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SECTION IV.—MUSEUMS.

INDIAN MUSEUM, CALCUTTA.

*Report for the Year 1930-31.**By Rai Bahadur Ramaprasad Chanda.*

Antiquities other than coins added to the collection of the Archæological Section of the Indian Museum in 1930-31 number 38. Among these *four spotted red sandstone heads from Mathurā* are the earliest in age. One of these heads (No. 8555) shows the *ūrṇā* between the eyebrows¹, and marks of the protuberance on the top of the head now lost which served as the so-called *ushṇīṣa* (Plate CXXI, figs. *a* and *b*). These two *lakṣaṇas* (marks) of the *mahāpuruṣa* (superman) distinguish the heads of the images of the Buddha. Another characteristic feature of the Buddha is the half-shut eyes. In all the versions of the life of Gautama the Buddha beginning with the *Mahāsachchaka-sutta* of the *Majjhimanikāya* (No. 36) it is said that Gautama attained *bodhi* (enlightenment) or Buddhahood by performing *dhyāna* in its four stages. According to both the Buddhist and the Brāhmanic texts *dhyāna* or *dhyāna-yoga* has to be performed while seated in a posture (*āsana*) called *paryāṅka* or *palyāṅka* (Pāli *pallāṅka*). The description of this posture as given in the Buddhist and the Brāhmanic texts is identical. The Brāhmanic texts add one particular trait not clearly specified in the Buddhist definition, that the eyes should be slightly opened and fixed on the tip of the nose.² All the images of the Buddha, the Jinas and the chief Brāhmanic gods of the Gupta and the post-Gupta period found in Northern India show eyes slightly opened below and fixed on the tip of the nose. On this head also we recognize the same pose of the eyes, though not quite accurately rendered. They are partially shut, but not to the extent necessary for fixing them exclusively on the tip of the nose, and the lower eyelids are not lowered. It may be argued that the eyes on this and similar other heads from Mathurā are not really posed as the eyes of the *dhyāna-yogin*, but are open eyes rendered in a conventional manner.³ The way in which the sculptors of Mathurā of the Śaka-Kushāna period rendered open staring eyes is

¹ This is a very surprising way of showing the *ūrṇā*, indeed. As far as I can remember, this is the only head of the Buddha I have seen on which the *ūrṇā* is nothing but a continuation of the eyebrows ending in a curl of hair where the two eyebrows meet. Such a *lakṣaṇa* would be in accordance with the far-spread belief (supported by modern psychology) that people with heavy eyebrows are either saints or criminals. But in other images of the Buddha the *ūrṇā* is shown as a *jewel* in the middle of the forehead; in fact, a crystal has often been inserted into a hole on that place.—*Editor*.

² *Bhagavadgītā*, VI, 13; *Vāyupurāṇa*, XI, 16; *Kālidāsa's Kumārasambhava*, III, 47.

³ With the above argumentation of the learned author the Editor can not agree. There is no evidence whatever that "all the images" of the Buddha show eyes "slightly opened and fixed on the tip of the nose", neither is there any literary evidence in Buddhist literature to support such a attitude. Excessive meditation was strongly condemned by the Buddha, ascetic self-torture and austerities entirely rejected by him. All the images of the Buddha show him with eyes open and facing the spectator: except those which show him (1) before his enlightenment, seated in meditation under the Bodhi-tree, or (2) those which show him dying. There is no indication that the images under discussion related to either of these two incidents of his life. Indeed, the eyes are wide open. This applies to all the images in this and the following plates. The Rai Bahadur also published two notes on pp. 191-194 and 215-221 of the *A. S. R.* for 1929-30 (the previous volume of this series) with which I cannot agree at all.—*Editor*.

well illustrated by the head of a standing male figure E. 7, (Plate CXXI, c)¹ and a head supporting an inscribed bowl (Plate CXXI, d)² exhibited in the Curzon Museum of Archaeology, Mathurā. The votive inscription³ on the rim of the vase is engraved in Brāhmī characters closely resembling those used in inscriptions of the reign of the Mahākshatrpa Śodāsa.

Another remarkable feature about this head is the arrangement of the hair in schematic waves, not in curls, but in several rows of incised crescent-shaped waves of lines. Such arrangement of hair is found on the head of a seated Buddha, A. 65, in the Mathurā Museum (Plate CXXII, a) with a mutilated inscription dated in the year 51 evidently of the era of Kanishka,⁴ and on the heads of three seated figures of the Buddha on a fragmentary door lintel from Mathurā in the Lucknow Provincial Museum.⁵ Part of the bare right shoulder still attached to head No. 8555 indicates that only the left shoulder of the image was covered with drapery. But there are also naked images of the Jaina Tīrthāṅkaras or Jinas of the same period with hair on the head arranged in the same style. One side of a stele in the Mathurā Museum (B. 70)⁶ with figures of four standing Jinas on four sides and bearing a votive inscription dated in the year 35 evidently of the era of Kanishka is reproduced in Plate CXX, b. The figure in front and the figure to the right have wavy hair on the head, and the figure to the left shows hair arranged in spiral curls.

The three other heads acquired for the Indian Museum from Mathurā are of three different types. No. 8558 (Plate CXXIII, c) has the hair arranged in exactly the same fashion as No. 8555. The hair on No. 8556 (Plate CXXIII, a) is shown in spiral curls, and on No. 8557 (Plate CXXIII, b) the hair is not marked at all, but the area above the forehead covered by hair is slightly elevated. A better preserved head of the last type, B. 78, in the Mathurā Museum,⁷ is reproduced in Plate CXXIII, d. All the known inscribed images of the Buddha from Mathurā of the Kushāna period have a protuberance on the head called *ushnīsha*, and all known inscribed images of the Jina (*tīrthāṅkaras*) of the same period and school lack the protuberance, though it is found on many of the Jina images of the Gupta period.⁸ It may, therefore, be presumed that these three heads belonged to images of the Jinas.⁹

A sandstone architectural fragment ($15\frac{1}{2} \times 13\frac{1}{2}$ ") acquired from Benares is assignable to the Gupta period (Plate CXXIV, a). The carving on the fragment shows a balcony in which a young man is standing next to a young woman with his left arm resting on the back of her shoulders and the latter offering

¹ Ludwig BACHHOFFER:—*Early Buddhist Art*, Paris, 1929, Plate 75, right.

² J. Ph. VOGEL:—*La Sculpture de Mathurā*, (Ars Asiatica, XV), p. 55, Plate XLIXa.

³ *Epigraphia Indica*, Vol. XIX, p. 68, Plate VI.

⁴ VOGEL:—*Catalogue of the Archaeological Museum at Mathurā*, Allahabad, 1910, p. 63.

⁵ BACHHOFFER:—*Early Indian Sculpture*, Plate 87, top; VOGEL:—*La sculpture de Mathurā*, Plate XXXVIc.

⁶ VOGEL:—*Catalogue, etc.*, p. 79.

⁷ VOGEL:—*Catalogue, etc.*, p. 82.

⁸ For images of the Jinas of the Gupta period with protuberance on the head see *A. S. R.* for 1925-26, plate LVI (b) and (c), and for images of the Jinas of the same period without protuberance see VOGEL:—*La sculpture de Mathurā*, Plate XXXVI a-b.

