## PIETRA-DURA DECORATION OF THE TAI

A N important feature of the magnificent Taj is that it is embellished with many varieties of decoration simply with a view to relieve the monotony of the omni-present white marble. Especially one of them, in inlay on white marble, by its variegated precious stones dominates the rest both in quantity and quality. Even a casual observer of the Taj notices it on the spandrels of the facades of entrance, the facades of the actual mausoleum, the sarcophagi, the enclosure, etc. The same decoration in inlay is found in India on many Muslim monuments much earlier than those of the Mughals, although not of such a fine type as that of the Mughals. This particular form of decoration of the Taj has caused a good deal of controversy as to its being of Italian origin. We wish to discuss hereby tracing its real history as a part of the Muslim fine Arts.

It is alleged by the experts that the inlay is supposed to have originated in the East and taken by the Phænicians to Greece and thence to Rome. Phænicia and Greece were provinces of the Byzantine empire. But the fact is that the term pietra-dura applied to this form of inlaid decoration originated at Florence only during the sixteenth century and then began to be used in the sense it now signifies. It was something of a revival of the ancient Roman opus sectile and first appeared, according to Major Cole, in the Fabbrica Ducale built by Ferdinand I, Grand Duke of

Tuscany in 1558 A.D.<sup>2</sup>

Previous to the Italians, the Persians used the term Parchīn Kāri³ for this form of pietra-dura decoration while the Arabian writers used the word Al-Fusai Fasa4 for glass mosaics generally found in Palestine of the Byzantine origin, which is different from pietra-dura, as far as technique is concerned. It is a pity that writers sometimes fail to distinguish between

Khān Ārzū says:-

<sup>1.</sup> Father Hoston did his best to prove the pietra-dura of the Taj to be of Italian origin in a long article published in the Journal of the United Provinces Historical Society, Vol. III, 1922.

<sup>2.</sup> Cole, H. H., Illustrations of Buildings near Muttra and Delhi, London, 1872.

<sup>3.</sup> Nāşir Khusrau says:

<sup>4.</sup> Lisān-ul-'Arab and Lane's Arabic Dictionary under الفسفساء - فسفس Muqaddasi's Geography, p. 58, Le Strange's Palestine under the Muslim, pp. 228-230, 241, 268; the Legacy of Islam, p. 161.

the two. Nāṣir Khusrau (d. 1088 A.D.) a well-known Persian writer, traveller and philosopher, used the word Parchīn in his poetry, and in the real sense of Parchīn Kārī. Khān Ārzū also brings it into his poetry, but we should content ourselves with the contemporary histories of the Mughal Emperors who decorated their masterpieces of architecture with this very pietra-dura describing it by the same term Parchīn Kārī.

The Byzantine monuments of Asia Minor were decorated with inlay in marble much before the foundation of St. Sophia at Constantinople in the 6th century of the Christian era. Later on, the Seljuq Turks occupied Asia Minor in the 11th century. Their capital was then Qunia where they erected new monuments, including mosques, madrasas and palaces after their own special styles. Those monuments were duly decorated with their special devices of geometric patterns, floral motifs and arabesques in stucco, in relief, in inlay, etc. In particular, the prayer niche of the Laranda mosque at Qunia built in 1225 A.D. invites our careful observation to study the varieties of decoration which it bears in inlay, both in terra-cotta and marble. Similar terra-cotta inlay as a technique of the Seljuqs of the days of Malik Shāh is traceable in the Small Dome Chamber of the Masjid of Isfahan.<sup>1</sup>

