

CHAPTER V

ART

The architectural creations of man are usually ornamented with various architectural features - functional or purely decorative - as well as additional natural or artificial decorative elements borrowed, adopted and evolved according to trend of that particular culture.

The Buddhists who erected the grand Mahastupa, embellished this magnificent brick structure with various decorations of terracotta works. Some parts of the Viharas were also decorated with simple saw-tooth decorations.

This chapter deals with the artistic aspects of these objects. For the sake of convenience and clear understanding, this chapter is divided into three parts : First part deals with the synthetic study of the basic elements of decoration, wherein every motif is studied in details of its original form - either natural or artificial - and its varied application at Devanimori. Second part deals with the technique of manufacture, wherein technique of actual application of these motifs is also described. The final part deals with actual detailed descriptions of all art pieces. Here, every piece is further studied analytically in tabular form where details of form, function and position of all decorative motifs are classified.

Basic Elements and Motifs of Decoration:

It is a well-known fact that architecture creates opportunity for other visual arts like sculpture, painting etc., to flourish. The Buddhists who erected the magnificent and artistically adorned edifice like Mahastupa, therefore, would not miss any opportunity of expressing their artistic tradition of decorating the plain facets of this structure. To accomplish this task of ornamentation of this religious structure like Mahastupa, they have followed the tradition inherited from their predecessors of Gandhara Art, which, in turn, had borrowed, adopted and Indianized the Greco-Roman art of the ancient occident¹.

The basic elements which comprise the bulk of various motifs of Devanimori can be classified into two main groups: (1) Natural, and (2) Artificial. The natural motifs are borrowed or derived from the organic world of plants, animals and man. Under the head of Artificial motifs can be listed the geometric designs produced by artificial means from imagination and forms derived from human artifacts.

NATURAL MOTIFS

Natural motifs can be divided into three classes :

1. Floral
2. Faunal
3. Human

FLORAL :

In nearly every style, many motifs are derived from the plant world to produce various patterns. Leaves and flowers either singly or combined have been adopted in almost all schools of art. For this purpose, the artists have selected some leaves having artistic shapes, which are further developed into basic ornaments in accordance with rules of rhythm and symmetry.

At Devanimori, we have following leaves and flowers:

- A. Acanthus
- B. Laurel
- C. Olive
- D. Lotus

A. Acanthus : (Acanthus Mollis : Fig.34)

Of all the motifs borrowed from nature acanthus is the most common in Greco-Roman art. Its frequent and varied application in Corinthian Order of Greek and Roman art is well-known². Its typical serrated form which provides a wide range of ornamental possibilities seems to be the main reason for its popularity. Vitruvius, the famous classical author on architecture, states that Callimachus (B.C.437) discovered and developed the artistic composition of this leaf depicted on the inverted bell-shaped capital of Corinthian Order³. The artistic tender compositions of Greek art was adopted by Romans who spread it in their empire in Syria from where the Indo-Corinthian style took

root. It is well-known that Kanishka invited the artists even from Asiaminor^{3A}.

At Devanimori, acanthus leaf is represented in various forms according to its function and position in the decorative scheme as a whole. But the spoonshaped rounded tips and vigorous curves are the chief characteristics of this plant which are utilized by the artists in various ways. The application of this floral motif can be divided into four types:

1. Mould
2. Fillet Band
3. Enclosed Ornament
4. Free Ornament

Mould:

The most frequent and varied use of acanthus leaf is on the ovolo shaped ellipsoid mould. On this mould, acanthus leaves are depicted in two forms:

- (a) In the row of vertical sprouts (Fig.38 and 46)
- (b) In the row of vertical composite intricate form (Fig.38, 47 and 48)

Fig 38 and 46

(a) Fig. 38, 47 and 48 :

On this mould, the basic form of acanthus leaf is palmette - like decoration in horizontal rectangular form. In this form, the leaf emerging from the receding base follows the quarter circle section and reaches upto top. The tips are not so much rounded as in type B. The side

lobes are averted side-ward. This representation is executed by means of prominently grooved serration and prominent rounded tips.

(b) Figs. 38A, 47 and 48:

In this form, the characteristics of serration, turn of sprouting, and tips of the lobes are emphasized, specially to augment the vigour and sprout. The spinal lines of serration are curved in semi-circular arcs. But due to the restricted band-like narrow field of the mould surface, the natural form of the leaf is missed, and instead, these leaves have become horizontally rectangular (H.4" to 4½", B.10" to 11" on plan : Fig.38). But, inspite of this unnatural form, the sprouting vigour of forceful lines, spoonshaped tips and curves in ultorelievo represent a harmonious blending of rhythm and symmetry.

Fillet bands : (Fig.38A)

The fillet bands of acanthus leaves are applied along the formal line of Chaitya arches. Here, they are employed in two compositions : purely acanthus leaves band (Fig.40, 19 and 20) and composite band formed with one or two other geometric or floral motifs (Fig.40/16 & 17). The form of this leaf on these bands is either square or horizontally rectangular. The tips are depicted in low relief and serration is marked in shallow grooves. The blunt tips are depicted in low relief (Fig.38). The composite bands are

formed by adding chequer pattern and olivestalks (Figs.40/16 to 20). These compositions are used on arches with undercut (No.40/12) and Arches with medallion.

Enclosed Decorations : (Figs.38A)

The enclosed decorations of acanthus leaf are employed on semi-circular stilted arches, Chaitya arches, and square bricks. On stilted arches they occur in two forms : rectangular and square. The form of rectangular type is same as that of the fillet band decoration, i.e. five to seven lobbed leaf in low relief. The oblique form is different. It has blunt spoon-shaped tips. As the alignment of leaf is diagonal to the enclosing square the averted tips are confined within the square pointing towards corners.

Free Ornament : (Figs.38A)

The most important and artistic as well as intricate use of acanthus leaf is its use as a free ornament on the Indo-Corinthian pilaster capital. Here, various forms of formalized and stylized acanthus leaves are employed in horizontal tiers or rows arranged one above the other. But unlike its original Corinthian proto type (Fig.37), the natural form of the leaf is not cared for, but instead, its serration and lobes are emphasized. Due to squat form and over emphasized serration, curves and lobes are exaggerated. As a result, the original tenderness and simple beauty of Greek style is lost. What we have at Devanimori is the

stereotyped copy of the traditional standardized Roman form (Figs.38A) which exhibits the force of intricate design rather than beauty of a well balanced tender composition. (For correlation, see Chapter VII : Contacts and Correlation).

LAUREL (Laurus noilis : Fig.38B)

Due to its symbolic significance and its lanceolate shape, laurel leaf was introduced in decoration of architecture by the Greeks⁴. It played a conspicuous role^e in Greek religion, as it was sacred to Apollo - the God of Sun, Song, and Music, and founder of cities. The conquering heroes and artists were crowned with crowns of laurel leaves. Even upto this date, stalks of laurel symbolize glory⁵.

At Devanimori, this motif is employed in following forms:

- A. On mould
- B. As free ornament to decorate plain surface
- C. As deformed geometric form.

(A) - The most frequent use of laurel leaf is on the ovolo mould. As such, it is depicted in horizontal scroll. It is carved in groups of fours arranged in vertical rows along the curvature of the mould. The natural form of the leaf is completely changed. It has assumed the form of an isosceles triangle resembling the shape of a spear head with two tiny flanking volutes at the base looking like side barbs. The tip is pointed. Along its rib, this leaf is marked with a

deep incised line. The simple wedge-shaped Geometric form of this leaf was employed on the rounded moulds on stilted arches (Fig.31).

As free ornament, it decorated the surface of semi-circular stilted arch. Here also, its natural form is replaced by geometric wedge shaped form devoid of any additional decoration except incised line along its length.

Olive (*Olea Europea* : Figs.38,36)

Like laurel leaf, olive leaf is also a symbolic leaf. It was sacred to Athena, the goddess of wisdom, power, peace and prosperity. Hence, olive branch symbolizes peace. At Olympian games olive branches were prizes for victory. In Rome, heroes were welcomed with wreaths of olive boughs⁶.

The elliptical form and straight stalk of olive plant provides only one type of decoration, - fillet band. Hence, on all terracottas of Devanimori, olive leaf is depicted in only one decoration - Vertebrate band. As such, the fillet band of olive-leaf decoration occurs on all forms of arches - Chaitya arches as well as semi-circular stilted arches.

It has two variations : The usual double leaf stalk, and single leaf stalk (Fig.38B). The olive stalk is employed even as a separating band between two main bands or other enclosed decoration on jambs (Fig.31).

The original olive leaf is slightly elliptical, but at

Devanimori, its tip is widened and shaped into a spoon-shaped form (Fig.38C).

Lotus (Nelumbium Speciosum)

Lotus (Padma) is also a symbolic water plant. It was freely used in ancient Egypt, Assyria and India. It was sacred to Osiris and Isis (Egyptian God and Goddess). It symbolized recurring fertilization of land, and immortality⁷. In India, it is attached to ^{Ksh}Laxmi - the Goddess of prosperity. In Buddhist religion, it is attached to Amitābha^{7A} and Padmapāni^{7A}.

Lotus calix and petals are used in various forms according to their position in decoration. But in every form, the petal is much formalized and stylized. It has pointed tip and rounded form. Every petal is decorated with a central vertical incised line. Its main use is in the form of petal-bands on the seats (Kamalasana) of Buddha images. On Chaitya arches, it is employed in bands of petals either pointing up or down and in some instances, two bands - one overlapping the other (Figs.27 to 30). On square bricks and medallions, it is employed in two forms : (A) Petal compositions and (B) Corolla or calix composition. The petal designs of square bricks (Fig.38D) are composed of four diagonal petals either meeting at the centre or emerging from the centre and pointing towards corners. The corolla type has the whole corolla of the lotus carved in alto rilievo in a convex bulging relief (Fig.59). On semi-circular stilted arches,

some members of its jambs are covered with overlapping lotus petals (Fig.31A).

On image seats, the petals are arranged in horizontal rows - either single or double. The petals of upper row are pointing upward and the lower row pointing downward (Figs.26 to 30).