⁹ This presumption is rather unlikely. A large number of Buddha images have no protuberance; and the style of Jaina sculpture, though identical with the Buddhist sculpture of the earliest period, soon developed characteristics of its own which are missing in the images under discussion. These images are probably Buddhas.—Editor.

a cup of wine¹ with her right hand. The female figure is badly damaged. There arose provincial variations of the Gupta art in the post-Gupta period. The best known among the post-Gupta schools or early mediæval schools is the Pāla art of the Kingdom of Gauda (Bihar and Bengal). Other branch schools arose in Orissa and in Upper India, i.e., the United Provinces, Western India (Rāj-pūtānā and Gujarāt), Central India and the Central Provinces. A fine specimen of sculpture of the Upper Indian school dating from the eleventh century A.D. has been acquired from a dealer of Lucknow (Plate CXXIV, b). It is a sandstone group of Hara (Śiva) and Gaurī (Durgā or Umā), (2' 2" × 1' 3"). Śiva is seated on a lotus in half *pariyāṅka* posture with the right leg hanging down.² His right upper hand, now considerably damaged, holds a trident and his right lower hand draws the goddess nearer, touching her left breast. The right arm of the goddess passes over the left shoulder and round the neck, and the hand rests on the right shoulder of Śiva. The bull, the dancing Bhṛīṅgī and other attendant figures below are carved with care.

Another grey sandstone group of Hara-Gaurī (No. 8561, 1' 7½" × 10¼") from Benares reproduced in Plate CXXIV, c, represents the last or dying phase of the plastic art of Āryāvarta. It is a recent work, perhaps a couple of centuries old. Perhaps this group is contemporaneous with the Rājput and other late indigenous schools of painting in the products of which gods like Śiva and Kṛishṇa are shown as performing *līlā* (sport) instead of *dhyāna-yoga*. An image of a seated Viṣṇu (No. 8562, 1' 7½" × 10¼") also representing this degenerate phase of Indo-Āryan art acquired for the Indian Museum from Benares is reproduced in Plate CXXIV, d. To measure the depth of degradation one need only compare this image with a sandstone image of the seated Viṣṇu in the Curzon Museum of Archæology at Mathurā assignable to the twelfth century A.D. (Plate CXXII, c). Our seated Viṣṇu from Benares may be older than our Benares Hara-Gaurī, for the lotus throne is retained in the former. But what a deplorable caricature this of Viṣṇu seated in *pariyāṅka* posture absorbed in *dhyāna-yoga*!³

Among the Muslim antiquities acquired during the year a *nishān* or official letter of Prince Dārā Shikoh lent by the Director General of Archæology in India deserves notice here. Maulvi Shamsuddin AHMAD writes:—

"The Nishan bears the seal of Prince Dārā Shikoh. It was despatched to Mubārīz Khān, the Governor of Kabul, and is dated the 5th Rajab of the 15th regnal year of Shāh Jahān corresponding to 27th August, 1642.

"Mubārīz Khān, a common soldier, rose to eminence in the reign of the Emperor Jahāngīr who in recognition of his valuable services promoted him to the rank of a Commander of three thousand horsemen. Shāh Jahān appointed

¹ It is difficult to say what the contents of the cup were!—Editor.

² Once one of the legs is hanging down, the term *pariyāṅka* can not apply any more; the posture in question is known as *lalitāsana*, i.e., "seated at ease".—Editor.

³ I respectfully disagree with the learned author in his wholesale condemnation of figs. 13 and 14. They are, of course, not "refined"; they are not in strict accordance with canons; they are works of "peasant-artists"; but they are true works of art, full of vigour, and in their simplicity much more sincere expressions of artistic sentiments than fig. 13 which is splendid court-art, but cold; or fig. 14 which is baroque and sentimental. True art is not "refinement"; it is force, sincerity, simplicity. Folk art always answers these requirements.—Editor.

him Governor of Kabul and the neighbouring territories. Mubariz Khan had to face immense difficulties in dealing with the lawless frontier tribesmen. He was, therefore, compelled to bring the matter to the notice of the Central Government and to solicit permission to expel some of the most undesirable and troublesome clans in order to restore peace and order. In reply Prince Dārā Shikoh on behalf of the Central Government despatched this *nishān* (order) signifying his approval of the proposal."

Report for the Year 1931-32.

By Mr G. C. Chandra.

During the year 1931-32 two groups of sculptures, one from Orissa and another from Bihar, were arranged and set up for exhibition with descriptive labels, in the southern verandah, ground floor, of the Indian Museum, Calcutta, to give an idea of the features peculiar to these two sister-schools of sculpture. The specimens range in date from the 7th to the 13th century A.D. and include a few masterpieces which deserve special attention.

Among the fresh acquisitions mention may be made of an interesting group of Buddhist images in blue chlorite, of about the 9th century A.D., from Virat-Cuttack near Chauduar in Orissa. (Plate CXXV)¹. One hundred and thirty-eight coins, of which sixty-six are non-Muhammadan, were added to the Coin Cabinet of the Archaeological Section. These include a set of electron coins of the Kashmīrī King Lalitāditya with the legend *Śrī Pratāpa*, and a silver coin of Prince Murād, the fourth son of the Emperor Shāh Jahān. This latter is interesting inasmuch as it was struck at Surat in the year 1657 A.D. when Shāh Jahān was lying ill and his sons were fighting among themselves for the Imperial throne.

Report for the year 1932-33.

By Mr N. G. Majumdar.

During the year 1932-33 five silver punch-marked coins and a copper cast coin, being specimens of the earliest Indian currency (*kārshāpanas*), were added to the cabinet of the Indian Museum. The punch-marked pieces (Plate CXXVI, a-e) belong to a lot of 35 coins discovered near Manda, Rajshahi District, and constitute the earliest numismatic find so far reported in Bengal. On the obverse of these coins we can recognize the solar symbol, taurine, caduceus, hill symbol, fish, hare, and the tree in railing, while on the reverse only one symbol is punched which is either a taurine, a caduceus, a flower or a hill symbol.² The coins represent no less than five types which differ from one another in the

¹ These include two images of the Buddha in the *bhūmieparīā-mudrā*, (Plate CXXV, figs. a and c) seated on *padmāsana*s under which a figure (of a devotee?) is seen flanked on both sides by lions. Both images excel in the simplicity and the directness of their artistic appeal. The Tārā in fig. b of the same plate is more ornate in every respect; the seat, the background and the figure itself are all profusely decorated, and indicate a later origin (probably 10th century), although the plastic quality of the body is still splendid. The *deśarapālā* in fig. d must probably be relegated halfway between the Buddhas and the Tārā; it shows already the baroque bending of the upper body, although simpler in execution. It is, however, difficult, to say much about such a fragment; this figure evidently formed part of a larger composition. (No size is given). —Editor.

² For an explanation of the origin of these symbols *vide* my article in *J. R. A. S.*, April 1935, pp. 307-318. —Editor.

grouping of the symbols on the obverse. The cast coin (Plate CXXVI, *f*), which is from the Midnapur District, shows an elephant on one side and a hill symbol on the other. Among other additions to the cabinet mention may be made of a gold coin from Mahāsthān, Bogra District,¹ representing the standing bearded figure of King Kanishka on the obverse and the goddess *Nanaia* on the reverse. In view of the corrupt Greek legends appearing on this coin it may be regarded as an imitation of the issues of Kanishka, and appears to have been in circulation at a later period in Eastern India. Another gold coin, which, however, contains a good deal of alloy, comes from Mahānād, Hooghly District, and belongs to King Śaśānka of Gauḍa. It represents on one side the god Śiva riding on a bull, and a seated Lakshmi on the other.