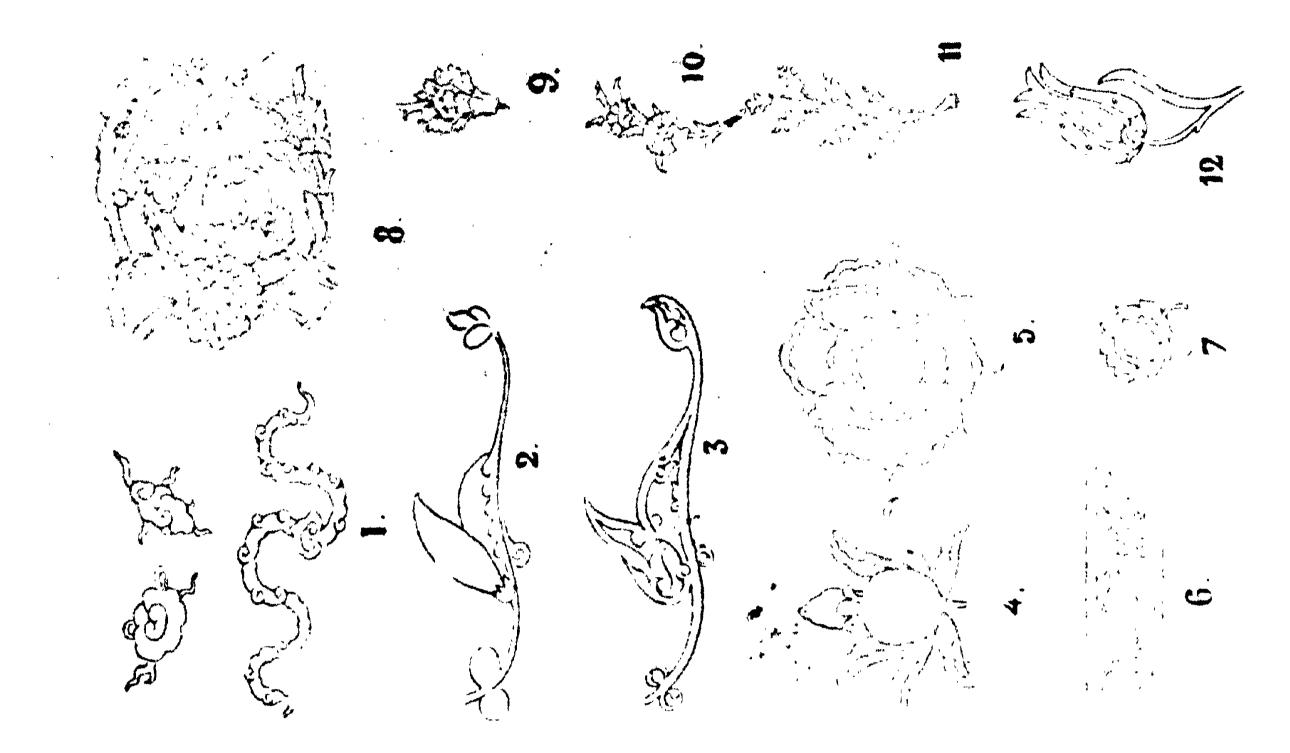
If we trace the existence of coloured mural decoration among the Musalmans, we shall be able to find very early specimens of faience revetments and faience mosaics in Persian buildings. Ibn Rustah, writing about 903 (290 A.H.) discusses the great mosque of Baghdad and others which were wholly ornamented with lapis lazuli tiles, and Ya'qūbī in the tenth century speaks of the Masjid at Bukhara as celebrated for its green minaret.<sup>2</sup> In short, the Musalmans had begun early to decorate their monuments after their particular designs and devices which later became their standard styles. When the Byzantine empire ceased to exist, the Art and Literature of the Musalmans became the source of inspiration to Europe. In the case of the colour decoration of the architecture of Italy, Mr. James Ward says: "In all flat ornament used in the decoration of buildings of the 13th and 14th centuries in Italy, either in painting, mosaics, or inlaid work, Byzantine, Saracenic or Persian influence may be noticed." And further he says: "We may clearly see the development of Giotto's Italian Gothic ornament, still mixed with some of the older Romanseque forms that Tarrati loved to use, while Saracenic influences are not absent."3

Especially as to the decorative patterns or motifs of Muslim monuments whether in India or abroad, we shall see that they generally have one and the same origin. Therefore it encourages us to conclude that the Musalmans in India began to decorate their monuments by applying the same patterns whether in faience or in mural or on stone in relief