HUMAN AND FAUNAL DECORATIONS

It is a universal tendency among man kind to transmit to their posterity the great deeds and personalities of Gods and superhuman heroes. Hence, it was natural for the Mahayana Buddhist artists to represent the great Master in an anthropomorphic form. The superhuman self restrained dignity of Buddha is depicted in Dhyanamudra (seated meditation posture). Although the form and posture of these images are stereotyped, they differ in features of face and treatment of drapery etc. (A detailed study of these is incorporated under descriptions of the terracottas on following pages).

Another example of human body as a decoration is a fragment of a female torso. It represents a female figure in Dvibhanga. The head and parts of hands of this figure are broken. This figure was attached to the jamb of a semi-circular stilted arch. Hence, it can be assumed that human figure was employed as free ornament also. Similar figure on a gold repose is found from Taxila^{7B}.

The enclosed ornament of human face is common on square bricks. One grotesque face is found on the central medallion of a Chaitya arch also (Fig.33). These grotesque faces in front pose are depicted on the plain surface of square bricks. They are in low relief produced by prominent incised lines and low relief modelling. The wide open bulging eyes, bare teeth, distorted drawn up lips, and snorting nostrils produce distorted ugly face. These bricks like those at Mirpur-Khas⁸ were studded on the face of the structure under round mouldings and thus formed a part of surface decoration.

Faunal Motifs :

The use of animal figures in natural or idealized forms is less frequent than that of the floral decorations. In fact, only lion figure (Felis leo) is utilized as a motif of decoration. The majestic stature, compact proportionate muscular build and strength and courage are the main attractive characteristics of this noble creature. It was a common decorative device in ancient Assyrian, Egyptian, Greek and Roman architecture⁹.

At Devanimori, lion is depicted in two forms :

1. Free ornament
2. Enclosed ornament

As free ornament, it is depicted on the top member of jambs of semi-circular stilted arches - surmounting the bell-shaped band of inverted acanthus leaves (Fig.31). Here, lion



is depicted seated on its haunches. As it is comparatively a small figure (5½" high), only its prominent features like the mane, wide mouth, eyes, powerful paws and muscular thighs are depicted. No other details are added.

As enclosed ornament, it appears on square bricks. But in this case, only the front pose of its head is depicted. Its face is represented by typical wide open mouth, mane, moustaches, snub nose, and bare teeth.(Fig.63).

ARTIFICIAL AND GEOMETRIC MOTIFS

This group of motifs can be divided into two sub-groups:

1. Based on artificial objects
2. Geometric figures and designs

(1) A few decorations are derived from following objects:

- (A) Flower Vase
- (B) Bead and reel

A. The Vase is employed as free ornament to decorate the front surface of jambs of semi-circular stilted arches (Fig.31A). This Vase has funnel-shaped mouths and globular body tapering towards the base which has averted rim base. Similar forms were common in Greek vessels¹⁰. A trident-like floral decoration is sprouting out of these vases (Fig.31) probably symbol of Triratna. (Three jewels of Buddhist religion - Buddha, Dharma and Sangha).

B. The bead and reel motifs (Fig.38E) are depicted on low relief mould. These motifs are much deformed compared to their original Greco-Roman form¹¹ (Fig.38E). The bead is barrel-shaped with incised line along its axis. The reel is nothing but vertical ellipsoids in relief. These two motifs are used on bands which separate the main bands on Chaitya arches and semi-circular arches. Unlike its original use in Greek and Roman architecture, it is not used as an independent mould like the ovolo-shaped moulds of acanthus leaves and laurel leaves.

(2) Geometric figures and designs can be classified into following classes:

- (A) Lines
- (B) Chevrons
- (C) Chequers
- (D) Circles
- (E) Squares

(A) Lines are produced by relief ribbing and incision. The ribbed lines are $\frac{1}{2}$ " to $\frac{3}{4}$ " broad. They are employed for separating the decorations and bordering the motifs. They are straight, wavy, and even zigzag. Sometimes, dotted lines are also used to adorn the decorative features like dentils etc. (Figs.64A and B).

(B) Chevrons in relief or incision are used for decorating borders on Chaitya arches (Fig.40) and top portions of

dentils (Fig.64). These chevrons are sometimes further decorated with vertical incised lines.

(C) Chequer lines pattern: This pattern is composed of alternate carved out and vertically crossed squares. It is the most common device of decorating plain surfaces. It is employed to produce fillet bands at the base of cornices. On square bricks, they are employed as enclosed ornament confined within the square border (Figs.54 and 57). On Chaitya arches and semi-circular stilted arches, chequer patterns are employed as free ornamental bands.

A laurel-leaf-like floral motif can also be classified under this head because in this instance, the obliquely aligned leaves are carved within tiny squares which are half carved diagonally (Fig.56). This motif is employed on all arches in bands as well as surface decorations.

(D) Incised circles form two main decorations:

(1) Independent circles which form the border decoration of Chaitya arches and semi-circular stilted arches (Figs.39, 40 and 41). Bisecting incised circles are employed to produce four-petalled floral design within overlapping circles (Fig.38E).

After this study of basic elements of decoration, now it will be interesting to describe the technique of manufacture of the art pieces (terracottas) on which these motifs are actually employed in various patterns and compositions.

TECHNIQUE

As far as the technique of modelling is concerned, the images, decorative slabs and decorative bricks from Devanimori can be classified into following main groups:

1. Images
2. Arches
3. Capitals
4. Medallions
5. Decorative bricks

As already stated above (Chapter IV : Architecture), the Mahastupa of Devanimori was embellished with terracotta work only. The clay utilized for the manufacture of these art pieces is finely lavedgated alluvial clay devoid of impurities. The firing of these terracotta works is of such a high standard that some of these pieces (inspite of their big sizes) are almost crimson red.

IMAGES :

The Buddha images are the most artistic eloquent specimens of a balanced blending of art and craftsmanship. They are made from fine well lavedgated clay devoid of any other impurities except fine sand. This clay seems to have been obtained from the alluvium of the river. As the water was most essential for the whole process, the fabrication of these images was carried out probably on the river-bank in open. A number of animal foot-prints on some bricks support this assumption.*

*The author is thankful to Dr.(Mrs.)D.R.Shah, Lecturer in Zoology, Department of Archaeology and Ancient History, for identification of these foot-prints.

The technique employed is what may be called 'piece-modelling' technique. These images are not moulded images as they may appear at first glance but are modelled individually. This fact is evident when the proportions and measurements of various parts of body are compared minutely. Various parts of body such as head, torso, hands, legs etc., were modelled separately and then assembled together.

The process of fabrication can be divided into following stages:

1. Primary modelling of various parts of the body individually.
2. Assembling these parts together.
3. Finishing of joints.
4. Sticking and finishing of minor limbs.
5. Rendering the details of various features.
6. Applying slip.
7. Drying.
8. Firing.
9. Colouring.

(1) Primary modelling of various parts of body:

For the purpose of convenience and accuracy of proportions, the body was divided into several parts from joint to joint. For this purpose, it was probably divided at every bending joint. The following parts were prepared separately.

- (1) Head (2) Torso (3) Arms (4) Fore-arms
- (5) Hands (6) Thighs and legs (7) Feet.

From the above method of division of various parts of the body, it will be clearly evident that the sculptor has divided the body into several parts according to positions of bends in various limbs. This was economical by point of labour also, because when a certain portion of body is standardized in form and posture, its copies can be fabricated even in lots. Thus, when a modeller prepared certain limbs with constant practice, concentration and repetition of the same job, he might have been working in a well defined uniform technique. By this method of work, uniformity can be ascertained to quite a fair extent, which was a very important factor in the making of Buddha images, because the artist has in his imagination certain conventional figure of Buddha conceived according to religious tradition. He had to put in every image what is called the Prāṇa (soul) of the Great Master in a superhuman divine body. Even a slight mistake of proportions or uniformity was intolerable. So the facial features, position of hands, typical curves of fingers etc., had to be finished with utmost care and concentration.

(2) Assembling of various parts:

During this stage, various parts of body were joined together in their natural postures.

The squatting position of Dhyānamudra (meditation) is such that the legs and thighs produce roughly, widened "V" shape. This posture produces a heavy flat base of the image, which provides a stable base. So it can safely be assumed

that this part of the body was first placed on the rectangular slab of lotus-throne. The other heavy piece was the torso. So, it seems that it was placed on the legs in vertical position. After this, the arms were stuck to respective shoulders.

For the purpose of meditation posture, the forearms were bent inward and placed in the lap just above the upturned heels. To produce this posture, the forearm was attached to the elbow at an angle of about 100° . Finally, hands with full-stretched straight fingers and raised thumbs were attached to knuckles in slightly angular pose.

After this, the head was fixed on the torso. The back support of a rectangular slab was attached to the image at a perfect angle in such a way that there should not be a slightest stoop.

(3) Finishing touches on joints:

Mere assembling of various parts will not produce a natural finish so it seems that some soft semi-liquid clay was applied at every joining point to render a natural bend of that particular portion of the body. This job demanded a very careful and accurate workmanship, because even a slight mistake in this process would spoil the beauty of the whole image.

(4) Adding the minor limbs:

To complete the human form, ears were attached to head and details of fingers and thumbs to hands and feet. Rendering

of ears was very important, because according to Buddhist traditions, Buddha had all the thirty-two Mahapurusha Lakshanas* (peculiar characteristics of a great man) one of which was the abnormally elongated earlobes¹². The fingers and thumbs were not given so much attention. Only their shapes were represented. The Urna¹³ or a tiny hair tuft was represented by a spherical tiny knob in relief just above the centre of the eye-brows.

(5) Rendering the details:

When the figure or the form of the body proper was ready, following details were added:

- (a) Drapery
- (b) Hair
- (c) Details of facial features.

The folds and frills of drapery were depicted by two techniques : (a) by incised lines either single or in pairs, and (b) ribbed lines. Complete details of drapery are not represented (but only their salient features), because the drapery is 'transperent' (under which anatomical features of body are visible).

The effects of eye-brows are produced by ribbed bow-shaped lines. The half closed eye-lids are depicted by deep crescentic cuts.

*Lalita Vistara

(6) Applying the slip:

Finally, an even slip was applied all over the image for a final finish to produce a smooth texture.

(7) Drying:

The drying of the image demanded special attention, because if the drying is not gradual and uniform, all care taken upto this stage would be of no use. Moreover, there were all possibilities of cracking, during this process. It seems that for this purpose, the images were dried under shade and not in the open sun.

(8) Firing:

No evidence of firing kiln could be traced from the excavation. But it seems that this process also must have been done very carefully. Considering the size and thickness of section of the images, it seems that they required very high temperature.