Among antiquities other than coins the following deserve special mention: a pottery vessel bearing certain symbols; three jar-covers (Plate CXXVI, *h*) and 81 beads of various semi-precious stones from Rajgir (Plate CXXVI, *g*); a small stone slab bearing a Mauryan Brāhmī inscription from Mahāsthān; a stone image of Hari-Hara from Bihar (Plate CXXVII, *d*); several terra-cotta figurines and a miniature crystal figure of the Jina Pārśvanātha from Mathurā; a stone image of an unknown deity seated on a camel (Plate CXXVII, *b*) and a seated figure of Sūrya, both from Bairhatta, Dinajpur District (Plate CXXVII, *c*); a large image of Viṣṇu from Itahar, Dinajpur District; an inscribed stone image of Prajñāpāramitā from the neighbourhood of Nālandā (Plate CXXVII, *a*); and three sets of copper-plates of the Assamese kings Dharmapāla and Indrapāla. The pot from Rajgir, which is 7½" high, has a line of indented marks at the shoulder and below it there are three symbols, of which two are very clear, viz. a circle intersected by a cross and a pair of right-angled triangles meeting at a point in the shape of an M surmounting a rectangle. The Brāhmī inscription from Mahāsthān has been recently edited by Prof. D. R. BHANDARKAR in the *Epigraphia Indica*, Vol. XXI, p. 83 and plate. But there are certain points regarding this record on which finality has not yet been reached. Thus it is doubtful whether *savagiyānam* or *saṁvagiyānam* mentioned in the inscription should be equated with *saṁvargīyānām*, i.e., 'of the *Samvarga* people', or with *saṁvargīyānām*, i.e., 'of the clansmen'. Then again the meaning of the term *atīyāyika* which occurs thrice in the inscription is not very clear. But there is no doubt that the order conveyed by this record was issued from *Puḍanagala*, i.e., *Puṇḍranagara* in which we must recognize the forerunner of the later term *Puṇḍravardhana*. The discovery of this record at Mahāsthān shows that *Puṇḍranagara* or *Puṇḍravardhana* and the present Mahāsthān are identical.

The stone image of Hari-Hara (Plate CXXVII, *d*) referred to above, which is assignable to the 12th-13th century A.D., is unique from an iconographical point of view. The central figure represents Śiva in the right half and Viṣṇu in the left half, as indicated by the *triśūla*, *akṣhasūtra*, *śankha* and *chakra* held in the right and left hands respectively. Below Hari and Hara, at the bottom of the lotus seat, there further appear Garuḍa on the side of Hari and the bull

¹ *J. A. S. B.*, vol. XXVIII, pp. 127-129, and Plate 1.

on the side of Hara. Hari-Hara stands between two women; the figure on the right is to be identified as Durgā and that on the left as Lakshmī. The composition of Hari-Hara standing between the two wives reminds us of the verse describing Pradyumneśvara in the Deopara *praśasti* of Vijayasena. Similar verses in praise of Hari-Hara are also quoted in ŚRĪDHARADĀSA'S *Saduktikarṇāmrīta*. In the background, at the extreme right appears a standing figure of the Buddha in the attitude of offering protection. Above his head are two *chaityas*. In the corresponding position to the left is a figure of Sūrya with his usual attributes and attendants. In a panel below are depicted the seven horses of his chariot, and the figure of the charioteer Aruṇa can also be recognized between the two legs of the central figure. The execution of this sculpture is quite crude and shows a debased style which suggests a late date for it. This is also supported by the staring look of the eyes. The introduction of the Buddha and Sūrya by the side of Hari-Hara constitutes the chief iconographic importance of this image.

The Sūrya image (Plate CXXVII, c) belongs practically to the same period as the Hari-Hara. This also has staring eyes and the execution is more or less crude.¹ It bears an inscription in proto-Bengālī characters on the pedestal which reads as follows:

Oṃ śrīmad-Vaktraśiv=āchārya-kārīto bhāti-kāmadah

Sūryah samasta-rogaṇām hartā viśva-prakāśakah

i.e.: "(This image of) the Sun who bestows splendour and fulfils desires, removes all diseases and illumines the universe, has been made by the Master Vaktraśiva".

Another inscribed image (Plate CXXVII, a) is that of the Buddhist goddess Prajñāpāramitā which came from the neighbourhood of Nālandā. The inscription records the gift of one Dharmaśrīpāla, an inhabitant of Banavāsi-Karṇāṭa (North Kanara). It belongs to about the 11th century A.D.

The three copper-plates² from Assam belong to the 11th-12th century A.D. One of them refers itself to the reign of King Indrapāla and comes from Guyā-kuchi in the Kamrup District. It records a gift of land to a donee whose ancestral home was Baigrāma in Śrāvastī, probably identical with the village Baigram near Hili in the Dinajpur District where a copper-plate of the Gupta period has been recently discovered.³ According to one view there was a Śrāvastī also in North Bengal; so that the Śrāvastī of this grant need not be necessarily identified with Saheth-Maheth in the U. P., the Śrāvastī of Buddhist fame. The two other copper-plate charters belong to the reign of King Dharmapālavarman. One of them, the findspot of which is not known, records a grant of land in the Śubhaṅkara-*pāṭaka* and states that the family to which the donees belonged

¹ The technical 'finish' of this image is, however, very much superior to that in fig. d; there is a great deal of movement in the attendant figures while those of the Hari-Hara image are stiff and lifeless; the decorative elements, the personal ornaments, etc., are also superior in fig. c. It should probably be relegated to the end of the 11th or the beginning of the 12th century.—Editor.

² These three copper-plates have been published by M. M. Padmanatha BHATTACHARYA in his *Kāmarūpa-Śāsanāvalī*, pp. 130, 146 and 168.

³ *Ep. Ind.*, vol. XXI, p. 78.

came from the village Kroḍaṇcha in Śrāvastī. The remaining copper-plate records a grant of land at Guheśvara-dig-dola in Pūraji-vishaya. It was discovered in the dry bed of the river Pushpabhadra to the north of Gauhati Town. The Kings Indrapāla and Dharmapāla style themselves as *Prāgjyotish-ādhipati*, i.e., 'Lord of Prāgjyotisha', on the seals attached to their copper-plates.¹

Report for the year 1933-34.

By Mr N. G. Majumdar.

The Indian Museum, Archæological Section, purchased with a grant of one thousand rupees placed at its disposal by the Trustees of the Museum, a large number of Palæolithic and Neolithic and Iron Age objects, which were discovered by Major WAUCHOPE of the Survey of India in Mysore, Hyderabad, and several localities of the Madras Presidency. This collection, which represents successive phases of the pre-historic cultures of Southern India, is interesting in various ways and forms a valuable supplement to the collections already deposited in this Museum and in the Museum at Madras.

The sites that yielded palæolithic implements are Jangaon and Allur on the Godāvarī river in the Karimnagar District of the Hyderabad State. Some of the palæoliths show big flakings and part of the nodule unworked. A massive hand-axe (*coup-de-poing*) from Allur belongs to this class (Plate CXXVIII, 2). A lighter example of hand-axe from Jangaon (Plate CXXVIII, 1) has a somewhat rounded end, but irregular flakings and zigzag sides like the rest of the palæoliths. A further stage in the manufacture of these hand-axes is seen in a fragmentary specimen from Jangaon (Plate CXXVIII, 5) of which one face has been made perfectly smooth, the sides run in regular straight line and the edge is rounded off. The other face of the implement is chipped by flakings. This artefact may be taken to be a Late Palæolithic example. An ovate hand-axe which is flat on both faces was found at Allur (Plate CXXVIII, 4), and the same site has produced the two flakes seen in Plate CXXVIII, 3 and 6. A celt (Plate CXXVIII, 16) which has the triangular shape of neolithic specimens, but is not smoothly dressed like the latter, comes from Sindhnur in the Hyderabad State. It seems to mark the transition from the palæolithic to the neolithic stage. There are besides Allur and Jangaon other palæolithic stations in the Godāvarī valley which are already known. From one of these, situated about 40 miles west of Bhadrachalam, that is, farther to the south of Allur and Jangaon, Mr W. T. BLANFORD² collected a number of hand-axes which are now in the Indian Museum.

The neoliths of the collection came from the Tungabhadra valley, from beyond the southern limit of the Hyderabad State, and also from regions further south in the Salem, Kurnool, Bellary, Anantpur and Arcot Districts. The acquisitions include some fine examples of celts, which are typical too of the age and area to which they belong. They are characterized by a well-trimmed sharp edge, and conical or flat and pointed butt-end, as may be seen in Plate

¹ The identification of Baḡrāma and the reading *Kroḍaṇcha* I owe to Mr K. N. DIKSHIT.