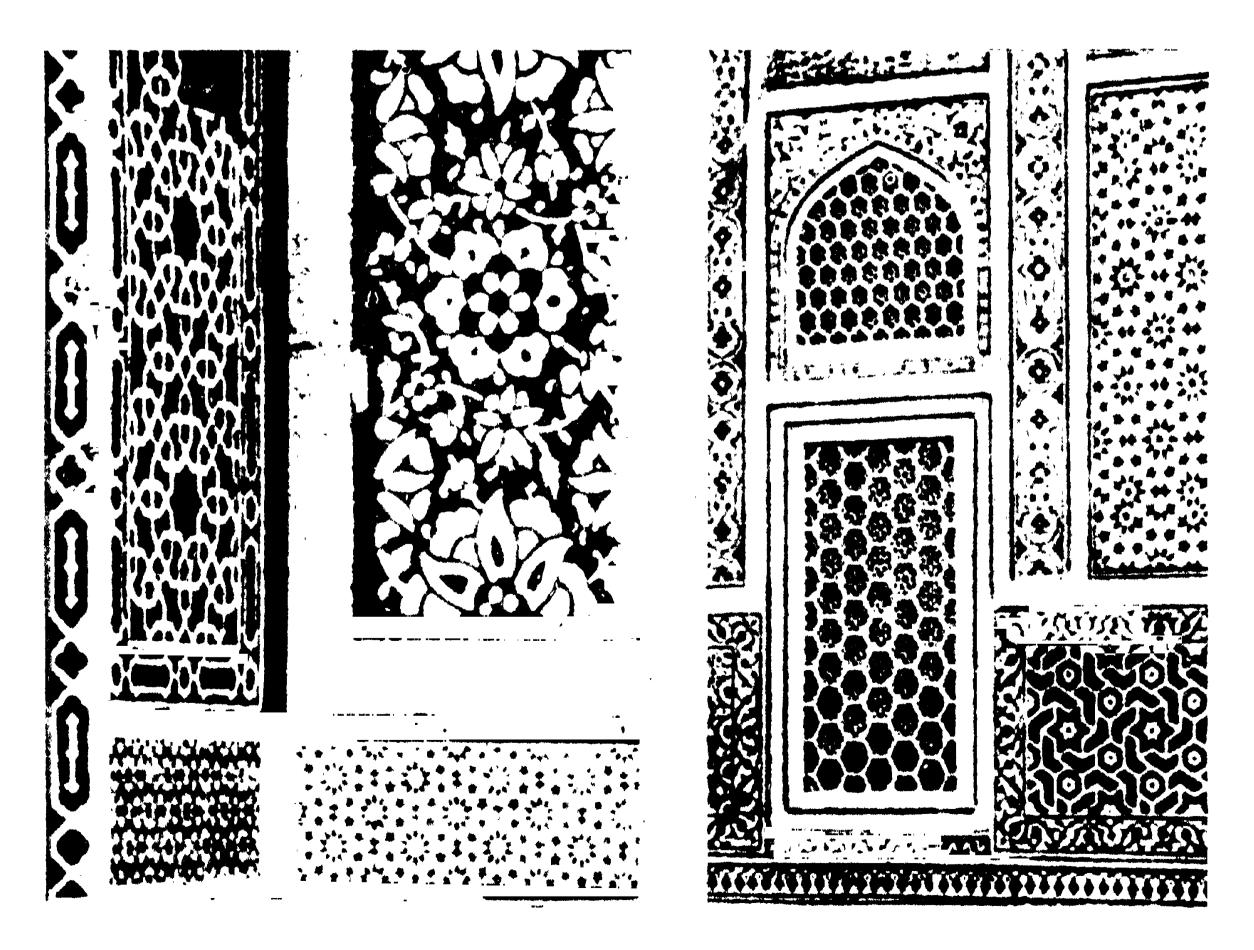
<sup>1.</sup> A.U. Pcpe, The Survey of Persian Art, pp. 1290-1.

<sup>2.</sup> Ibid, 1323.

<sup>3.</sup> Wards, J. A., The Italian Colour Decoration, London, 1908, pp. 60, 65, etc.



Figs. 1-12 showing the Lotus Palmette, Fantastic Foliage, etc., reproduced from M. Jalāl Asad's The Turkish Art (Turk Ṣan'atī), Istanbul, 1928, Pl. 30. These details actually belong to different monuments in Central Asia and Asia Minor.



14. A Detail of Pietra-Dura from the Facade of I'timādu'd-Dowla, Agra.

or in inlay (pietra-dura). The Lotus palmette, the pomegranate, the profile Lotus blossoms, fantastic foliage, Acanthus-half and split and other Arabesques, will invariably be found in conventional forms which are a chief characteristic of Muslim decoration. (See Figs.: 1-12). Owing to such a close resemblance in the decoration of Mughal buildings with those abroad, one sometimes begins to feel that one is not in India but rather in some other country. For this particular feature of Muslim decoration the study of the Survey of Persian Art by Mr. A. U. Pope, a standard voluminous work will be of great help. Apart from the expressions of these motifs in actual decoration we occasionally find reference to them in prose and poetry in descriptions of monuments. When 'Abdur Raḥīm Khān Khānān built his superb palaces and gardens in different places, his companion poets and literary men described them in their own way, which exemplifies the use of Shamsa Mudawwar (circular sun or lotus flower) specially on the spandrels of the arches, with other decorative motifs in wreaths, etc.<sup>2</sup>

