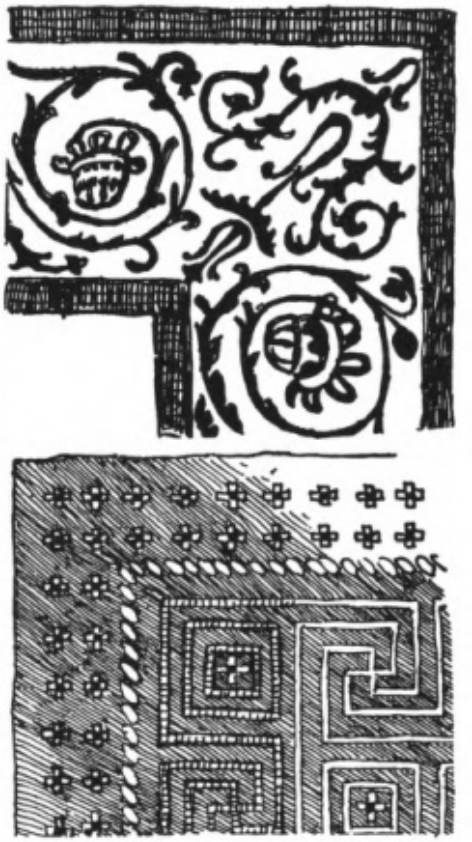

Fig. 202. Mosaic Floor Patterns.

Mosaic.

Mosaic floors were almost all of Opus Grecanicum, laid in small tesseræ of marble and other stone or even tile, in patterns which frequently suggest rug-designs. Each floor has a border and either an all-over patterned field (see Fig. 189), a central medallion, or a spangled field (Fig. 202; Plate XI, 9, 11, 12). The swastika appears in some of these. The chained dog with the inscription *Cave Canem* ("beware the dog") was a common decoration of the *prothyrum* or vestibule. The finer houses boasted elaborate pictures in color, made with very small tesseræ,

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FIG. 203.—MOSAIC FOUNTAIN, IN COURT OF CASA GRANDE

FIG. 204.—MARBLE TABLE SUPPORTS; HOUSE OF CORNELIUS RUFUS

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religious architecture and decoration diverged rapidly under Greek influence from the style of the West to become what we call the Byzantine. In Italy, with Rome as its center, they took on the development commonly called the Early Christian, or Latin, or—from the resemblance of the churches to the secular basilicas of the Empire—the Basilican style.

Early Christian Art Sepulchral.

The beginnings of Christian art are not, however, to be looked for in architecture. Until the edict of Constantine legalizing Christianity, its rites were, at least in the West, practised in private, largely in secret, and the language of symbols took on increased importance where persecution so often followed open speech. Upon the walls of the catacombs, which served not merely as places of sepulture but also as meeting-places for worship, were painted scriptural scenes and symbolic compositions: the Good Shepherd as a young man carrying a lamb on his shoulder, in evident reminiscence of the classic Herakles Kriophoros; the fish, the letters of

Fig. 206. Sarcophagus End, Ravenna.

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Fig. 207.—Detail, San Lorenzo fuori le Mura

Fig. 210.—Apse Mosaic, San Clemente

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narthex and on cloister arcades; (*d*) the ornamentation of the fixed furniture of the church; and (*e*), the decoration by painting or otherwise of the wooden ceilings of nave and aisles.

A. Floor Pavements.

Dates and periods are hard to fix and signify little in this field of design, as the style remained practically un-