² COGGIN BROWN:—*Catalogue Raisonné of the Pre-historic Antiquities in the Indian Museum*, p. 58.

CXXVIII, 17 and 18. A longish example of this class is that in Plate CXXVIII, 19. All the three celts were recovered from Yellagiri in the Salem District. Six of the smaller celts representing this type are shown in Plate CXXVIII, of which figures 12, 9 and 7 are from Nandavaram in Bellary District, and figs. 11, 8 from Rayadrug of the same District, while fig. 13 comes from Javadis in Arcot. The ring-stone of Plate CXXVIII, 14, which is from Yellagiri, was probably used as a mace-head; and the round stone (Plate CXXVIII, 15) from the same locality, which has two grooves on its sides evidently for holding it by means of two fingers, seems to have served the purpose of a hammer. The small celt-like object with a thick edge from the Tungabhadra valley, shown in Plate CXXVIII, 10, might also have been used for the latter purpose.

No pottery or other objects are recorded to have been associated with these specimens of palæolithic and neolithic industries. But the cultural difference between the two ages can be recognized very clearly in the artefacts themselves. The neolithic celts are marked, as usual, by a greater amount of technical skill than that displayed by the chipped hand-axes of the palæolithic people, showing how the later technicians had almost entirely overcome the difficulties of stone-working, and even developed a taste for finery, which takes us far beyond the stage reached in the palæolithic times.

So far as the evidence of associated objects is concerned we are entirely on a different footing with the Iron Age implements. These came from Yercaud in the Salem District and also from certain graves opened by Major WAUCHOPE, at a place called Huttanhalli which is 18 miles to the north of Bangalore. The excavations carried on by him at Huttanhalli led to the discovery not only of iron implements, but also of pottery vessels, which were found deposited with human bodies in burials. It is a polished ware, either completely black, or light red with black patches, and belongs technically to the group exhumed from certain graves in the Tinnevely and Salem¹ Districts, samples of which are now in the Indian Museum. The Huttanhalli pots (Plate CXXIX, 1-8) comprise thick-rimmed vessels and wide-mouthed pots and pans, most of which bear shallow incised marks, as in the case of the Hyderabad pottery noticed by Mr YAZDANI.² One of these (Plate CXXIX, 3) has four button-shaped feet, a feature present also in some of the Tinnevely specimens. It has further a linear decoration scored at the neck, like a continuous railing pattern. Samples of polished black pottery with incised geometric designs have recently been unearthed at the Late Chalcolithic site of Jhangar in Sind. It has been suggested elsewhere³ that in the Indus valley painted pottery of a red fabric was superseded by this class of ware, which accords well with the appearance of an allied fabric in the Iron Age in South India. The iron implements from Huttanhalli include a number of long spear-heads and celts. The celt in Plate CXXIX, 9, which measures 10½" in length and has a maximum breadth of 5½", has a pointed projection at each side just above the cutting edge, for which parallels

¹ ANDERSON:—*Catalogue and Handbook of the Archaeological Collections in the Indian Museum*, Pt. II, pp. 426-432.

² *Journal of the Hyderabad Archaeological Society*, 1917, pp. 56 ff.

³ *Explorations in Sind*, (Mem. A. S. I. No. 48), pp. 69-70.

may be cited from the Copper Age remains. It represents a type probably evolved directly from lithic forms, like the copper celts of Gungeria in the U. P.

We are thus confronted with the cultural remains of at least four distant phases of human civilization, namely Palæolithic, Neolithic, Chalcolithic and lastly what we are wont to associate with an 'Iron Age'. There cannot be any doubt as regards the sequence of the first three phases, although it would be unwise to correlate them with allied phases of European prehistory, or adopt for them equivalent dates. This is illustrated by the fact that in the South from the Neolithic we come at once to the Age of Iron, there being no copper-bronze period intervening. We have therefore every reason to believe that the Iron Age of the South was partially at any rate co-existent with the Chalcolithic, or Late Chalcolithic, of Northern and Western India.

The Indian Museum was also fortunate in acquiring interesting antiquities of the historical period from various parts of India. Several stone and terra-cotta figurines from Mathurā were added to the collection. Of the latter four deserve particular mention. One of them is the upper fragment of the figure of a young woman standing with exposed breast; this is a really fine example of clay-modelling (Plate CXXX, 3). Compared to it the standing figure of a female in Plate CXXX, 7, appears stiff and frontal. It has a fan-shaped head-dress, ear ornaments, breast-chain and girdle; and one of the hanging arms carries a bunch of flowers. Another terra-cotta (Plate CXXX, 5) shows a couple standing side by side, the female putting her arms around the neck of her lover. The fourth terra-cotta shows a lotus by the side of a figure holding a lyre on which he seems to be playing (Plate CXXX, 4). Of these four, fig. 7 may be as early as the Mauryan period, while the rest seem to date from the Śunga times.

Two carved ring-stones from Mathurā, of which one is fragmentary, are of still greater importance. The intact piece (Plate CXXX, 2) has five bands of decoration cut in relief on one face around the hole, and an Ujjain symbol and a star occur on the other face, while a row of honey-suckle and standing nude females decorate the side of the hole. The females have a strictly frontal pose, in which respect, as also in their nudity, they resemble the so-called *Prithivī* figure (Plate CXXX, 8) appearing on a gold-leaf from Lauriyā Nandangarh in the Champaran District of Bihar.¹ It was found in association with a deposit of human bones appertaining to a post-cremation burial, and it had, no doubt, a funerary significance. A ring-stone of exactly this description has been discovered by Sir John MARSHALL at Taxila.² According to him the woman figure represents the 'Goddess of Fertility' intimately connected with the cult of the *yoni*, and the ring-stones are referable to the third century B.C. Another ring-stone of this type with nude female figures in relief was found by CUNNINGHAM³ at Sankisa, and he notes that part of a similar 'carved plaque' was also collected by him at Taxila.

¹ Bloch:—*A. S. R.*, 1906-07, pp. 122-123. The gold-leaf is now in the Indian Museum.

² *A. S. R.*, 1920-21, p. 21 and Pl. XVII, fig. 30, *ibid.*, 1927-28, Pl. XX, fig. 7 and pp. 66-67. Cf. MARSHALL:—*Mohenjo-daro and the Indus Civilization*, Vol. I, pp. 62-63.

³ *A. S. R.*, Vol. XI, Pl. IX, fig. 3.

The fragmentary ring-stone from Mathurā (Plate CXXX, 1) has a band at the edge in which the same type of a standing nude female appears, the other elements of the band being a palm tree, a camel with two humps, that is, of the Bactrian species, and a composite animal figure having the body of a lion, wings of a bird and head of a man. There are also represented below the animal figures two cranes, and between the camel and the palm tree is carved in relief the well-known taurine symbol, while a floral pattern appears at the centre of the piece. It may be noted that the nudity of the female is clearly indicated as on the Lauriya gold-leaf and on all the ring-stones referred to above, and the peculiar way in which the two arms hang below the hips is a characteristic feature of these representations of the goddess. The Bactrian camel, as well as the composite animal which shows Assyrian affinities, points to the conclusion that the ring-stone, whatever might have been its purpose, was the work of a foreigner.¹ The composite animal figure has its analogies on the pictographic seals discovered in the Indus valley, and it is possible that the ring-stones are of pre-Mauryan origin. Dr BLOCH who discovered the gold-leaf in course of his excavations at Lauriyā Nandangarh suggested that the figure was a representation of the deity Prithivī or the Earth Goddess, invoked by the Vedic people in burying the cremated remains of human bodies. Dr BLOCH was further of opinion that the funeral mounds in which the gold-leaf was discovered go back to the pre-Mauryan epoch.