Though unsurpassable specimens of hewn stone-carving of the ancients existed, no specimen of pietra-dura or inlay in stone was found till the Musalmans occupied India and began to enrich the land with their special devices both in art and literature. Gujarat stands out in prominence as it was there that the Muslims first came by sea, even before the conquest of Sindh; and even by land they conquered Gujarat before establishing themselves at Delhi. It is historical fact that the earliest Muslim inscription is found in Ahmadabad although monuments of such early days do not exist. Gujarat excelled the whole of India in respect of stone-carving, from the very early days; but it is also a fact that no sign of decoration in inlay is found here before the arrival of the Musalmans. The Jāmi' Masjid at Ahmadabad, built in 817 A.H./1414 A.D. is worthy of study,3 being one of the earliest mosques built by the Gujarat Muslim kings. Its central miḥrab bears the Shamsa, the presentation of an open sunflower in marble in overlay, with leaves and parts represented in variegated inlaid stones coloured yellow, black, pink, etc. Another Shamsa having the same variegated leaves, is also found in the central mihrab of the Juma' Masjid of the Manak Chawk built in 827 A.H./1425 A.D. (PIII). Not very far from Gujarat, in Malwa at Maudu-Shadiabad, the mausoleum of Hoshang Shāh built in 1435 A.D. also bears a variety of pietra-dura or inlay.4 Moreover, sometimes Islamic inscriptions are found inscribed in inlay either on red stone or black marble in white marble which, if we are not mistaken, was also first introduced into Gujarat, the best specimen is found in the Juma' Masjid of Muhammadabad-Champaner, built in 914 A.H./1508 A.D. 5 It all means that the inlay or pietra-dura as a

<sup>1.</sup> A.U. Pope, The Survey of Persian Art, p. 707. Figs. 944-47, 901-06, 774-5, 898.

<sup>2.</sup> Máthir-i-Rāhīmī, Vol. I, pp. 596, 607.

<sup>3.</sup> Chaghtai, M.A. Exhibition of Impressions of Inscriptions, Lahore, 1936, Nos. 14, 16, 17.

<sup>4.</sup> Archæological Survey of India, 1904-5, pp. 1-5.

<sup>5.</sup> Chaghtāi, Nos. 89-90.

Muslim contribution to Indian architecture already existed in India much earlier than that of Florentine pietra-dura.