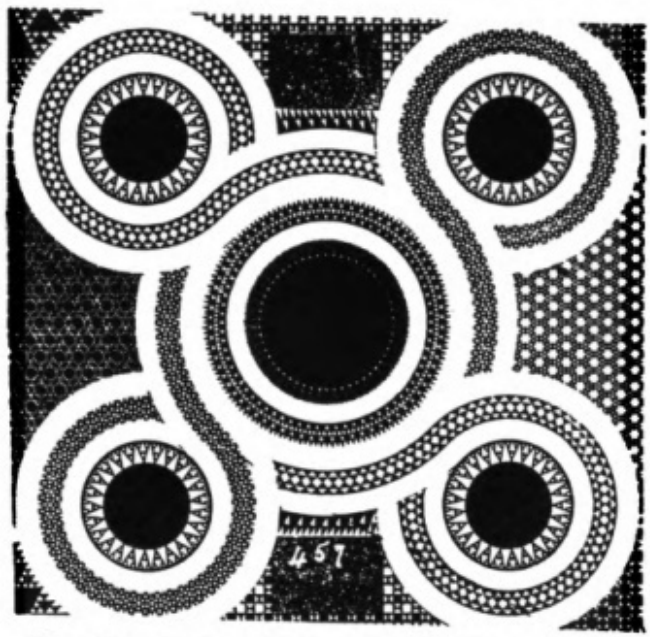

Fig. 208. Floor Mosaic, San Clemente, Rome.

changed for centuries. The nave floor was commonly divided into rectangular panels by broad bands of colored marble in which were set guilloche patterns (Fig. 208) in opus sectile combined with Alexandrinum. The panels were filled with field patterns of Alexandrinum surrounding discs or slabs of solid color (see Plate XIII, 12). Porphyry, verd-antique, ser-

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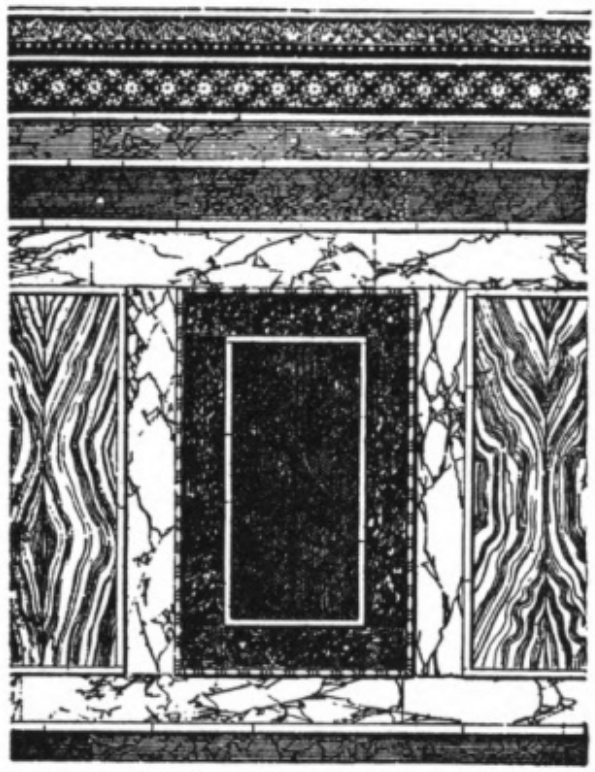

FIG. 209. BYZANTINE WAINSCOT.

209, a Byzantine example from Constantinople. This practice is common to the Basilican and Byzantine styles.

C. Mosaic.

In this art, at least in that branch of it in which small cubes or *tesseræ* of glass are employed to form pictures and patterns on walls and vaults (*opus Grecanicum*), it is impossible to distinguish sharply between the Byzantine and Basilican or Latin styles. Greeks from Constantinople doubtless were often employed to execute mosaics in Rome, and were probably the originators of

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reconstruction; of Sta. Prassede and Sta. Sabina, all at Rome; and of the two San Apollinare churches at Ravenna (sixth century). Of later date is the superb rinceau decoration in the apse-head of San Clemente (1096–1104): an exceptional example of conventional ornament in mosaic in a basilica (Figure 210). Apart from such applications of the rinceau, there were few distinctive ornament motives in the mosaic decora-

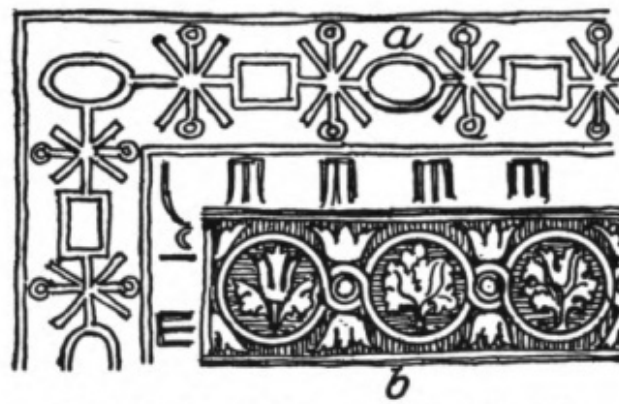

Fig. 211. Early Christian Mosaic Borders.