The only other terra-cotta object from Mathurā that deserves mention is a dabber which was probably meant for the potter's use. It bears the inscription *Kachhipasa*, i.e. 'belonging to Kachhipa', in Brāhmī characters of about the 1st century B.C. It is curious that dabbers of exactly this shape have been found in the chalcolithic strata of Mohenjo-daro, a fact that shows how the same type of object may often continue to exist unchanged for millennia.

Nine stone images were added to the collection during the year, eight of which came from North Bengal and one from Bihar. Plate CXXXI, c is an image of Vishṇu holding his usual attributes, viz.: *śaṅkha* (conch), *chakra* (discus), *gadā* (mace) and *padma* (lotus). The back-slab is completely covered by decorative devices and the halo has taken an oval shape, as in late mediæval images. The deity is attended by Lakshmī and Sarasvatī, and also by the personified forms of *Śaṅkha* and *Chakra*, who bear the respective emblems on the head. It may be noted that these human representations of the attributes of Vishṇu are very common in the Bengal school of sculpture, and the way in which they carry the emblems constitutes a peculiar feature not found in any of the Vishṇu images from Bihar in the Indian Museum collection. On grounds of style the sculpture may be assigned to about the twelfth century A.D., being evidently of a later date than the Vishṇu image from Baghaura, of the reign of Mahipāla.

The image of Sūrya in Plate CXXXI, d, as compared with the Vishṇu image, marks a stage of decadence, and may be of a somewhat later date. Both

¹ Not a single object excavated so far at any site in India shows a more marked Assyrian influence than the ring-stone under discussion. The date-palm and the composite animal are perfectly identical with Assyrian representations; if found in Assyria they would belong to the most everyday class of reliefs. For other Assyrian-Babylonian elements in Indian art see my article *Mesopotamian and Early Indian Art: Comparisons*, in *Mélanges Linossier*, pp. 203-253.

the images were collected from Ganpur, near Manda in the Rajshahi District. Sūrya has for his charioteer Aruṇa, who, although he is driving the seven horses, is seen riding on a *makara*. This fantastic animal as the carrier of Aruṇa appears also in a few other images of Sūrya discovered in Bengal.¹

A relief of the well-known 'Mother-and-Child' is seen in Plate CXXXII, *b*. It has the usual *nava-graha* or Nine Planets, the *līṅga* and Gaṇeśa, depicted in a row above the reclining figure of the Mother and the new-born child. The identification of the 'Mother-and-Child' representations has aroused the interest of several scholars, but no solution so far offered is free from doubt. It is to be noted, however—and this may help further attempts to identification—that in this particular sculpture the child wears a *jaṭā-mukuta*² and is shown as lying on its back with folded hands. It was acquired from Chowra Kasba, near Manda (Rajshahi District). From the same place were also collected an image of Garuḍa and two images of Śiva. The Garuḍa is a figure in the round, seated in the kneeling posture with folded hands (Plate CXXXII, *c*). It must have formed the crowning member of a *Garuḍa-dhvaja*, i.e. Garuḍa-pillar, as shown by the tenon below his lotus seat.³

The two images of Śiva acquired this year, of which one is seen in Plate CXXXII, *d*, resemble each other in all iconographic details. They represent a two-armed deity holding a trident in the left hand and a rosary in the right, while there is a long garland hanging down to the knees, as in Viṣṇu figures. But the image does not show any other characteristic of Viṣṇu images, and his *jaṭā-mukuta*, the third eye, the *ūrdhva-medhira*, and the bull shown on the pedestal, all point to the fact that it represents a particular form of Śiva. Two other examples of this icon are in the Rajshahi Museum⁴, and it may be noted that human representations of Śiva are rare in Northern India. These specimens do not appear to be earlier than the twelfth century A.D.⁵

Plate CXXXI, *b* is another interesting image which was found at a place called Chowra Para near Manda (Rajshahi District). The deity is the Bodhisattva Avalokiteśvara. His right hand is in the *varada* pose, and the left hand holds a lotus with a stalk. Above his head appear five seated Buddha figures, and in the back-slab are also carved decorative elements, figures of heavenly beings, riders on leogryphs and elephants etc. There are two male and two female attendants to the central figure besides the usual *sūchi-mukha* figured on the pedestal. The attendants are from right to left as follows: the goddess Tārā with a lotus in her left hand; Sudhanakumāra with folded hands, carrying a book under his left armpit; Hayagrīva with protruding belly and up-raised hair, resting on a staff; and lastly, Bhṛikuṭī Tārā, the four-armed goddess,

¹ A figure from Chapra near Manda (Rajshahi District) now in the Rajshahi Museum, has also an Aruṇa riding on a *makara*. See *Catalogue of the Archaeological Relics in the Museum of the Varendra Research Society*, 1919, p. 23.

² That is, a certain type of high, conical crown, with matted hair worn by Śiva and other deities, but originally definitely confined to Indra only.—Editor.

³ This fine sculpture seems to belong to the same age as the Viṣṇu and Sūrya images in the preceding page, i.e. about the 11th-12th century A.D.—Editor.

⁴ *Catalogue of Archaeological Relics etc.*, p. 11, where the figures are described as 'Harihara'.

⁵ Indeed, the specimen shown in Plate CXXXII, fig. *d* is a very poor artistic production and should be ascribed to the middle of the 13th century.—Editor.

whose upper right hand is in the *varada* pose and upper left carries a staff with three horns, the lower right hand holds a rosary, and the lower left a *kamaṇḍalu*. This image is important both from an iconographic and an artistic point of view; there is in it a superior sensitivity, a fine feeling for balance, proportion and detail. Its date is probably not earlier than the 11th century A.D.

But iconographically the most important sculpture acquired during the year appears in Plate CXXXI, *a* which represents Māyā, the mother of the Buddha, standing under the *sāla* tree. It comes from Nālandā in the Patna District. The sculpture represents the Nativity of the Prince Siddhārtha. The Buddha Śākyamuni is first seen coming out of the right of the womb of Māyā and next standing on a kind of column of lotuses, suggesting the first steps he took immediately after his birth. The divine child is attended by Śakra on the right and Brahmā on the left. The latter can be recognised by the *kamaṇḍalu* he carries in his left hand, while Śakra is stretching out the cloth to receive the Buddha—an incident that is so often depicted in the Gandhāra school of art. Above the figure of Brahmā is a deity with four arms who is certainly to be identified as Viṣṇu from the mace he is seen carrying in his upper right hand. This is the first time we have a figure of Viṣṇu appearing in a purely Buddhist scene. This feature, although uncanonical and incongruous in itself, once more shows how Vaiṣṇavism had penetrated Eastern India during the later days of Buddhism. The sculpture probably dates from the 11th century A.D.¹

Two small bronzes were acquired from Mahāsthān in the Bogra District. Of these one is a figure of Mañjuśrī seated in the *mahārājalīlā*, bearing at the back a circular seal of the Buddhist creed. The figure had originally silver eyes. The other bronze (Plate CXXXII, *a*) depicts an elephant carrying on its back four figures seated in a row. The principal one seems to be a royal personage and the lady seated in his front is probably his wife. Behind the prince a woman is seen holding a staff which probably supported an umbrella. Behind her a male personage is seated. The features of the riders have curiously enough an Orissan feeling about them, and on the temple façades of Orissa such elephant scenes are by no means uncommon. On stylistic grounds this small sculpture may be referred to the thirteenth century A.D. It does not, of course, necessarily follow that this bronze was originally imported from Orissa.

A collection of ten clay and terra-cotta votive tablets were received in exchange from the authorities of the National Museum, Bangkok, two of which are reproduced in Plate CXXX, 9 and 10. The tablets were all discovered in Siam and valuable for purposes of comparison with those found in India.