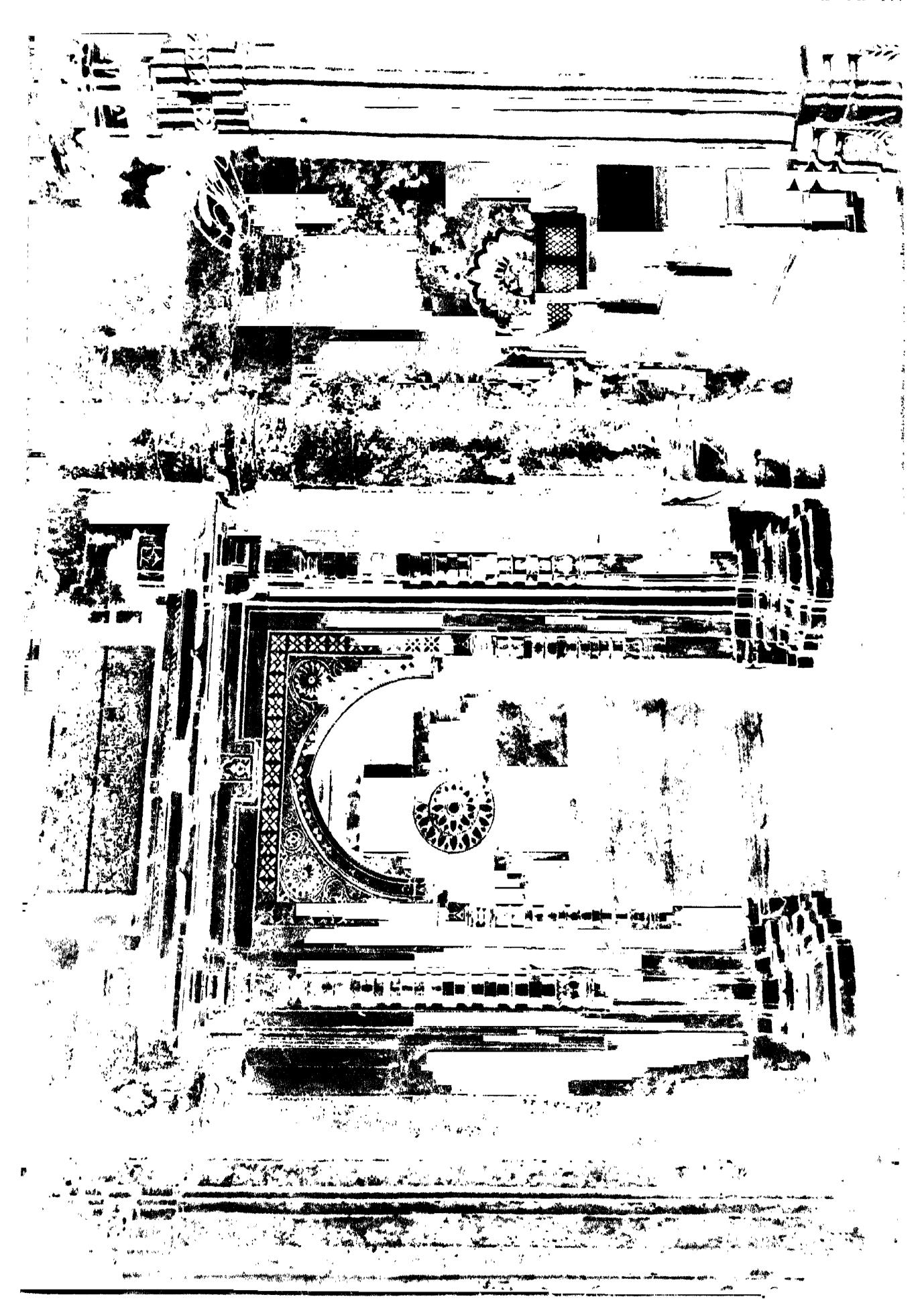
In the days of Babur, Agra became the seat of the Mughal kingdom. The Mughals enriched it with monuments which they built after their particular style of architecture in situ, which was based on prototypes found in Central Asia.1 Even to the days of Shāh Jahān we can easily study and discern this feature from their monuments which have been decorated with so many devices such as relief, mural, stucco, inlay, etc. But their decorative motifs are of one and the same style and shape as stated above. From this particular point of view, both at Delhi and Agra, certain notable mausoleums are worth study, such as: that of Shamsu'd-Din Khan Atka at Delhi built in 974 A.H./1566 A.D.; Salim Chishti's mausoleum at Agra, built in 982 A.H./1574 A.D: the mausoleum of Akbar at Sikandra, Agra, built in 1022 A.H./1613 A.D. and that of I'timādu'd-Dowla at Agra, built in 1038 A.H./1628 A.D. But from the days of Jahangir these decorative motifs began to appear mostly on the exterior of monuments, either in faience or pietra-dura in lieu of other varieties of decoration.<sup>2</sup> (See Figs. 13 & 14). It was due to Shāh Jahān himself who raised pietra-dura to its zenith. When Jahāngīr, his father, died in 1037 A.H./1627 A.D., his mausoleum was erected by Shāh Jahān at Lahore. The floors of its platform and of the roof bear excellent specimens of inlay in geometrical traceries of striped marble, but the sarcophagus has a unique form of *pietra-dura* decoration of precious stones of variegated colours, which had never been adopted before in India, and the same was also carried out on the sarcophagus of Aşaf Khān's tomb adjoining Jahangir's at Lahore, although he died 16 years later. These show Shāh Jahān's genius in architecture.

On the occasion of the erection of the Taj, the mausoleum of Mumtaz, Shāh Jahān, following the prototype of his own creation of this form of decoration at Lahore in Jahāngīr's mausoleum, carried it to its climax to make it harmonise with the highest standard of the architecture created there. The sarcophagus of Mumtaz which is exactly in the centre of the dome, consists of pietra-dura in precious stones, namely lapis lazuli agate, jasper, brown-violet stone, green stone, etc., etc., (See Fig. 15) with which every spandrel or every other salient detail of the Taj is richly adorned. These stones have freely been employed in wreaths, leaves, tulips, etc., in conventional forms, and in the delicately written inscriptions from the Qur'ān in black marble. Shāh Jahān died in 1076 A.H., i.e., nineteen years after the final completion of the Taj, and was buried by the side of his beloved wife, instead of finding a separate mausoleum on parallel lines, as he had contemplated in his own lifetime to build opposite the Taj on the other bank of the river. The interment of Shāh Jahān's body by the side of Mumtaz, has, of course, marred the central symmetry of the dome,

<sup>1.</sup> Cohn-Wiener, E., Turan, Berlin, 1930, pp. 31, etc.