(9) Colouring:

Finally, the images were coloured with whitish cream colour, some traces of which are retained on some of the images. Like their close allies from Mirpur-Khas¹⁴, these images were not polychrome with details of eye-brows, eyes etc., but were painted with single plain colour.

ARCHES:

As regards the shape and technique of manufacture, arches can be classified into two groups:

1. Semi-circular stilted arches
2. Chaitya arches
 - (i) having wedge-shaped undercut
 - (ii) having central medallion

The process of manufacture of both these types can be divided into five stages:

- A. Preparing the form
- B. Drawing the layout of decoration
- C. Carving and finishing
- D. Drying
- E. Firing

First, the shape or the form of the required arch was modelled with some sharp instrument which is clear from the neat cuts of the form. After this, the layout of the proposed decoration was drawn on it. The carving of the decorative patterns was accomplished by two techniques : The floral motifs were attempted in smooth but slightly obliquely carved out to produce a smoothing effect of mild shade and light, while the geometric designs were marked with vertical deep incisions. After this, the finishing touches such as finishing of tips of leaves etc., was done. Finally, every piece was coated with a fine slip.

All these processes were done when the artifacts were still damp. Upto this stage, they demanded careful handling. Due to their size (semi-circular arches B. 3'-10" x H. 4' and Chaitya arches B. 3'-1½", H. 1'-7") their transport when damp

was also difficult because a slight jerk or uneven base level may twist the damp piece or even break it. But, in such condition, it was very easy to cut them into convenient pieces. Hence, for the purpose of convenience, tallying lines were drawn along their edges and borders before cutting the whole piece into convenient slabs. These lines are clearly visible on almost all decorative pieces.

For this purpose, the Chaitya arches were cut into vertical halves, while the semi-circular stilted arches were cut horizontally into nine or ten components.

After all these processes, these pieces were dried under shade and were finally put into kiln for firing. At the time of actual use, the pieces were assembled and put at their proper positions. At that time, the tallying lines were checked for accuracy of the shape of the arch as a whole.

MEDALLIONS : (Fig.44)

The circular medallions were prepared in ulto-relievo on field of square slabs (1'-4" x 1'-4"). It seems that a prominent disc of about 1.5 inches thickness in relief was carved out on the square slab. After this, the outline of respective design was drawn on it. And finally, the cuts and curves were produced by carving. As the medallions were generally decorated with floral motifs only, carving was executed with utmost care to render the natural form of the motif.

CAPITALS : (Figs. 42 and 43)

The capitals of pilasters are carved on rectangular clay slabs ($1'-1\frac{1}{2}"$ x $0'-10\frac{1}{2}"$ x $0'-6"$). Only its front and part of side portions which were protruding out of the structure were worked upon. This portion was divided into three horizontal bands of sprouting acanthus leaves of various forms and sizes. It seems that for this purpose, each band was divided into several parts according to number of leaves to be depicted on it. The leaves were depicted in bold relief by carving them with some sharp instrument which gives it powerful lines of twists and turns. For this purpose, the spinal lines of lobes are marked with deep grooves, and tips are brought into prominent relief by carving off its surrounding field.

PILASTERS : (Fig. 65)

These pilasters were the replicas of the bigger pilasters which form the part of the architectural features. Hence, they are also composed of base, shaft and the capital. They are rectangular in section with two prominent ends, one of which formed the base and the other, the capital. It seems that first a long rafter-like rectangular slab of clay was taken on which the outlines of base, shaft and capital were marked. The plain base was prepared by scraping off extra clay. The shaft was carved out plain. The capital was copied from the bigger capitals of the main pilasters.

BASES OF PILASTERS :

These bases were prepared from thick square slabs. As they were simple pieces devoid of any decorations of carving, they were given alternate roll moulds and rounded grooves by gradual process of scraping.

BRACKETS OR DENTILS : (Fig.64)

Brackets or Dentils can be divided into two groups:

- (A) Long rod-like rectangular loose pieces
- (B) In group of threes on rectangular bricks.

(A) This type is made of long shaft-like slab of clay. Only one of its ends which was to be kept jutting out of the structure was worked (Fig.64C). One of its ends was first scraped to produce angular concavities to produce a hyperboloid section with a flat top (kept such to support the surmounting member of the structure). The concave surfaces of this end are decorated with incised designs, wavy lines and dots etc.

Technique of Type B which falls in the category of decorative bricks is described under the head of decorative bricks.

DECORATIVE RECTANGULAR BRICKS : (Figs.46, 47 and 48)

This group is named decorative bricks because they have the same dimensions as those of the plain bricks used for constructional work ($17'' \times 10\frac{1}{2}'' \times 2\frac{1}{2}''$). As they were

to be inserted into the structure keeping only its decorated side visible, only their longer flanks were worked. These sides were chamfered and then decorated with various floral motifs of acanthus or laurel leaves (Figs.38A and 38B). The geometric pattern of chequer design was executed on plain surface.

For floral patterns of acanthus and bay leaves, the facet of the brick was divided into convenient compartments (Fig.38B). As the horizontal band of these bricks would be visible from a lower view point, the lower angle of the brick was chamfered in an ovolo section in such a way that the vertical acanthus leaves in relief would look like sprouting from under the brick.

To produce the Bay-leaf motif, the chamfered side was divided into four horizontal bands (Fig.38B) of rectangles in string courses. Then, each rectangle was divided diagonally into two halves. After this, each adjoining pair of right angled triangles having adjoining right-angle was carved off leaving a deep cavity. The result of this process would be horizontal bands of wedged shaped motifs pointing in one direction. The wedged shaped motifs were further decorated with incised lines along their axis.

SQUARE BRICKS : (Figs.53 to 63)

These bricks are prepared from square slabs ($5\frac{1}{2}$ " to 6" square). As only its square face was to be kept exposed, only that part was decorated. First, a square was marked on the

flat surface leaving a plain border of 1" to $\frac{3}{4}$ ". Then, the enclosed decoration of floral geometric or faunal pattern was depicted on the plain square field in low relief.

The art objects from Devanimori can be classified into two main groups:

1. Terracottas
2. Stone figurines.

The terracottas are chief objects of study, stone figures being very few in number (four only).

TERRACOTTAS

Under the head of terracottas are described only those pieces of terracottas which have their own independent existence. As such, this group includes Buddha images, human and animal figures (very small in number - 6 only), arches, capitals and medallions. Although some of them are the components of architectural features, they deserve special detailed study.

Terracotta group is the most important and outstanding group. It is not so due to its numerical strength only, but because it is the backbone of the art traditions of Devanimori. Moreover, as already mentioned above, the whole Stupa was adorned with these terracotta decorations only. No sign of wood or stone could be traced on the Stupa. No doubt, this material was commonly used in the construction of the Viharas.

According to form and function, the terracottas can be

classified into following main groups which are further divided into sub-groups:

1. Sculptures
2. Decorative components of architectural features
3. Decorative bricks.

1. Sculptures :

This is the most important group because it includes the Buddha images - the essence of Devanimori art. According to form, this group can be sub-divided into three sub-groups :

- A. Buddha images
- B. Human figures
- C. Animal figures.

A. Buddha images : (Figs.26 to 30)

Height - 2'-2½" to 2'-3"

Breadth - 2'-0"

All the images without any exception are in Dhyanamudra - meditating posture. In all fragments of twenty-six images are discovered. Out of these, twelve are almost intact with very slight damage and could be repaired, while remaining fourteen are highly damaged and hence could not be repaired or remodelled into complete pieces. No doubt, even from the fragments, the postures of the images can easily be judged.

In all, twenty heads are found, out of which twelve could be refitted to their respective torsos. No complete images

could be reconstructed from the fragments of remaining fourteen. From this, it will be clearly evident that about 50% of the images are highly damaged and are beyond the possibility of repairs or remodelling unless the missing pieces are manufactured a new and added to them.

But, from whatever is left, it is not at all difficult to conceive the original features of all the images. The bends and postures of hands and fingers are same in all the fragments suggesting a uniform posture of Dhyanamudra.

All these images are executed in ul to relievo (almost three dimensional relief). Only their backs are hidden from view, which is stuck to the backslab of the image that has a flattened wedgeshaped top. This back slab serves two purposes: It holds the image in place, and serves as a masonry piece also. Actually, it is meant for fixing the image on the face of the Stupa. The top of this back slab as already mentioned above is flattened wedgeshaped in such a form that it fits in the undercut of the surmounting Chaitya arches (Fig.45).

All the images are in Dhyanamudra. As such, they are in squatting posture - Padmasana. To form a Padmasana, the legs are bent inward at knee to an acute angle in such a way that their toes are brought together in the lap near the abdomen, with heels turned upward. The hands are resting in a Mudra (Pose) in the lap just above the heels. The palms of hands are turned upward, with fingers stretched to full length. The right palm is resting on the left one.

The torso is kept erect in such a way that the back is kept straight without the slightest stoop. The manly body is having fully developed sloping chest, while the abdomen is sunk back to produce a slim waist. The sloping shoulders, chest and thighs in squatting posture show only the form of the muscles, but not their details. But still the muscles seem to be quite stout. They are what may be called rounded muscles. The body is draped in a Sanghati (cloak-like upper garment). Only the face, some part of chest near neck, neck, hands and feet are bare.

If the Stupa is the highest achievement in grandeur and imposing magnificence, the image of Buddha is the highest achievement in artistic creation. It is a well-known fact that while looking at any human figure, it is the face that first attracts the attention of the onlookers. The sculptors of Devanimori seem to be quite aware of this human tendency. That is why the essence of all the artistic creation is summed up in the creation of head, or more accurately the expressive ideal form of face.

Although all the images are in the same posture and look alike at the first glance, they do have some minor differences and variations in their physical features as well as other details like drapery, hairstyle etc. To study these variations minutely, following features of these images should be studied in details:

1. Form and features of face
2. Hair-style
3. Urna
4. Drapery
5. Seat.

1. Classification according to form and features of face:

According to forms of head and facial features, the Buddha images from Devanimori can be classified into three groups:

- A. Having Oval face
- B. Having Almond-shaped face
- C. ^{Having} Round face.

These classifications are based on the proportion of forehead, zygomatic arch of face, cheeks, and chin.