In all 401 coins were added to the cabinet of the Indian Museum. The most interesting additions to the non-Muhammadan series were over seventy punch-marked coins of silver and copper, of which sixteen belong to the hoard discovered at Patraha in the Purnea District. A lot of coins was procured at Mathurā, and its importance lies in the fact that the coins were originally found

¹ In no circumstances would I date it later than the early years of the 10th century.—Editor.

also in the same locality. There are several punch-marked silver specimens in this collection and quite a number of copper pieces belonging to the Satraps Hagāna and Hagāmāsha. Among other acquisitions mention may be made of a rare silver coin of the Gupta King Budhagupta conforming to the type described by Mr ALLAN.¹ Among the Muhammadan series the most important acquisition was a copper coin of Bārbak Shāh, the seventh Sultān of the house of Iliyās Shāh of Bengal. It was discovered on the surface of a cultivated land, to the south of the Dakhil Darwaza at Gaur, and secured by me during a visit to the place in March, 1934. The existence of a copper currency of the Sultāns of Bengal was so far unknown to numismatists. Maulvi Shamsuddin AHMAD, M.A., Assistant Curator of the Archæological Section, reads the legends of the coin as follows:

Obverse:

ابو المجاهد باريك شاه سلطان بن محمود شاه السلطان

(Abū-l-Mujāhid Bārbak Shāh Sultān, son of Maḥmūd Shāh, the Sultān).

Reverse:

خليفة الله يا لحيث و البرهان

(The Vice-regent of God with deed and proof).

TAXILA MUSEUM.

Report for the year 1931-32.

By M. N. Dutta Gupta.

The Taxila Museum is becoming more popular; it attracts a large number of visitors not only from India but from foreign countries as well. During the year 1931-32 many distinguished visitors visited the Museum; there have been 20 parties of students from different Colleges in the Province.

Under the orders of the Government of India a fee of 2 annas per head was levied on all visitors to the excavated monuments with effect from the 1st September 1931. The total receipts of these and other fees amounted to Rs. 1,086-14-0.

On account of financial stringency, excavation work at Taxila had to be very much reduced and the number of antiquities added to the Museum during the year was proportionately smaller. Some of the new antiquities, however, are very interesting. They include *three relic caskets* from the site of Kālawān, one of which was found in company with a copper-plate bearing an inscription in Kharoshtī characters of the later part of the 1st century A.D. The text of the inscription which has been edited by Professor Sten KONOW, is reproduced above in Sir John MARSHALL's report on the Taxila excavations.

This *stūpa*-shaped steatite casket which was found with the above plate as well as the inner globular one of the same stone were covered inside and outside with gold-leaf. The inner casket contained a gold casket, and inside the

¹ *Catalogue of the Coins of the Gupta Dynasties* p. 153 and Plate XXIV, 13-15.

latter one were a bone relic, a number of rosettes and discs of thin sheet of gold and silver, as well as beads of quartz, beryl, garnet, pearl, turquoise *etc.*

A small fragmentary figure of the Fasting Buddha and a panel depicting Queen Māyā's dream are also among the more interesting of the new acquisitions.

The total number of antiquities added to the Museum collection was as follows:

1. Metal antiquities	28
2. Terra-cotta and pottery	6
3. Stone sculptures <i>etc.</i>	71
4. Stucco sculptures	236
5. Shell objects	1
6. Copper Coins	167

The copper coins include one each of Local Taxila, Hermaios, Azes and Soter Megas, 2 of Kadphises II, 3 of Kanishka, 1 of Huvishka, 138 of Vāsudeva, 8 of late Kushāna and Indo-Sāsānian. The remaining coins are not identified.

Good headway has been made in providing titles for the cases, as well as for individual antiquities in gold lettering. Unfortunately, the post of marksman was abolished in December 1931, and as a result the work of labelling could not go on as rapidly as had been hoped. The labels are very essential if the visitors are to understand the exhibits and for this reason the dismissal of the marksman is much to be regretted. The post of the modeller of the Frontier Circle was also abolished simultaneously. For some time past he had been assisting in the preparation of the drawings of antiquities required for publication as well as in other miscellaneous work in the Laboratory and Museum. His absence is therefore also being keenly felt.

During the year under review all the selected pottery from the excavations at Taxila were studied and listed under Sir John MARSHALL's supervision. Typical specimens of the latter have been exhibited in a separate show-case. Drawings of all metal antiquities were prepared.

Report for 1932-33.

During the year 1932-33 the number of visitors to the Taxila Museum was over 15,000 and of those to the ruins over 4,000.

Owing to the drastic reduction of funds little excavation was done at Taxila by Sir John MARSHALL during the current year and the number of antiquities added to the Museum has been proportionately small. The antiquities comprise the following:

1. Metal antiquities	52
2. Terra-cotta and pottery	57
3. Stone Sculptures <i>etc.</i>	15
4. Stucco Sculptures <i>etc.</i>	4
5. Shell and bone objects	5
6. Beads	5
7. Copper coins	58

The copper coins include 2 of Kadphises, 12 of Kanishka, 33 of Vāsudeva, 2 Late Kushāna, 3 Sāsānian; the rest are not identified.

Among the more noteworthy objects were a large copper lotus in relief; a dome-shaped lid of the same metal; a stone relief depicting Buddha's First Sermon; and a terra-cotta head of a Bodhisattva (ht. 14·25") with a remarkable head-dress.

The classification of pottery in the Museum which had been largely done in the previous year was completed by the Curator and revised by Sir John MARSHALL; and progress was also made in the classification of the stone, metal, bone, shell and glass antiquities. 420 drawings of specimens selected by Sir John MARSHALL were prepared by the draftsman.

Report for the year 1933-34.

During the year 1933-34 the number of visitors to the Taxila Museum was about 11,000 and of those to the ruins about 4,000.

Owing to paucity of funds little excavation was done at Taxila by Sir John MARSHALL during the current year and the following antiquities have been added to the Museum collection:

1. Metal antiquities	51
2. Terra-cotta and pottery	68
3. Stone objects	23
4. Stucco sculptures <i>etc.</i>	2
5. Shell and bone objects	26
6. Beads	38
7. Coins, including 19 debased gold coins	189

The copper coins are of Local Taxila, Appolodotos, Azes, Spalaris, Gondophares, Rajuvula, Hermaios, Kadphises, Soter Megas, and the gold ones include 2 of Bhadra, 15 of Late Kushāna and 2 of Chandragupta II.

Among the noteworthy objects were the following:—

- (1) A solid torque, weighing about 40 *tolas*, diam. 6·5", relieved with coiled wire; thick at the opening and thinner towards the ends. On clasp *nandipada* symbol.
- (2) A pair of ear-rings of solid gold relieved with coiled wire with lover's knot between ends of coils. Diam. 1·15".
- (3) A pair of fingerrings of gold, diam. 0·8", open-work vine scroll edged with beaded border on upper side. Three oval cloisons with small ones of various shapes filled with chalcedony. In the vine scroll are also trefoil cloisons.
- (4) A bracelet of copper, diam. 2·5", with medallion above representing Dionysus or Silenus holding wine-skin on shoulder and pouring wine into fluted wine cup.
- (5) A broken bronze *kūza* with a spout, ht. 3·5", containing 10 bell-shaped gold pendants, 48 hollow beads of gold, a few beads of stone and a number of tiny pearls.

- (6) A hoard of copper utensils found at Sirkap, consisting of a globular cooking-pot with ring-handle on shoulder; two bell-shaped cooking-pots with carinated body; three dishes; one handled pan; one lid of a vessel with central handle; 2 ladles; one globular pitcher; one slanting edged tumbler; 4 standard goblets and 3 circular mirrors.
- (7) Two statues presented by Sir John MARSHALL, *i.e.*, (a) A brass statue of a seated Bodhisattva, covered with jewels, holding a casket in the hands; Nepalese or Tibetan work; height 15.75" (Plate CLIII, e); and (b) A stone figure from Gandhāra, showing a bearded male figure leaning on an animal (lion?) in the style of the late Hellenistic and Roman river-gods; length 14" (Plate CLIV, b).

Considering the great importance of permanently numbering the antiquities in the Museum, the Director General of Archaeology in India has kindly sanctioned the appointment of a marksman for two years. The numbering of exhibits is now again proceeding satisfactorily.