<sup>2.</sup> Smith E. W. Mughal Colour Decoration, Allahabad 1902.

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which is the chief characteristic of Oriental architecture. However, Aurangzeb, simply with a view not to mar its beauty and harmony, prepared the sarcophagus both on the floor and in the basement with the same form and standard of pietra-dura as that of Mumtaz, so much so that at present no one can distinguish which is the later of the two, so far as the minutest details in the workmanship are concerned. Only the inscriptions bearing dates of death and name respectively, can clear the

point.

These works prove beyond all doubts that the Mughal pietra-dura in India is the offshoot of Central Asian and Persian specimens. Mr. Havell remarks: "The masons, who executed the inlay, including the so-called pietra-dura, which is distinctly Persian in character, were Indian and Hindus who came from Kanauj. The chief worker, Chiranji Lal, received one of the highest salaries, 800 rupees per month which is a sufficient proof that he was not a mere artisan working under supervision, but was a master-craftsman of high position among Shāh Jahān's experts. His subordinates were Choti Lal, Mannu Lal and Manohar Singh, whose salaries ranged from 300 to 200 rupees per month.

"Though the extensive use of marble and stone inlaid decoration in Indian buildings was most probably a fashion introduced by the Arabs, who had themselves borrowed it from the Byzantines, it seems that the practice had become a part of the Hindu craft tradition so long before the building of the Taj as effectually to dispose of the theory that the pietra-dura of the latter was derived from the Florentine work of the 16th century, to which it has no resemblance except in technique."

Here it seems necessary to make it clear that almost all the Parchīn Karan—pietra-dura workers, cited above in the account of Mr. Havell, are those mentioned in the Persian MSS. in my possession and their native places are cities in Central Asia. Samarqand is shown as the home of Charanji Lal, Rūm (Constantinople) of Mohan Lal, Balkh of Manohar Singh and so on, which seems to be physically all but impossible. To my mind either their actual Muslim names have been mutilated and instead of them Hindu names have been coined or the information supplied in these MSS. is altogether fabricated. However, it is gratifying to note that Mr. Havell is of the opinion that the origin of this form of decoration is Persian in character.

Quite contrary to facts, the pietra-dura work of the recess behind the baldachin—Nashīman-i-Zilli Elāhi in the Diwan-i-'Am of the Delhi Fort, the design of which represents flowers, fruits, and birds in a most natural manner—is said to have been executed by Austin de Bordeaux. Among the other designs the Frenchman is mistakenly supposed to have introduced his own portrait under the garb of Orpheus playing on his lyre, with a lion, a leopard and a hare lying charmed at his feet. All this seems to be impossible, for Austin died in 1632 A.D., i.e., just after the construc-

<sup>1.</sup> The Nineteenth Century and After, June 1903, The Taj and its Designers, by E. B. Havell.

tion of the Taj was begun, and the Delhi Fort was founded in 1048 H./ 1638 A.D., i.e., six years after his death.<sup>1</sup>