The Oval face group (Fig.27) is having typical Oval face. The breadth of forehead and the lower part of the face are almost equal. The almond shaped face (Fig.29) has narrower lower face, and the round face has rounded features and form (Fig.28).

A. Oval face:

This group is comprised of only two specimens (Fig.27). Their proportions are as follows: Height 4"; Breadth 3.7"; Nose (length) 1.35" to 1.3"; breadth 1"-00; zygomatic arch - 3.1" to 3.2".

This type has either wavy hair (Fig.27A) or spirals of hair depicted by knobbles arranged in systematic formations. In proportion, eyes of this type are slightly bigger (1.7" x .7") than the average eyes of other groups. The cheeks are slightly flabby but not to much extent. The lips are also not so shapely. The chin is rounded. The segmental incised lines which represent the eye brows are not represented so artistically. The eyelids are also a bit flabby. The wavy hair are represented by incised wavy lines. These lines are sprouting outward from the centre of the forehead and spread gradually on both sides towards temples and back of the head as they go up. They finally merge with the protruding knot (of hair) on the top of the head. The elongated earlobes are same as type B and type C.

B. Almond-shaped face :

This is the most artistic type (Fig.29). It has a sweet form of perfectly balanced proportionate features, which produce such a face which very aptly conveys the dignified and self-restrained personality of a Mahāpurusha (Superman).

This type has a broad forehead at the lower edge of which are segmental eyebrows represented by incised lines just on the brim of the eyesockets. Under these eye brows are the half-closed eyes (ardhamillita netra). As the eyes are half-closed (upto only slit-like opening), the details of eyes are not visible. The eyes are kept half-closed because Buddha is represented not simply sitting in meditation but as the

Enlightened One, who has already possessed the knowledge (Gnāna) and hence has a dignity of self-satisfaction, as well as a feeling of compassion for all the creatures of the world.

The eyebrows merge with the shaply ridge of nose which emerges from the centre of the forehead and ends in a rounded tip. Both the lips - upper as well as lower - are shaped with some sharp instrument in such a way that they have sharp edges which render them a clear cut accurate form and individual prominence. The upper lip is marked by typical vertical depression in centre, which looks like a vertical groove between nose and upper lip. This feature gives a sharp loop to the bowshaped upper line of the lip. Both ends of this lip are slightly turned up to produce a pleasant mirth. The chin protruding down is very slightly hooked out at its blunt rounded end. The cheeks are rounded perfectly. They merge with the eyes, nose, lips, chin and ears in rhythamatic curves. The plasticity and the mould of cheeks are upto so much perfection that they render a well balanced individuality to all features of face and group them in an ideal combined form of a natural and artistic form. The elongated ears are typical. They have abnormally elongated earlobes which hang even beyond the jaw and reach almost upto the shoulders. According to Lalitavistāra, Mahāpadhāna Sutta, and Dharmapradīpikā, Buddha had Dakshinavarta Romaraji (hair in spirals turning right). The spirals of hair on these images are rendered by symbolic representation of tiny hemispherical knobbles, which are

arranged in systematic formations that follow the outline of forehead and the top hair-knot.

C. Round Face : (Fig.28)

This type has generally rounded features. In type A, the head with the top hairlock is slightly elongated and hence has slightly tapering top, type B has an almost flat top with prominent Usnisa. But type C has a rounded top. The forehead is slightly narrower (3.5" to 3.6") than other two types and has typical rounded curve between temple and the forehead proper. This feature is considered typical because in types A and B, the temple is almost flat. The eyebrows are also in a more rounded segments. The eyes are smaller compared to type A. The nose is also shorter (1.2") than type A and B (1.35"). The tip of the nose is also not so much pointed as type B. The lower lip is thicker and protruding out prominently. But the main feature is the form of cheeks and chin. The cheeks are rounded completely and together with the outline of head and temples make almost a perfect circular outline. The chin is not so prominent like type B.

CLASSIFICATION ACCORDING TO DRAPERY:

Drapery is one of the most important features in classification of these Buddha images, because it provides direct evidence for stylistic background and can thus help in tracing their origin as well as contact and correlation.

It is a well-known fact that whenever a figure is draped,

the drapery is represented by depicting the folds and frills by typical traditional method of that particular art school. Here, the seated Buddha figure is wearing a cloak-like one piece upper garment called Saṅghaṭī. It covers almost the whole body except face, hands, some portion of chest around neck, and feet upto toes. The Saṅghaṭī is worn in two fashions - both shoulders covered, and only one shoulder covered. Thirteen images have both shoulders draped while nine have only one shoulder covered. No details could be traced from the fragments of four images as shoulder portions of these images are missing.

The folds and frills of the images from Devanimori are depicted by two methods :

1. By incised lines
2. By ribbed lines

These lines were drawn with some sharp instrument when the images were damp. They run in smooth gentle curves following the form of the body. Most of them which are on torso and hands emerge from behind the image and drop sharply in loops and again rise sharply and disappear behind the image. The lines on the legs are depicted in oblique lines.

The depiction of incised lines can be divided into two techniques : (a) single line; (b) paired lines.

The ribbed lines can be divided into three types; (a) Flat low rib, (b) Prominent rib and (c) Prominent rib with an incised groove along its run.

The flat rib group is having almost flat lines about $\frac{1}{4}$ " wide. There are two images in this type (No.22 and 23). The prominent rib group has a prominent rib having a triangular section. This group includes two images (No.24 and 25). The C group has only one specimen (No.26). In this type, the rib is incised at its top all along its run.

CLASSIFICATION ACCORDING TO DECORATION OF SEATS:

All the images are seated on seats $2\frac{1}{2}$ " to 3" thick. The front and flanks of these seats are decorated with lotus petals in prominent relief. On each seat, there are nine to twelve main vertical petals arranged in horizontal bands. The gap between triangular tips near top is filled with smaller tips in background. This overlapping creates an impression of a full corolla. The size of petals differ according to their numbers. Bigger the size of petals, smaller is the number. Considering various types of decoration, these seats can be classified into two main groups:

(A) Having a band of single petals.

(B) Having a band of double petals.

(A) Having a band of single petal :

This group can be sub-divided into two sub-groups:

(a) Having petal tips pointing up

(b) Having petal tips pointing down.

Group A gives an impression of a full bloomed lotus. Thus,

creating an impression as if Buddha is seated on a lotus, Group B seems to be just a change in position, probably due to sculptor's fancy.

(B) Having band of double petals :

In this type, the seats are thicker ($3\frac{1}{4}$ ") than type A. The petals of lower band are pointing downward, while those of upper band pointing up. Thus, this type produces a calyx of a complete full bloomed lotus. In some instances, the upper row of petals is arranged in typical formation in which the front row of petals is composed of full petals, while the gap between the tips of petals is filled with double tips. This arrangement of overlapping petals gives an impression of tripal-petalled calyx.

CLASSIFICATION ACCORDING TO URWA :

As Buddha is represented as a Yogin in Dhyanamudra, this feature has been added to some images.

This feature is represented by a prominent tiny hemispherical knobble between eyebrows just above the nose.

In all, seven images have this sign positively. Five images have no trace of this sign at all. No data could be collected from fourteen images, as their heads were either missing or this feature was obliterated.

The details of the images are tabulated below:

Buddha Images

Table showing details of drapery, face, hair-style,
cushion seat and Urna.

<u>Sr. No.</u>	<u>Style of Drapery.</u>	<u>Face</u>	<u>Cushion seat</u>	<u>Urna</u>	<u>Remarks.</u>
1.	Both Single shoul- incised ders lines	Oval	Single petal pointing down	Yes but broken	Almost intact piece. Some patches added for finish.
2.	One Single shoul- incised der lines	Oval	Single petal pointing down	Yes but broken	Hands and right leg and right foot missing.
3.	One Single shoul- incised der lines	Oval	Single petal pointing down	Worn out	Face worn out but features are still visible.
4.	One Single shoul- incised der lines	-	Single petal pointing down	Not there	Right hand and part of left hand and parts of left leg missing.
5.	Both Single shoul- incised ders lines	-	Single petal pointing down	-	Face worn out, lower torso and hands and legs are missing.
6.	One Single shoul- incised der lines	-	Single petal pointing down	-	Head is missing. Found from the Stupa.
7.	One Single shoul- incised der lines	-	Single petal pointing down	-	Broken to pieces. Head missing.
8.	Both Single shoul- incised ders lines	-	Triple petals pointing up.	-	Head missing, hands and legs broken but intact.
9.	One Single shoul- incised der line	Round	Triple petals pointing up	Yes but broken	Hands missing, parts of arms repaired.

<u>Sr. No.</u>	<u>Style of Drapery.</u>	<u>Face</u>	<u>Cushion seat</u>	<u>Urna</u>	<u>Remarks.</u>
10.	Both shoul- ders Incised double lines	-	Single petal pointing down	Yes	Right hand, part of left hand and parts of left foot broken.
11.	Both shoul- ders Incised double lines	-	Single petal pointing down	Yes	Almost intact image except part of its right shoulder.
12.	One shoul- der Incised double lines	-	Single petal pointing down	-	Face worn out, lower torso, legs and hands damaged.
13.	Both shoul- ders Incised double lines	-	Single petal pointing down	-	Much damaged.
14.	Both shoul- ders Incised double lines	Round	Double petals one row of tripal petals pointing up. Other row of single petals pointing down.	-	Hairstyle, Wavy.
15.	Shoul- ders Incised double dama- lines ged	-	Triple petals pointing up	-	A very rich decora- tion of lotus petals to depict a corolla of lotus. It has ten main petals and 27 petal tips behind main line. Head and hands missing. Broken from torso.
16.	Shoul- ders Incised double dama- lines ged	-	Single petal pointing down	-	Only leg portions are intact - other parts missing.
17.	Both shoul- ders Incised double lines	-	Single petal pointing down	-	Head and hands missing.