tions. Fig. 211 shows two examples of mosaic borders, *a* from the palace of St. John Lateran, a mosaic of the eighth century; *b* from the façade of Santa Maria in Trastevere, both in Rome.

D. Ecclesiastical Furniture.

The chief elements in the fixed furniture of the churches were the *ciborium* or baldaquin—the canopy over the altar and tomb of the saint; the altar itself; the choir-enclosure; and the two pulpits or *ambones,* affected respectively to the reading of the Gospels and of the Epistles, the former being adorned with a

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columnar candelabrum. The seats for the clergy were originally simple steps of marble set around the apse, and the bishop's throne was apparently of very simple design. Later the clergy-seats were removed from the apse or *bema* and the altar placed there in their stead, though the ciborium remained in its original position to mark the tomb of the martyr or saint.

Fig. 212. Ara Coeli, Rome.

All this fixed furniture was of marble, usually built up of flat slabs inlaid with opus Alexandrinum. The ciborium was a structure of four columns with a pyramidal roof; the altar a simple rectangular box or table of marble; the choir-enclosure a paneled marble parapet about three feet high; the ambones, elevated reading-desks on either side of the choir reached by flights of steep stairs. The decoration of these simple forms was often very rich, especially of the pulpits and altar frontals (Fig. 212). It consisted of inlaid patterns of opus Alexandrinum combined with disks and guilloches of *sectile,* in principle like the floor-mosaics, but finer in scale and execution. In the later work, the geometrical units of the Alexandrine mosaic—triangles, squares, circular segments, etc.—were often of glass paste, producing much more brilliant effects than

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the marble and porphyry units of the earlier works. It appears to have been first used in the spiral flutings of the gospel or Easter column. This brilliant form of Alexandrine work, whatever its origin, became especially common in Southern Italy, and was practised there and in Rome as late as the thirteenth century. It is found in the cloisters of Monreale (twelfth century),

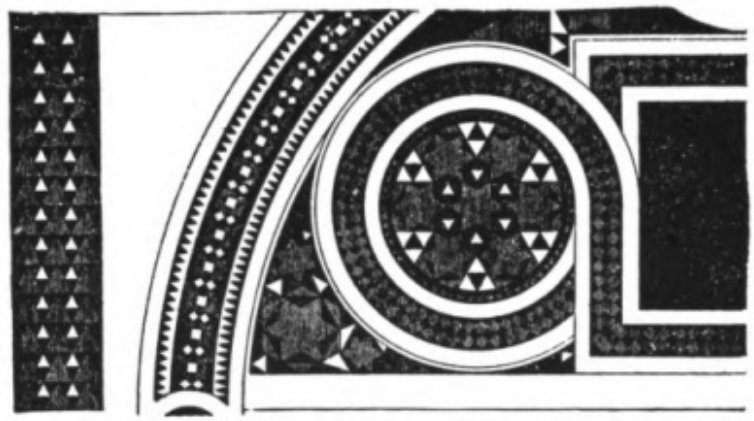

FIG. 213. MOSAIC DETAILS, PULPIT IN SAN LORENZO FUORI.

in Sicily, and in those of San Paolo *fuori* and St. John Lateran at Rome (thirteenth century). Rome became the center of an important school of *marmorarii* and of a great industry in marble mosaic, and its artists traveled far to execute orders for church furniture and cloister-arcades. The family of the Cosmati (from Cosmatus or Cosmas, grandson of the founder of the school), were especially noted for several generations, and their name is often applied to the combination of *sectile* and *Alexandrinum* which they used and developed (Figs. 212, 213 from Ara Coeli and San Lorenzo Rome. See Chapter XIV).

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