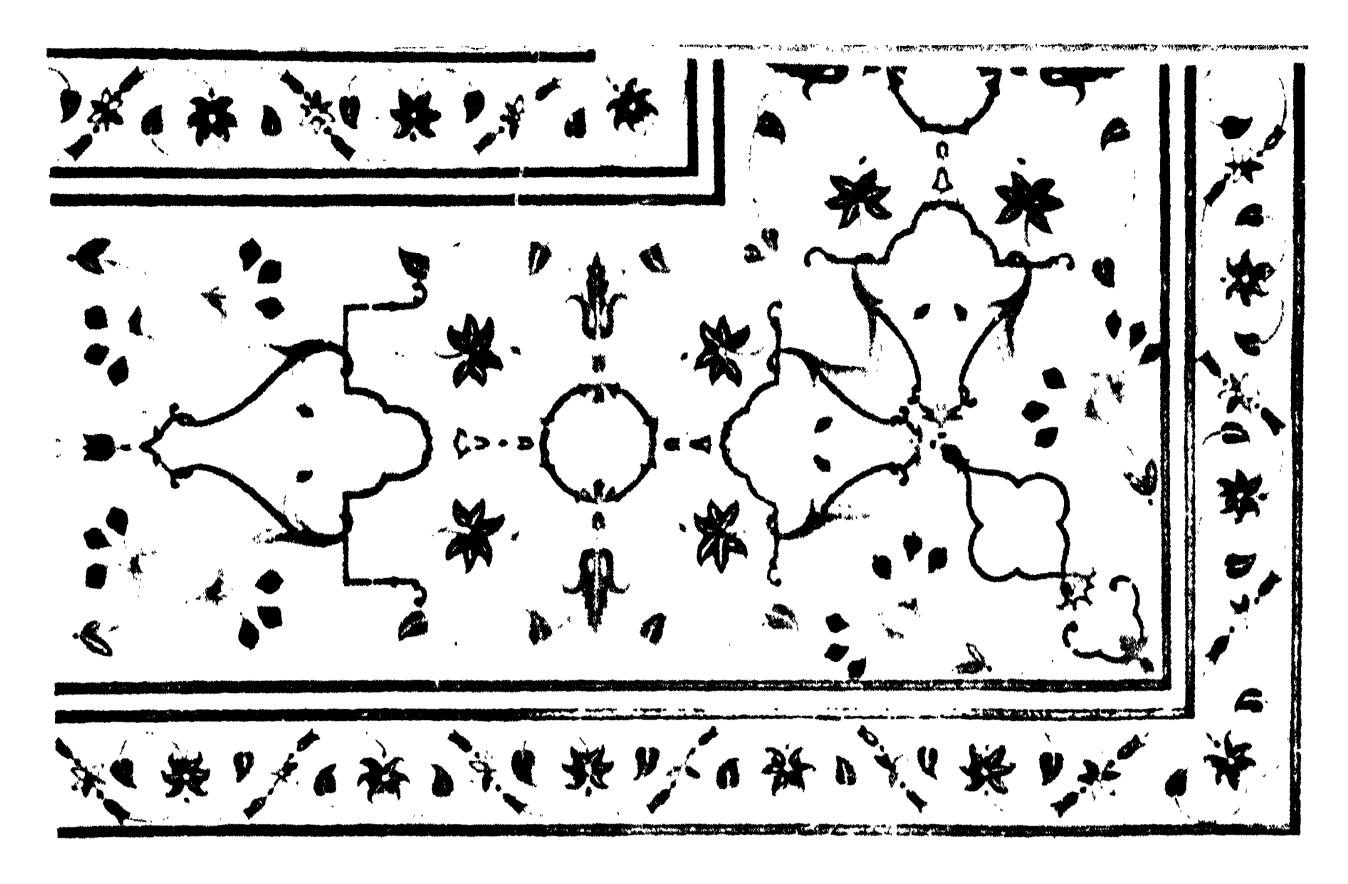
We are fortunate in finding a contemporary account of this portion of the Diwan-i-'Am of the Delhi Fort in the official record, 'Amal Ṣālih, which does not make any mention of this particular piece of work having been designed or executed by a European artist:—" Near the ceiling is the Jharoka (balcony) for the nobles and the plebeians which is a place of prostration for the public and a source of fulfilment of the desires of the wordly people. This balcony, just like a bungalow, is wholly constructed of marble and is four yards long and three yards wide. It consists of four pillars and a recess, in the back wall, seven yards long and two and a half yards wide, which is adorned with Parchīn Kārī—(pietra-dura) decoration of variegated stones by the most highly skilled artists with all sorts of wonderful paintings. It excels in beauty so that the silverized orange of the moon and the golden citron of sun cannot stand in front of it. It provides so much amusement to the eye that one looks disdainfully at the real multicoloured garden in full bloom in spring. On three sides of it there is a fixed lattice of pure gold which gives the impression that the balcony is encircled with sun rays. Every morning this auspicious place is honoured with the presence of the Emperor, when it is exalted more than the mansions of the moon and the sun, and on account of the radiation of light from the appearance of the Emperor, this place looks elegant as the place of the rising sun. In front of this magnificent balcony there is a spacious hall of forty pillars, each of which is strong enough to be a support for the Koh Bestun, or rather a base for seven azure domes. This very lofty hall is twenty-seven yards long and twenty-four yards wide. The decoration of the ceiling and different paintings on the wall excel even the work of the great artist Mānī."2

But in my opinion the most vivid and faithful picture of the Diwan-i-'Am is that depicted by the contemporary French traveller, Bernier, in which he has fully shown the arrangement of the royal audience in the Darbar-hall of those days. Being an art-expert, he could easily assert, without any hesitation, whether there was any sign of the hand of European artist in the construction of the baldachin of the Delhi Fort or of the Taj at Agra. In this respect his following passage describing the pietra-dura decoration of the Taj, with which he has compared similar work found in Florence, Italy, conclusively proves that neither was any European artist employed by the Emperor nor was any sort of such work ever imported for the Taj from Europe. "The interior or concave part of the dome and generally the whole of the wall from top to the bottom are faced with white marble; no part can be found that is not skilfully wrought or

<sup>1.</sup> See Islamic Culture, April 1940.