<u>Sr. No.</u>	<u>Style of Drapery</u>	<u>Face</u>	<u>Cushion seat</u>	<u>Urna</u>	<u>Remarks</u>
18.	Both shoul- ders Incised double lines	-	Single petal pointing down	-	In fragments - fragments of legs, shoulder and torso.
19.	- Incised double lines	-	Single petal pointing down	-	Only legs and left hand intact.
20.	- Incised double lines	-	Single petal pointing down	-	Only legs and part of left hand intact.
21.	One shoul- der Incised double lines	-	Single petal pointing down	-	Head, one hand and leg are missing.
22.	Both shoul- ders Ribbed single line	Round	Single petal pointing down	No.	Hands and parts of feet are missing.
23.	One shoul- der Ribbed single line	Round	Single petal pointing down	No.	Almost intact image. Parts of hands, feet and right shoulder repaired.
24.	Both shoul- ders Promi- nently ribbed lines	-	Double petals in 2 rows upper row point- ing up and lower one pointing down	Yes	Belly, right hand and right leg damaged.
25.	Both shoul- ders Promi- nently ribbed lines	Round	Single petals pointing down	-	Broken but can be repaired fully except the face.
26.	Both shoul- ders Incised promi- nently ribbed lines	Oval	Double row upper row pointing up and the lower row pointing down	No	Nose repaired. Hands and belly repaired.

DECORATIVE PIECES

This group forms the backbone of the decorative traditions of Devanimori. It is the biggest group, as it includes about a dozen varieties of decorative pieces which are classified into following six groups:

1. Arches
2. Capitals of pilasters
3. Medallions
4. Pilasters
5. Bases of pilasters
6. Dentils or brackets.

All these pieces are actually the components of decorative architectural features (in addition to cornices, moulds and fillet bands). Most of them can be called one piece terracottas (No.2, 3, 4, 5 and 6). Only the arches (No.1) - being bigger (4'-1" to 4'-2" x 4'-0" and 3'-2" x 1'-7") - had to be cut into convenient slabs when they were damp and re-assembled on the structure itself as one piece decoration.

(1) ARCHES :

According to form, arches can be classified into two groups:

- (A) Semi-circular stilted arches
- (B) Chaitya arches.

(A) Semi-circular stilted arches : (Figs.31 and 39)

Height 4'-1" to 4'-2"; W. 3'-10" to 4'-0" (Fig.6)

As suggested by its name itself, the top part of this arch is semi-circular in shape. At base, its side jambs end abruptly without any formative feature.

This arch can be divided into two main parts. The arch proper, and side jambs. The top semi-circular arch is composed of two parts : The vault, and two side volutes which flank it. The side jambs are composed of two parts : (a) top portion having roughly bellshaped base with surmounting animal figures; (b) the shaft-like jambs.

As already noted in the beginning of this chapter, these arches were composed of several slabs which fit with each other exactly to form the complete arch.

The decorative scheme of this arch is composed of fillet bands and moulds, which are executed by incised, carved, and moulded designs. The formative features such as animals, and bellshaped concave-surfaced moulds are executed in relief.

The decoration of this arch is composed of four components:

- (A) Architectural features in relief
- (B) Bands of sculptures in alto relievo
- (C) Rounded moulding
- (D) Fillet bands

(A) Architectural features in relief:

This includes the capital-like feature of the arch which is just under the side volutes of the top arch and surmount the side jambs. This part can be divided into four main parts:

- (A) Bell shaped base
- (B) Horizontal ledges and recesses
- (C) Lion figures in relief
- (D) Floral background of the lion-figure.

(A) The bellshaped base is rendered in relief. Its surface is concave in section. It is decorated with two inverted acanthus leaves.

(B) Ledges and recesses are provided to separate the bellshaped capital and the animal figure.

(C) The lion-figures (5"x5½") seated on their haunches surmount the band of ledges and recesses. These lion figures are executed in alto-relievo in a profile pose so as to face side-ward. Actually, these lion-figures are depicted on the junction of semi-circular arch and side jambs. As these figures are comparatively small, only their forms and basic features such as typical head, broad jaws, powerful thighs and legs, mane, and tail are represented.

Most of these lion figures are highly damaged. But, inspite of that, their postures as well as features are clear cut and powerful. The open jaws, the fully stretched forelegs, haunches, and supple but powerful body convey the strength and

natural beauty of the animal. The tail raised up in a curl is also well balance^d with the form of main body.

The whole figure is displayed against a background of acanthus leaf. The oblique lines of acanthus leaves render good contrast to the diagonal display of this animal figure.

(C) Rounded Moulding :

This rounded moulding is $2\frac{1}{2}$ " broad and runs all along the arch along its inner border. It is decorated with ribbed lines produced by incised lines. The whole mould is decorated with alternating triangles which are hatched with oblique lines. The oblique lines of each triangle are at right angle to its adjoining triangle. This arrangement relieves the monotony of the mould as a whole.

(D) Fillet Bands :

These bands run all along the arch. They are executed in prominent incised lines. They are composed of floral as well as geometric motifs. Though they are in incised lines, their effect is like that of relief work.

There are three bands:-

(A) Running along the inner border.

(B) Running along the central line

(C) Confined to the outer Chamfered edge of jamb just below the bell-shaped capital.

(A) A $1\frac{1}{4}$ " broad band runs all along the inner border of the arch. It is generally composed of squares and circles or

their various compositions executed by incised lines or paired petals.

(B) The main band which runs all along the central line of the arch is 2" broad and is composed of various compositions of floral as well as geometric designs, and some times even a blending of both. This band is the main decorative feature of the arch. To give it prominence, it is separated from the inner edge band by means of the above mentioned rounded mould.

(C) A rectangular decoration-like band is confined to the base portion of jambs where their angular edge is chamfered. It covers the area between the bellshaped capital and the base ($13\frac{1}{2}" \times 8\frac{1}{4}"$). Like the other two bands mentioned above, this band is also decorated with geometric or floral motifs. Their details are analysed in the following table :

<u>Sr. No.</u>	<u>Inner border band</u>	<u>Mould</u>	<u>Central band</u>	<u>Remarks</u>
1.	Oblique petals	Garland of ribbed lines, dotted and continuous.	-	-
2.	Oblique petals bordered on both sides by half petals.	Garland of ribbed lines, dotted and continuous.	-	-
3.	Chequer pattern diagonally half carved squares three rows.	Three faced angular decorated with geometric composition of petals, produced by bisecting circles.	-	-

<u>Sr. No.</u>	<u>Inner border band</u>	<u>Mould</u>	<u>Central band</u>	<u>Remarks</u>
4.	Chequer pattern diagonally half carved squares two rows.	Garland of geometric composition of alternating triangles, filled with ribbed dotted lines, separated by bands of zigzag lines.	-	-
5.	Composite decoration of chequer pattern of obliquely cut squares and acanthus leaf.	Composite decoration of triangles filled with petals, separating band of zigzag lines.	-	-
6.	Composite band of obliquely sprouting acanthus leaf in square & four petalled geometric design in square.	Oblique and horizontal bands of straight (dotted as well as plain) and zigzag lines.	-	-
7.	Oblique petals	Dotted and plain lines in oblique alignments.	Chequered band of three rows. Chequered composition of diagonally half carved squares.	Separating band of bead and reel motifs.
8.	Composite band of geometric decorations of diagonally half carved squares and acanthus leaf.	Composite mould of geometric and floral motif of a horizontal band of geometric design of petals composed by bisecting circles and circles and oblique lines (dotted as well as plain)	-	-
9.	Composite band of chequer pattern and acanthus leaves	Composite chequer pattern composed of mould diagonally half carved chequer pattern and oblique lines (dotted & Plain)	-	-

Sr. No.	Inner border band	Mould	Central band	Remarks.
10.	-	-	Geometric composition of petals produced by bisecting circles.	Portion under capital decorated with loops of garland & tessals at top. The lower bellshaped portion is decorated with overlapping lotus petals.
11.	Geometric composition	-	Floral composition.	Chamfered angled portion under capital. It is decorated with wedge shaped motif and horizontal band of olive stalk.
12.	-	-	Geometric composition of squares with diagonal leaf.	Main decorative motif is the Vase-like <u>Ghatapallava</u> motif with Trident-like leaves sprouting from it. (Probably symbolizing <u>Triratna</u> symbol. Decoration of garland and tessals is damaged.
13.	Oblique petals.	Oblique plain & dotted lines	Chequer pattern of four rows composed of obliquely half-carved squares, bordered by a vertical band of bead and reel motif.	The rounded outer angle (which was probably part of the chamfered angle under capital is decorated with squares filled with four petalled geometric composition.
14.	Oblique petals.	Oblique plain & dotted lines	Geometric band of squares each square filled with oblique petals.	The rounded outer angle (which was probably part of the chamfered angle under capital) is decorated with chequered pattern composed of diagonally half carved squares.
15.	Geometric composition	-	-	Chamfered angled portion under capital. It is decorated with wedgeshaped motif and horizontal band of olive stalk.

CHAITYA ARCHES

Chaitya arches form the most important feature of the Stupa, and as such, they are fretted with various decorations which at once attract attention. Moreover, they were employed as surmounting decorations on the Buddha images. Although their basic form is same, these arches can be divided into two sub-groups:

1. Having wedgeshaped undercut
2. Having central medallion.

(1) Having wedgeshaped undercut:

H. 1'-7" B. 3'-2" (Figs. 32 and 40)

Like semi-circular stilted arches, these arches were also prepared in pieces. But they were prepared in only two equal halves divided vertically.

A Chaitya arch can be divided into four parts:

- (A) Back-slab
- (B) Top Volutes
- (C) Semi-circular vault
- (D) Flank volutes at the base.

Like the Buddha images, these arches were also to be fixed on the structure face, hence each of them was having a stepped back-slab with a wedgeshaped undercut which was meant for fitting on the wedgeshaped top of the image. This backslab is about 4" thick. Its top corners are cut into steps for

fitting with the brick work of the Stupa structure. This slab is plain outside the segment of the arch, but the space flanking the undercut which is within the arch is decorated with various geometric and floral motifs and their compositions.

The form of arch proper, which is composed of top volutes, vault, and side volutes, was in a prominent relief rising about $2\frac{1}{2}$ " to 3" from the background of the backslab.

(B) Top volutes :

This part is composed of two volutes turning on two opposite sides. They are plain and devoid of any decoration. Only its sharp angular edge is blunted by scraping.

(C) Semi-circular vault:

This is the main part of the arch, as it is its main feature where the decorations are confined and due to which these arches have their typical form. This part is decorated with two fillet bands of decorations in relief. The inner band is generally a rounded mould decorated with various motifs such as ribbed lines, dots, and floral string line patterns etc. In some specimens (No.18), this rounded mould is replaced by some floral motif such as prominent lotus petals jutting out in alto relievo. But the rounded mould is most common.