The classification and cataloguing of metal, stone, stucco, terra-cotta, bone, shell and glass antiquities which had been made during the current and previous year by the Curator, was revised by Sir John MARSHALL. About 300 drawings of specimens selected by Sir John MARSHALL were prepared by the draftsman.

The work of copying the Museum index cards of all the antiquities exhibited in the Museum into the bound registers was brought to completion during the year under review.

DELHI FORT MUSEUM.

Report for the year 1930-31.

By Mr H. L. Srivastava.

During the year under review several improvements were effected. The exhibits were cleaned, overhauled and rearranged; photographs of about 170 of them were taken. Two antiquities *viz.* a petition from Āqā 'Abdu-r-Rashīd to Shāh Jahān (Plate CXXXIII, a and b) and a specimen of calligraphy said to be written by the Emperor Aurangzeb (Plate CXXXIII, c) were received on loan from the Director General of Archaeology. The reverse side of the petition of Āqā 'Abdu-r-Rashīd contains a picture in which the Āqā is presenting his petition to Shāh Jahān.

'Abdu-r-Rashīd Dailmī, better known as the Āqā was a sister's son and pupil of Mir Imād after whose murder he migrated from Iran to India during the reign of Shāh Jahān. On account of his skill in penmanship he was taken into royal favour. He was the instructor in calligraphy of Dārā Shikoh, the eldest son and crown prince of Shāh Jahān. Zebu-n-Nisā, the talented daughter of Aurangzeb, is also said to have been one of his pupils. He died at an advanced age in the year 1081 A.H. (1670-71 A.D.) and was buried at Agra.

IRANIAN TEXT OF ĀQĀ 'ABDU-R-RASHĪD'S PETITION.

الله اکبر

الهی

خلیفۃ الرحمانی صاحبقران قانی

داشت

عرضه

عبد الرشید الدیلمی

بنده فدوی

سجدهات عبودیت از روز صدق نیت بتقدیم رسانیده بعرض حجاب بارگاه اشتباه میروساند که چون ذات مقدس بندگان اعلیحضرت سلیمان مترت مظهر رحمت الحیت و هیچ بنده از بندها باکمال تقصیر از رحمت نامید نیست بقا برین تکیه بر عنایت حضرت نموده معروض می دارد که جمع را این بنده باخلاص بجهت سر انجام خدمات بامید واری دارد التماس می نماید که حقیقت جاگیر بنده بعرض مقدس برسد بعد ازان هر حکم که درباب بنده صادر شود یقین که محض خیریت و رفالیت بنده خواهد بود سابه این کعبه حاجات همواره برسد بندها گسترده باد -

TRANSLATION.

"GOD is Great.

A Petition.

The humble petitioner, 'Abdu-r-Rashīd of Dailam first proffering his sincere devotional prostrations, submits to the Chamberlains of the Heaven-like Court that as the August Person of His Majesty, the Solomon ranked, the Viceregent of the Beneficent GOD and the Second Lord of Felicity is an index of the Divine Mercy, and as none of his servants with the greatest of short-comings despairs of the Mercy of GOD, therefore, relying on the kindness of His Majesty, he states that this faithful servant has a group of men, expectant of rendering services and prays that the real facts about the *jāgīr* (freehold) of this servant may reach the Blessed Ears. After that any Order which is issued about this servant will surely be conducive to his absolute good and well-being. May the Shadow of the *Ka'ba* (at Mecca) of (fulfillings) needs be eternally spread over the heads of servants."

During the year under review 176 coins (1 gold, 36 silver and 139 copper) were received. Out of these 45 coins have been presented by the various Provincial Governments as Treasure-trove finds and the remaining 131 have been received on loan from the Director General of Archæology in India.

A teakwood coin cabinet was made and fitted in the steel safe already in the Museum. This cabinet will accommodate the collection of coins purchased from Mr Nelson WRIGHT.

*Report for the year 1931-32.**By Mr H. L. Srivastava.*

The income accrued from the sale of proceeds of admission tickets to the Delhi Fort during the year 1931-32 was Rs. 16,113-6 against Rs. 12,366 realized last year. This is a marked rise in the income.

Owing to the prevailing financial distress the activities had been rather poor, and no step could be taken to improve the Museum beyond what had been done last year. A *farmān* of Maryam Zamānī, mother of the Emperor Jahāngīr, was received on loan from the Director General of Archæology in India (Plate CXXXIII, fig. d), and an oil painting of Begam Samrū was kindly presented by Sir John THOMPSON, K.C.S.I., etc., late Chief Commissioner, Delhi. The former decree was discussed in detail by Khan Bahadur Maulvi ZAFAR HASAN, B.A., at the eighth meeting of the Indian Historical Records Commission held at Lahore in November, 1925, but the latter is not less important in view of its contents and beautiful execution.

Begam Samrū was a Muḥammadan girl, named Zebu-n-Nisā, who married an adventurer called Walter Reinhardt, known as Samrū or Sombre Sāhib. In 1781 she became a Roman Catholic and a few years after the death of her first husband she married a French soldier of fortune, named Le Vassout who commanded her small army. She held an extensive *jāgīr* at Sardhana, District Meerut, and her troops under George Thomas fought against the British forces at Assaye in 1803; with the collapse of Sindhia, however, she had to make her submission. She died in 1836, aged 88 (lunar) years, and leaving upwards of six lakhs of rupees to various charitable purposes; a fine monument was erected in her memory in the church she had built at Sardhana.

The additions made to the coin cabinet comprised 107 coins (91 silver, 1 billon and 15 copper) which were presented as Treasure-trove finds by various local governments.

*Report for the year 1932-33.**By Mr M. Hamid Kuraishi.*

During the year 1932-33 seven interesting additions were made to the exhibits in the Delhi Museum, viz., (1) a portrait of Bāz Bahādūr, (2) Hand-book for Delhi by Frederick COOPER, (3) a *farmān* of the Emperor Akbar dated 970 A.H., (4) a portrait of Imām Muḥammad Baqīr, (5) a *sūznī*¹ (5'4"×3') with floral decorations in silk embroidery and a silk fringe, (6) a manuscript copy of the *Shāhnāma* of FIRDAUSI said to be written in the 16th century (containing 20 illustrations), and (7) an album of papers relating to the Indian Mutiny of 1857 with a note by His Excellency Sir Malcolm HAILEY. Of these the first six were received on loan from the Director General of Archæology in India and the last one was presented to the Museum by the Chief Commissioner of Delhi.

The presentations made to the coin cabinet of the Museum by the Director of Industries C. P., Nagpur, and the Governments of the Panjab, United Provinces

¹ See glossary at the end of this volume.—Editor.

and Bengal, comprised 2 gold, 1 copper and 99 silver coins making a total of 102. One more copper coin was received on loan from the Director General of Archæology in India. These coins are mainly Treasure-trove finds and represent various periods of Muḥammadan rule in India.

As the old paintings in the Museum were damaged by insects, the expert advice of the Archæological Chemist was asked for. He came to Delhi and examined the paintings and treated them with suitable chemicals after cleaning, and finally mounted them on cream coloured cardboard which was specially obtained from England for the purpose. This treatment has saved already 57 paintings from the depredation of insects, and the original colours have been splendidly restored to the miniatures.

Report for the year 1933-34.

By Mr Ashfaq Ali.

On account of the financial stringency the number of acquisitions to the Museum was rather poor. An old cotton shirt inscribed with Qurānic verses and supposed to have been worn by the last Mughal Emperor was presented by the High Commissioner for India, and the following articles were received on loan from the Director General of Archæology:—

- (i) Specimen of calligraphy by Wāriṣu-d-Dīn Haft Qalam, better known as Zumurrud Raqam.
- (ii) Picture of Ḥaẓrat Shaikh Salim Chishtī, the famous saint of Fathpur Sikri, with Akbar's Sadru-s-Sudur Shailah 'Abdu-n-Nabi and two princes.
- (iii) Picture of Ḥaẓrat Saiyid 'Abdu-l-Qādir Gilāni, better known as Pirān Pir.
- (iv) Picture of Sarmad listening to the music of two musicians sitting before him.
- (v) Picture showing 'Abdu-r-Raḥīm Khān-i-Khānān and Kṛishṇa.