<sup>2. &#</sup>x27;Amal Ṣāliḥ, Vol. III, pp. 42-43. As far as the measurements of this hall are concerned there is some difference between the actual ones and those noted above from 'Amal Ṣāliḥ, otherwise the description is more or less the same.

To face p. 471.



15. A Detail of Pietra-Dura of Mumtaz's Sarcophagus at the Taj.



16. A Detail of the Italian Pietra-Dura from the Dining Table of Louis XIV of France in the Louvre Museum, Paris, which is obviously quite different from that of the Taj as well as other Oriental motifs.

that has not its peculiar beauty. Everywhere are seen the jasper and jachen, or jade, as well as other stones similar to those that enrich the walls of the Grand Duke's chapel at Florence, and several more of grand value and rarity, set in an endless variety of modes, mixed and encased in the slabs of marble which face the body of the wall. Even the squares of white and black marble which compose the pavement are inlaid with these precious stones in the most beautiful and delicate manner imaginable."

Finally the words of the great authority Sir John Marshall may be adduced to refute all false ideas about the attribution of the pietra-dura of the baldachin at Delhi and of the Taj at Agra to European origin:—

"Something remains to be said concerning the date and style of these plaques. Tradition has it that the decoration of the throne was the workmanship of Austin de Bordeaux, the celebrated French artificer, who is said to have been employed by the Emperor Shahjahan both on the palaces at Delhi and on the Taj at Agra. The figure of Orpheus, indeed, is pointed out by the native guides as a portrait of Austin de Bordeaux himself. The story seems apocryphal. Perhaps it was suggested by the Italian character of the panel design; but it should be observed that the black marble of their background and the majority of the inlaid stones are of Italian and not Indian provenance, and it is not unreasonable to suppose, therefore, that they were not only designed but actually executed in an Italian studio and afterwards imported into this country.

"The arabesques, on the other hand, which decorate the inter-spaces between the panels, are of pure Indian style and Indian workmanship, without a vestige of foreign influence. Mr. Havell, referring to the decoration of the Delhi Throne in a recent article in the Ninth Century and After, 1903, has suggested that it has been wrongly attributed to Shahjahan's reign and ought, rather, to be referred to the early part of the 18th century. He rightly insisted on its in-

feriority in point of style to that of the Taj at Agra."2

Again two years after, Sir John Marshall confirmed these words by stronger remarks after consulting an Italian expert on Italian marbles. He says:—"The view which I then expressed, has since been confirmed by S. Menegatti a Florentine mosicist, a practical expert in Italian marbles. These panels were without doubt made in Italy and brought to India all complete so that they stand on quite a different plane to works of art produced on Indian soil, and afford no substantial proof whatever of the extraneous influences to be looked for in the latter; (the presence of these Italian plaques demonstrates trade connections but nothing more)." (See Fig. 16).

<sup>1.</sup> Bernier's Travels, p. 298.

<sup>2.</sup> Archæological Survey Annual Report for 1902-03, p. 20.

<sup>3.</sup> Ibid. 1904-5, p. 1-3.

Apart from the pietra-dura, and other forms of decoration, Shāh Jahān also enriched his buildings with the best specimens of Al-Fusai Fasā (Glass Mosaics) as defined in the beginning of this chapter, with which generally the roofs of various halls in Delhi, Agra and Lahore were decorated; but the best specimen of this which surpasses all others in beauty and quality, is at Lahore in the Fort Muthamman Burj (Octagonal Tower). It is found on pillars, walls, roofs in variegated coloured pieces of glass. When one looks at it, the sight is dazzled and innumerable reflexes confront one. These pieces are set in stucco in most beautiful and symmetrical designs, floral decorations and motifs. For this reason this part of the Lahore Fort is locally called the Shīsh Maḥal (the Palace of Mirrors).

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