The outer band is a flat band decorated by relief work. It is $1\frac{3}{4}$ " to 2" broad and runs all along the arch. This band is generally decorated with floral patterns, but some-

times, geometric designs are also executed (No.13 & 14). These bands are separated by prominently marked incised or ribbed lines running parallel to the bands.

(D) Flank Volutes at the base:

These prominent heavy volutes measure 6" x 7½" and flank the arch at its base. Proportionately, they are heavy. But it seems that they are kept like that to give a stable footing to arch.

The details of these arches are tabulated below:

CHAITYA ARCHES WITH UNDERCUT

<u>Sr. No.</u>	<u>Main band</u>	<u>Decoration of the backslab</u>	<u>Remarks.</u>
1.	Double-olive leaf.	Floral leaves formed by geometric composition of bisecting circles.	Top volute broken, only one half of the arch recovered.
2.	Double-olive leaf	Floral composition of curls of highly deformed leaves	Top and side volutes are completely missing.
3.	Double-olive leaf	Composite design of chequer pattern and acanthus leaf	Top volute, part of backslab & part of decoration within the arch broken. The acanthus leaf decoration is near the base of the arch and the chequer pattern is above it.
4.	Composite band of single olive leaf and bead and reel motif separated by ridged and square dot line	Group of acanthus leaves in diagonal sprouts.	Top & side volutes broken.

<u>Sr. No.</u>	<u>Main band</u>	<u>Decoration of the backslab</u>	<u>Remarks.</u>
5.	Composite band single olive leaf motif.	-	Only the top volute and half of the main band intact - all other parts completely missing.
6.	Composite band of lotus petals pointing inward & bead reel motif	Acanthus leaf pattern	Lower half of the arch is completely missing.
7.	Composite band of lotus petals pointing outward and bead and reel motif	Missing	The top volute and the decoration within the arch are missing.
8.	Lotus petals pointing inward	Chequer pattern.	The side volute, lower half and the decoration on the backslab missing.
9.	Composite pattern of embossed squares and lotus petals pointing outward, their outline is marked with an incised line to produce a rib-like outline.	Chequer pattern.	Only the side volute and small portion of base with all bands and mould preserved.
10.	Composite band of deformed lotus petals marked with two vertical incised lines and having pointed triangular tips, and single olive leaf pattern.	Halves of deformed acanthus leaves arranged in an oblique design composition.	-
11.	Composite band of half carved alternate chequers and band of tiny incised circles.	Chequer pattern of alternate carved chequers.	The top and side volutes broken. The decoration is also much worn out.

Sr. No.	Main band	Decoration of the backslab	Remarks.
12.	Chequer pattern of diagonally half carved chequers.	Chequer pattern of alternate carved square and plain square.	The top and side volutes are broken. This piece is in three fragments.
13.	Chequer pattern of obliquely half carved squares	Composition of acanthus leaves. One central leaf is depicted perpendicular to the oblique line of the under-cut. The flanking halves of leaves are depicted ✓ one pointing toward top while other near the base towards base.	The top volute is missing and the side volute is worn out.
14.	Composite band of acanthus leaves pointing outward and the bead and reel motif	Chequer pattern of alternate carved out squares	The top portion with volute and side portion with volute and base are missing.
15.	Groups of two acanthus leaves one group of sprouts pointing outward the second one has acanthus leaves in having diagonal sprouts opposite each other.	Three acanthus leaves. The central leaf at right angle to the undercut and two flanking leaves at diagonal alignment.	The top and side volutes are missing.
16.	Acanthus leaves sprouting outward	Chequer pattern with obliquely half carved squares	Top and side volutes broken.
17.	Acanthus leaves separated by dotted line flanked by ribbed lines	Chequer pattern with alternate carved squares	Only top portion of the arch preserved, the lower part along with side volutes completely missing.

<u>Sr. No.</u>	<u>Main band</u>	<u>Decoration of the backslab</u>	<u>Remarks.</u>
18.	Composite design of half carved squares and geometric design of floral petals	Broken	Only small top portion of the arch is intact. The top volute and the base with the side volute is missing.
19.	Geometric composition of floral leaves.	Plain	This is the only specimen having completely plain backslab devoid of any decoration.
20.	Geometric composition of floral petals composed by bisecting circles.	Chequer pattern with half carved squares.	Rounded mould of lotus petals pointing inward. Only base portion with side volute is intact.
21.	Floral composition of a serpentine creeper of undulating form	Composite decoration of acanthus leaf and half carved squares in three separate parts.	Top portion and side portion completely missing.
22.	Composite design of floral and geometric motifs - acanthus leaf & geometrical composition of floral pattern.	Floral pattern of a half leaf of acanthus	Moulded band of lotus petals pointing inward. The top and base portion completely missing.

2. ARCHES HAVING CENTRAL MEDALLIONS ✓

H.1'-6" to 1'-6½" B.2'-6"

(Figs.41A to 41P)

This type has almost same form as the arches with undercut. But, it is slightly smaller in size and is more roundish. Like the arches with undercut, these arches are also on stepped back-

slabs. But, they differ from other arches in two respects: (a) surmounting medallion-like decoration; (b) central medallion. This arch can be divided into five main parts:

- (A) The surmounting medallion-like decoration
- (B) Pair of diverging volutes under this medallion
- (C) Flank volutes at the base
- (D) Decorative band
- (E) Central medallion.

(A) The surmounting medallion-like decoration (dia. $3\frac{1}{4}$ ") is composed of floral motif. Near the base, it is flanked by two leaves sprouting out from the top of the volutes which, in turn, form the top of the arch.

(B) The pair of diverging volutes (dia. $2\frac{1}{2}$ ") is a typical feature of this arch. These volutes are formed by averting the outer edges of the circular arch top. They are devoid of any decoration.

(C) The heavy flank volutes which flank the arch at its base are supposed to give stability.

(D) The broad decorative band which runs all along the arch is composed of three bands. ^{The} ~~Two~~ outer band ($2\frac{1}{4}$ ") is composed of geometric and floral motifs such as chequer, acanthus, olive leaf etc., carved in relief by incising, while the inner band is of either a rounded mould or a band of protruding lotus petals in Upto Relievo.

(E) The central medallion is the chief attractive feature of this arch. It is decorated with grotesque human face (only one piece - No.16) or some floral or geometric composition of floral motif. But mostly, these medallions are decorated with floral motifs.

The central medallion and the decorative bands of the arch proper are separated by a prominent cavity without any decoration running all round the medallion.

The following table gives the details of these arches:

CHAITYA ARCHES WITH MEDALLIONS

<u>Sr. No.</u>	<u>Main band</u>	<u>Mould</u>	<u>Inner border band</u>	<u>Medallion</u>
1.	Composite pattern of double olive leaves and tips of lotus leaves	Dentils	Floral motif of leaves in geometric composition.	Missing
2.	Double olive leaves	Ribbed line zigzag line & dotted line	Lozenges	Geometric composition of eight floral petals within a circle marked by a band of lozenges within ribbed lines.
3.	Composite decoration of single olive leaf and bead and reel motif.	Dentils	Tiny circles within squares	Floral motif of leaves in curls.

<u>Sr. No.</u>	<u>Main band</u>	<u>Mould</u>	<u>Inner border band</u>	<u>Medallion</u>
4.	Composite decoration of single half-leaf and tips of lotus petals	Dentils	Deformed lotus petals marked by a pair of verticle incised lines.	Missing.
5.	Deformed lotus petals	A band of olive leaves at the top and bands of ribbed dotted and zigzag lines.	Worn out.	Floral composition of a corolla having eight main petals and tips of other sub-petals sprouting behind them, thus producing a convex top to produce a three dimensional effect.
6.	Deformed lotus petals having triangular tips pointing inward	Lotus petals	Not depicted	Geometric composition of eight floral petals.
7.	Composite band of deformed lotus petals and lozenges	Deformed olive leaves	Logenzes	Floral pattern of grape-leaf (?)
8.	Chequer pattern of diagonally half carved squares	Ribbed lines dotted lines and zigzag lines	Not decorated	Floral composition of a corolla having eight main petals and tips of other petals sprouting out from under the main petals. The centre of the corolla is decorated with a prominent circle marked by dotted ribbed line and a central motif.

Sr. No.	Main band	Mould	Inner border band	Medallion
9.	Composite band of geometric motif of diagonally half carved squares and tips of lotus petals.	Dentils	Only one incised line.	Geometric composition of four deformed acanthus leaves. Their tips meet in the centre of the medallion.
10.	Thin band of bead and reel motif.	Dotted and ribbed lines	Geometric composition of floral leaves.	Two circular bands of lotus petals in prominent relief. The central corolla overlying the super lower circle.
11.	Composite band An acanthus leaf at the top, central band of alternate carved squares, upto side volute top and double olive leaf pattern at the base.	Dentils	Single olive leaf.	Floral motif of twisting leaves within a circle marked by zigzag ribbed line, with a pair of ribbed lines.
12.	-	-	-	Floral motif of grape leaf (?)
13.	-	Ribbed line of embossed squares	Embossed squares	Floral motif of grape leaf (?)
14.	-	-	-	Floral motif of twists of leaves.
15.	-	-	-	Grotesque human face.

CAPITALS OF PILASTERS

The capitals of pilasters formed the top member of the pilaster, which had plain moulded base and rectangular shaft. (For further details of architectural study, see Chapter IV : Architecture)

The capitals are of three types. But, most probably, originally there might have been some more variants, because whatever is discovered from the excavations is merely a fractional representation of the original number and variety. It should be noted that the capitals on platform No.1, some of which (eight) were found insitu represented only about 18% of the original number (44). From the group of other capitals which originally must have been comprised of more than seventy (36 on platform No.II and many more on the drum). Fragments of only four to five capitals and one intact specimen have been collected. However, from whatever has been collected from the excavation, it is not far fetched to state that it definitely represents all the main features of these pieces.

The basic decorative motif of these Indo-Corinthian capitals was the acanthus leaf, which was represented in various sprouting forms on the squat capital. But, inspite of same basic decoration, there are some differences in size as well as decorative scheme. But, primarily, they can be divided according to size, according to which the decorative scheme also varies.

As such, these capitals can be classified into three main types. Type 1 - the smaller one - was employed on Platform I (Fig.12 and 12A), while the other two types were employed on Platform II (Fig.13B) and probably the drum.

Type 1 : H.6" : B.1'-1½" (Fig.12 and 12A)

This type is a rectangular slab. The decorations of this capital are confined on the front and parts of flanks. The remaining portion which was intended to be studded on the face of the Stupa is kept plain. This capital can be divided into three components: (A) Lower band, (B) Upper band, and (C) Central rectangular decoration.

The lower band is composed of a horizontal rectangular decoration which is flanked by two obliquely sprouting small acanthus leaves. The upper band is also composed of decorations of acanthus leaves. It has a squat central leaf in a horizontal rectangular band, which like the lower band, is flanked by obliquely sprouting acanthus leaves. Decoration of upper band is uniform in all the capitals, but the decoration of central horizontal rectangle of lower band varies in every capital. The decorations on these rectangles are composed of geometric as well as floral motifs such as chequer pattern, acanthus leaf, Bay or laurel leaf, and Olive leaf. The base of the capital is composed of a rounded ledge.

Type 2 : H.7" : B. 1'-2¼" (Fig.43)

In form, and basic decorations of acanthus leaves, this type does not differ from Type 1. But the difference is in the decorative scheme. In this type, the acanthus leaves are depicted as if sprouting from under the capital. Thus, all

lines of relief decorations are either vertical or oblique only. They impart a more vigorous force of sprouting than that of Type 1. The decorations of this capital can be divided into two bands only, which are separated by a prominent ribbed line.

The upper band is composed of three parts - the central main leaf, and two flanking tendrils. The lower band is composed of two acanthus leaves with an egg motif in the centre which is marked by tiny circles. The base of this capital is finished with a rounded ledge decorated with dotted incised oblique lines.

Type 3 : H. 7" - B. 1'-2 $\frac{1}{4}$ "

This type is same as type 2, but instead of the central egg motif in the lower band, it has a four petalled floral motif in a semi-circle.

MEDALLIONS

Only two medallions have been discovered. But it seems that originally there must have been many more. These medallions are carved on square slabs (1'-4" x 1'-4" square and 7 $\frac{1}{4}$ " thick). The decorations of these medallions are confined within a circle marked by a prominent rib. This circle decoration in relief is projecting out from the square field very prominently (1 $\frac{3}{4}$ "). Although only two specimens are found, their floral decoration differ very clearly. Type 1

(Fig.44A) has a composite floral motif which is depicted in a bunch with twists and turns. Type 2 (Fig.44B) has a convex bulging surface which depicts a bunch of lotus petals sprouting out and thus forming a bulge projecting six inches from the surface. These medallions were most probably arranged either under some cornice or other architectural feature on platform or drum.

PILASTERS

This group is comprised of only small pilasters measuring H.1'-3" : B.7½". They are manufactured as single piece. Actually, these pilasters are replicas of the bigger pilasters which form the part of the architectural features which are already treated in the chapter regarding Architecture. Hence, like the bigger pilasters; in components, shape and decorations, they can be divided into three main parts : (1) Base (2) Shaft (3) Capital.

The base is plain and devoid of any decoration except its formative horizontal rounded mould near its base. The shaft having a rectangular section is marked by a prominent incised mark (Fig.45) in its centre. In form and decoration the capital is of the same type as Type 1 capital. Its decorations can be divided into three main parts : Two bands - upper and lower - and the horizontal rectangular decoration. Both the decorative bands are decorated with stylized acanthus leaves in relief, represented in horizontal bands. The central rectangle in the lower band is invariably hatched by incised criss-cross lines.

These pilasters formed the flank parts of the niche in which images of Buddha in Dhyanamudra were seated. Actually, they flanked the Buddha images and supported the surmounting Chaitya arch. The side volutes of the surmounting arch rested on the capitals of these pilasters (Fig.45).

BASES OF PILASTERS

These bases formed the lowest member of the bigger pilasters in relief which formed the bays on the platforms and probably the drum.

They are very simple and are devoid of decorations of any kind. A base can be divided into three parts: (1) plain fillet band at the base (2) central rounded mould (3) top ledge-like mould. The plain fillet band ($2\frac{3}{4}$ " to 3" broad) is devoid of any decorations. The central mould and the top band ($2\frac{1}{2}$ " broad) are undecorated. All these features are worked only on the front portion and 5" of flanks. The remaining portion ($6\frac{3}{4}$ " to 7") was to be studded in the surface of the structure and so was kept plain. It is rectangular in section.

BRACKETS OR DENTILS

Brackets or Dentils are manufactured in two forms: (1) Bar-like long dentils in one piece, and (2) groups of threes on the rectangular brick itself.

Type 1 is a long bar-like piece rectangular in section (Fig.64A). Only its $5\frac{3}{4}$ " of one end which was decorated was intended to be protruding out of the structure to represent a dentil or a bracket. Therefore, only that much portion is decorated. The remaining 1'-0" is kept plain. The decorated end is hyperboloid in section and looks roughly like an angular hour-glass with constricted middle. This portion is decorated with plain or dotted incised lines.

Type 2 (Figs.64 B and C) is represented in groups of threes. These dentils are depicted on the longer flank of the rectangular brick. In this case also, only the dentils were to be kept out of the structure. Hence, remaining portion of the brick which was to be studded into the masonry of the structure was kept plain. This type has two varieties, which, inspite of their similar basic inverted stepped form, differ in decorations. One type has got only incised decorations of chevrons while the other has only simple compositions of incised lines either horizontal, vertical or oblique (Figs.64 B and C).

DECORATIVE BRICKS

The term 'Decorative Bricks' is used to convey only those bricks which have decorations carved on them and hence are used for decorative purpose. Therefore, as such these bricks play a double role. They form some feature of the architecture and decorate the structure or part of it as well. Generally, its flank along the thickness is decorated.

These decorations are either geometric or floral and sometimes even compositions of both. But the decorative facet of brick is determined by its position in structure and its function. Hence, on basis of form, function, and decorations, decorative bricks can be classified into two main groups:

1. Rectangular bricks

2. Square bricks

Rectangular bricks : $17''$ to $16\frac{1}{2}''$ x $11''$ to $10\frac{1}{2}''$ x $2\frac{3}{4}''$ - $3''$:

These bricks are of same size as the ordinary bricks used in construction. This is quite obvious because one of their function is to be a part of the structure, and hence their dimensions ought to tally with those of other bricks. Their decorations are confined along one of its flank along its longer side (Figs.49 to 52). These decorations are of two types : (1) In form of Ovolo moulding, i.e. quarter-ellipse section receding downwards, (2) Fillet bands.

Type 1 is utilized invariably to decorate cornices by producing horizontal string course ovolo moulds, running all along the structure. These decorations are floral only. Only two floral motifs are utilized for this purpose:

(A) Acanthus leaf (B) Laurel or Bay leaf.

The acanthus leaf is depicted in three forms:
(Figs.37, 46, 47 and 48)

(a) In single leaf pattern

(b) composite leaf pattern with intervening egg motif

(c) composite leaf pattern with intervening floral motif.

(a) The single leaf pattern is a very simple decoration. On this brick, three acanthus leaves are depicted in a horizontal row with the intervening egg motifs which is decorated with tiny incised circles on them. The leaves are depicted sprouting from the receding bottom and after following the ellipsed quarter-circular mould reach upto the top line. Every leaf has three vertical central lobes according to serration of leaf. This group of three lobes is flanked by two spoonshaped broad lobes and a pair of leaf tips flanking the base.

These bricks are utilized to produce the lower most ovolo moulding under the cornice of Platform No.1 (Fig.12 and 12A).

(b) The composite leaf pattern (Figs.13B and 47) with intervening double egg motif is an intricate pattern composed of stylized acanthus leaf. In this type, the characteristics of serration, turn of sprouting and end tips of the acanthus leaf are emphasized to produce more vigour and force of an intricate play of lines in relief. For this purpose, the spinal lines of the leaf are curved in semi-circles in such a way that two prominent spoon-shaped tips of adjoining leaves touch each other in the centre of the brick just above the double egg motif. The upper side-corners of the brick are decorated with suspended spoon-shaped leaf-tips which point inward towards the centre of the brick. Thus, every brick depicts two halves of acanthus leaf sprouting from centre and again meeting at the top centre of the brick after a curvilinear

sprout in opposite directions. Therefore, when the string course horizontal mould is to be prepared, these bricks were arranged in a string course, which will bring together the two matching halves of acanthus leaves of adjoining bricks together to produce a stylized row of vigorously sprouting acanthus leaves intervened by double-egg motif.

(c) The composite leaf pattern (Fig.48) with intervening floral motif is also an intricate design of stylized acanthus leaves. It represents a half acanthus leaf with six lobes pointing inward. To the left of this is the floral motif of three petals. To the left of this is represented another intricate representation of acanthus leaves. The form of the leaf is not cared at all. But, its serrated and ribbed lobes are emphasized. Ten lobes are represented turning inward superimposed by a curved tip having three lobes. Another leaf emerging from base of the brick is depicted obliquely. This leaf ends near the top corner of the brick.

This type too, like type B, produces an ovolo mould of acanthus leaves in a row. No specimen of this type was found insitu but it seems that a mould of these bricks was also employed under some cornice or rounded mould on Platform II or the drum.

B. Bricks having Laurel leaf decorations:

These bricks are fretted with stylized Laurel leaves in relief. The form of the leaf is almost completely changed (Fig.49) and it looks like spear-heads. On each brick, these

leaves are represented in groups of vertical rows of threes arranged in a horizontal mould. Their pointed tips are pointing towards their right. Every leaf is in a pointed spear-shaped form having an incised line along its spinal line joining its base and tip. The rounded base is flanked by two tiny volutes turning inward (Fig.38). The horizontal string course ovolo mould produced by these bricks was most probably employed under some cornice or rounded mould.

C. Bricks having rounded leaves :

This group includes decorations of oblong shaped leaves created by prominent ribbed outlines and a groove-like depression along its length (Fig.50). On each brick, groups of vertical rows of four leaves are arranged in horizontal mould. Thus, a string line course of these bricks would produce a continuous pattern of leaves arranged in a string course on an ovolo mould.

D. Bricks having chequer pattern of floral motif:

This type has a chequer pattern having four rows of squares. Each square is obliquely half carved on which is represented three tipped floral motif (Fig.52A).

E. Rectangular Bricks having decorations of fillet bands:

This group includes bricks having geometric designs only. According to designs, these bricks can be classified into two types : (1) Having chequer pattern, (2) Having hook pattern.

(1) The chequer pattern (Fig.52) is composed of a simple but intelligent composition of alternate arrangement of carved square and plain square. The plain squares are marked with incised vertical crosses produced by bisecting diagonals. In all, four horizontal rows of such squares are depicted.

The chequer-patterned bricks were utilized to produce a fillet band at the base of the cornice surmounting the capitals of pilasters (Fig.12A and 13B). They were used thus at least on Platform I where they are found insitu. But it seems that they were used on the cornices of upper platform and even the drum. (One specimen having circular side is found).

The hook pattern is depicted in low relief on plain fillet band. The hooks are interlaced by their end curves. These bricks were also probably used under cornice.

SQUARE BRICKS (4" to 4½" square)

These bricks are quite different from the rectangular bricks. They differ not only in size or shape but in their decorative scheme as well as their function in the structure. Like rectangular bricks, they are not chamfered for producing moulds but are simply meant for decoration of surface of the structure. Hence, it can be stated that their function was only decorative and not decorative as well as architectural. As such, one of their types - having figure of Buddha and those having human or animal figures - can be classified even

as independent sculptures. All these decorations or designs are enclosed within a square produced by keeping a border of about $\frac{1}{2}$ " breadth along the edge of bricks.

According to subject of decorations, these bricks can be divided into five main groups:

1. Buddha images
2. Grotesque faces
3. Animal faces
4. Floral designs
5. Geometric designs.

1. Brick Buddha images:

This type includes only two bricks which were found from the core of the Stupa. Actually, these bricks were found along with six Buddha images which were dumped in the core of Platform I. This type has seated Buddha depicted in Dhyanamudra. As the figure is very small, no details are rendered but only the posture. The form and features of face are executed very roughly, as a result, they look like unfinished pieces. The limbs are also stiff and deformed (Figs. 30E and F).

2. Grotesque human face (Fig. 62):

This type depicts faces of human figures in ugly distorted forms to produce grotesque effects. All these faces are depicted in front pose. To produce grotesque effect, the eyes are kept wide open and bulging out, lips of wide open mouth are drawn up, and exaggerated snorting

nostrils are represented wide open. The ears are placed on top corners of the bricks. The hair are sometimes combed forward. The teeth of some faces are kept bare in open mouth. In some instances, only canine teeth are protruding out of the mouth. Figures having composite features of human and animal figures are also common.

3. Animal face (Fig.63):

This group has heads of animal figures. Heads of lion and tiger are common. Like the human faces, these faces are also depicted in grotesque looking distorted features of bulging wide open eyes, snorting nostrils, wide open mouth and bare teeth. The ears of these faces are depicted on top corners of the square.

4. Floral Motifs :

This group represents leaves and flowers. Various forms of acanthus and laurel leaves and petals of lotus are common (Fig.38). Geometric designs and geometric compositions of these floral motifs are also used.

Acanthus leaves are depicted in two ways : (a) Vertical sprouts, (b) Oblique sprouts.

Type (a) having vertical sprouts is having single leaf motif. It has double-tipped central lobe flanked by four sub-lobes. On the whole, this design looks like a rectangular design.

Type (b) which has oblique sprouts has a prominent central spoon-shaped tip flanked by one, two, three or four tips on either sides. The corner from which this leaf sprouts is marked either by prominent depression or a segment of a quarter circle in ribbed line.

The laurel leaves (?) are represented in a much rounded form (Fig.56) to suit the square field in which they are to be depicted. These decorations can be divided into two types. One type has four leaves in which tips of two leaves in diagonal lines meet each other at the centre of the brick, while the other two leaves in diagonal line have their bases meeting under the tips of the other diagonal pair. Their tips are pointed to opposite corners.

In second type, instead of diagonal alignment, the leaves are arranged in rows. Each leaf is carved out in a square. Thus, in all, there are nine leaves. The arrangements of tips and bases is same as type 1, i.e. tips and bases of leaves in cross-diagonal lines meeting at central point. Thus, they are forming a design of alternate leaves pointing inward and outward.

The type having lotus petals can also be classified into two main groups (Fig.59) : (A) Having four petalled decoration, (B) Corolla decoration.

The four petalled decorations are composed in two designs. In one type, the four petals are depicted sprouting from four corner of a square with their pointed tips meeting at the

centre of the square. In the second type, the two tips and two bases of the petals meet at the centre.

The corolla-type decoration is typical. It represents the sprouting round corolla of lotus petals in a bulging convex relief rising about $1\frac{1}{2}$ " from the square field of the brick. Three circular rows of petals are depicted overlapping each other and pointing towards the centre.

A type having composite floral pattern is also there (Fig.60). It represents a composition of lotus petals and acanthus leaf. It has four lotus petals with their tips meeting at the centre of the brick. This is bordered by four halves of acanthus leaves attached to four sides of the square.

5. Geometric Designs:

Geometric designs can be classified into two groups:

(A) Purely Geometric

(B) Geometric composition for producing floral design.

Purely geometric designs are chequer designs. They are of two types. Type 1 is composed of alternate carved out and plain squares (Fig.54). The plain squares are further decorated with incised vertical crosses. The other type - Type 2 (Fig.57) - is also a chequer pattern. But in this type, the squares are divided diagonally into halves out of which one of the halves is carved out in a sloping depression. The

other half is marked by a prominent incised line incised from corner to the centre of the square.

The geometric design to form floral motif is also common. This pattern is produced by common method of bisecting circles (Fig.54).

The following table gives the details of the types:

SQUARE BRICKS

<u>Sr. No.</u>	<u>Basic Motif</u>	<u>Composition</u>
1.	Acanthus	In a vertical rectangular motif sprouting up two central lobes are flanked by four lobes on each side.
2.	Acanthus	Leaf form deformed, diagonal composition of three lobes prominently marked by spinal grooves.
3.	Acanthus	Deformed diagonal composition of seven lobes marked prominently by spinal groove.
4.	Acanthus	Variant of No.3 with a segmental arch near the base of leaf.
5.	Acanthus	Variant of No.4 having nine lobes. The decoration of base segment is marked by an incised decoration.
6.	Deformed floral motif in geometric composition.	Four leaf deformed floral motif in cross-diagonal alignment. Tips and bases of each pair meeting at the centre of the square. The leaves are deformed by their rounded form.
7.	Deformed floral motif in geometric composition.	Variant of No.6, having prominently grooved spinal line.

Sr. No.	<u>Basic Motif</u>	<u>Composition</u>
8.	Deformed floral motif in geometric composition.	Geometric composition of nine leaves. Each leaf is depicted in a diagonally half carved square.
9.	-	A composition of four leaves pointing outward. The spinal line of the leaves are marked by prominent grooves in wavy lines.
10.	Floral leaves in geometric composition.	A geometric composition of four floral leaves composed by bisecting segments of circles. The edges of leaves are marked by ribbed lines and their spinal line is marked by prominent incised line.
11.	Floral leaves in geometric composition.	A variant of No.10. This type is marked by a prominent uninterrupted diagonal groove. Unlike No.10, it is without break at the centre.
12.	Floral leaves in geometric composition.	A variant of No.10. It differs from No.8 in only one respect, i.e. the decoration of the four sides of the square. These sides, i.e. the space between the leaves is decorated with double ribbed lines in form of segments of circles.
13.	Floral leaves in geometric composition.	Geometric composition of composite design formed by sixteen leaves. These leaves are produced by deformed circles of ribbed lines. Every leaf is marked by incised line along its spinal line.
14.	Floral decoration	Composition of two half corollas of lotus petals within half circles of ribbed line. Each half circle has two complete petals towards centre and two half petals near side edges. The two half petals near the side edges were kept like that because these bricks were utilized to produce a horizontal band in string course.

Sr. No.	<u>Basic Motif</u>	<u>Composition</u>
15.	Lotus petals	Composition of four lotus petals sprouting from the four corners of the square. Their pointed tips meet in the centre. The outlines and spinal lines of petals are marked by prominent incised lines.
16.	Lotus petals	Composition of four petals - two pointing towards corners and the other two towards centre. The two pointing towards corner ^{centre} are sprouting from depressed corner, and their tips meet at the centre. Their meeting point is above the other petals. The other two petals unlike the former pair sprout from a depressed centre and their tips end at plain opposite corners of the square. The space between the leaves is decorated with tips of petals sprouting out.
17.	Corolla of lotus.	Composition of two rows of concentric circles. The outline of every petal is marked by ribbed line and its spinal line is marked by incised line. The whole design is executed on a convex surface within a square.
18.	Corolla of lotus.	A variant of No.17 but this type has no prominent enclosing line of square.
19.	Composite decoration of acanthus leaves and lotus petals.	A composite design formed by four half leaves of acanthus is arranged in half circles along sides of square in such a way that a rhombus like design is produced in the centre. Four lotus petals sprouting up are depicted in this enclosed centre.
20.	Conch motif	Composition of four conches arranged in diagonal lines, with their pointed ends in mouths are meeting at the centre and thus, the circles on the mouths form concentric circles at the centre.

REFERENCES:

1. Marshall, Sir John, The Buddhist Art of Gandhara.
 2. Gloag, John, Guide to Western Architecture. p.47.
 3. Morgan M.H., Vitruvius's Ten Books on Architecture.
Book IV, Chapter I.
 - 3A. Rawlinson H.G., India and the Western World. pp.164-5.
 4. Meyer, Franz Sales, Hand-Book of Ornament. p.43.
 5. Ibid.
 6. Ibid.
 7. Ibid., p.48.
 - 7A. Bhattacharya B., The Indian Buddhist Iconography. p.51.
 - 7B. ASI, 1929-30, Pl.XVI 3 (SK 1507/2)
 8. Cousens, Henry, The Antiquities of Sind, Pl.XXIV.
 9. Meyers, Franz Sales, Ibid., pp.63-64.
 10. Heyden, A.A.M., Van Der and Soullard H.H., (Ed.by)
Atlas of the Classical World, p.63.
 11. Fletcher, Sir Banister, A History of Architecture.
Fifteenth Edition, p.125.
 12. Lalitavistara, as quoted by Grunwedel in Buddhist
Art of Gandhara, p.159.
 13. Ibid.
 14. ASI, 1909-10, p.90
-