The only additions made to the coin cabinet of the Museum were 54 silver coins presented by the various Provincial Governments to the Museum. Out of these 54 coins 5 belong to the Kings of Oudh, viz. Naṣīru-d-Dīn Haidar, Amjad 'Alī Shāh, one to Maḥmūd Shāh Durrāni, two to Nizāmu-l-Mulk Āṣaf Jāh of Hyderabad (Deccan), one to the East India Company, and the remaining 45 to the Mughal Emperors.

In the end mention should be made of the great loss sustained by the Museum during the year: the 44 pictures and a marble *huqqa* stand which graced the Museum since 1911 and were of considerable value to the Mughal Room in particular, had to be returned to their owner, M. Mahmud HUSAIN of Delhi on his request. The Mughal Room, which already lacked so many things to look like a Mughal Emperor's drawing-room, has been thus stripped of its treasures, and lost most of its interest and importance.

SARNĀTH MUSEUM.

Report for the year 1930-31.

By Mr M. S. Vats.

Further progress was made in overhauling the Museum at Sarnāth. Six table show-cases were replaced by new ones for the better display of exhibits. A masonry bench was constructed in the northern verandah and exhibits in the Main Hall were properly labelled. The Museum retained its usual popularity and was visited among others by Lord HARDINGE, late Viceroy and Governor General of India, and the delegates to the First All-Asia Educational Conference.

Report for the year 1931-32.

By Mr H. L. Srivastava.

Consequent on the abolition of the office of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, the charge of the Sarnāth Museum was transferred to the Superintendent, Northern Circle, along with the Hindu and Buddhist Monuments in the United Provinces.

As usual, the Sarnāth Museum continued to maintain its popularity and succeeded to attract thousands of visitors, both foreign and Indian.

An entrance fee of two annas per head is charged for adults, and 1 anna for children. The total amount of money realized at the gate from September, 1931 to March, 1932 came to Rs. 1,353-3. There was a huge gathering in October and November 1931 on the occasion of the opening ceremony of the Mūlagandhakūṭi Vihāra erected by the Mahabodhi Society.

No important acquisitions can be reported.

Report for the year 1932-33.

By Mr M. Hamid Kuraishi.

No addition was made to the Sarnāth Museum during the year under report, and the main work done there was the checking of the collection of antiquities and renumbering the exhibits that had lost their catalogue numbers through exposure to Sun and rain.

The total number of visitors to the Museum was 13,881.

Report for the year 1933-34.

By Mr M. Hamid Kuraishi.

Excavations for preparing the ground for conservation carried out in the area to the west of the Dharmarājika Stūpa revealed 179 minor antiquities, several stūpas and walls of a monastery and at one place 900 clay seals bearing inscriptions in characters of the 7th century A.D. and the symbol of the Wheel and deer emblematic of the First Sermon of the Buddha at Sarnāth. These objects are now housed in the Museum.

The total number of visitors to the Museum was 12,945. Among the distinguished visitors mention may be made of Their Excellencies the VICEROY of India and the Countess of WILLINGDON.

NĀLANDĀ MUSEUM.

Report for the year 1930-31.

By Mr M. Hamid Kuraishi.

Among the stone antiquities recovered during the year 1930-31 the majority came from the Chaitya Site No. 12. The best preserved of these include two Buddha images seated respectively in the *dharmachakra-mudrā* (height $7\frac{3}{4}$ ") and in the *bhūmisparśa-mudrā* (height $10\frac{1}{4}$ "), and a beautiful four-armed figure of the Bodhisattva Avalokiteśvara (Plate CXXXVIII, a) (height 2'7"), recovered from a niche of one of the votive *stūpas* to the south-east of the Main *Stūpa*. The Bodhisattva stands in the *vara-mudrā* posture on a lotus throne. A lotus stalk is held in his left upper hand and a *kamaṇḍalu* in the lower; the right upper hand carries a rosary and the lower is held in the *vara-mudrā*. A tiny figure of the Dhyāni Buddha appears in the head-dress. The consorts of the deity, Kurukullā and Bhṛīkuṭī, are represented on the sides, and a seated pot-bellied *preta* is receiving the nectar dripping from the deity's hand. In front of the feet of the deity, on the lotus throne, is an inscription in two lines, and below it another one of one line. At the right end of the pedestal is a kneeling female devotee with folded hands—probably the donor of the sculptures.¹

Other stone objects comprised a damaged headless bull or buffalo seated on a pedestal and measuring $11\frac{1}{2}$ " \times 7", fragmentary images of the Buddha, Bodhisattvas, etc., broken lotuses, stone umbrella tops, etc. But the most important among the year's acquisitions was the missing right half of a broken stone inscription the left half of which had been discovered by Mr PAGE in 1928-29. The missing fragment was recovered from Monastery No. 7 whence the other piece had also been unearthed. The stone measures $1'9\frac{3}{4}$ " \times $10\frac{3}{4}$ " \times $4\frac{1}{2}$ ". The inscription which is now complete consists of 15 lines beautifully written in the *nāgarī* script of about the 11th or 12th century A.D. It records the repairs to a shrine of Tārā at Somapura; the setting up of an image of Tārā in the great temple of Khasarpaṇa (a form of Avalokiteśvara), and other pious deeds of a monk named Vipulaśrīmitra.²

The only bronze object recovered during the year is a damaged bust of a four-armed figure (height $2\frac{1}{2}$ ") represented with folded hands and wearing ornaments.

Among the terra-cotta objects are a few seals and plaques; the upper left corner of a platter with raised edges ($5\frac{1}{8}$ " \times $5\frac{1}{8}$ " \times $1\frac{1}{2}$ ") bearing an inscription of 12 lines; and a mould of a seated inscribed figure of the Buddha, the last-named having been recovered from Site No. 12.

¹ From a stylistic point of view this fine and remarkably well-preserved image can be ascribed to the 10th century A.D.—Editor.

² For further details see *supra* in the Report for 1930-31 of the Government Epigraphist, p. 212.

Lastly there are a few pieces of pottery, iron objects, a couple of crystal gems and a few stucco heads among the minor antiquities discovered at Nālandā during 1930-31.

Report for the year 1931-32.

By Mr M. Hamid Kuraishi.

Almost all the antiquities recovered during the year came from the Chaitya Site No. 12. The most important amongst the stone objects is a *standing image of the Bodhisattva Avalokiteśvara* which was found inside a small detached shrine to be north of the Chaitya.¹ (Plate LXVIII, a). The image is 5'1" high including the pedestal and, except for a small piece at the semicircular top of the back slab which is missing, it is perfectly intact and in a remarkable state of preservation. The figure has two arms; it holds a lotus stalk in the left hand, the right hand being held in the charity attitude; and in the head-dress is a seated figure of a Dhyāni Buddha.²

Another stone sculpture which measures only 5½" in height shows the upper half of a Tārā figure holding a lotus stalk. To the right of the halo is a *stūpa* and a fragmentary inscription in one line in late mediæval characters. Among the less important antiquities are a fragment of a stone halo bearing a line of incomplete inscription, a stone *linga*, 14½" high, and a clay seal bearing the name *Dharmamitra*. The rest of the antiquities include 14 clay seals of the type so common at Nālandā; a couple of bricks carved with floral design; the damaged back slab of a bronze image; 10 small plaques of unburnt clay impressed with figures of the Buddha, *chaityas*, etc.; two umbrella discs of stone, each with a square hole in the middle; a detached lotus flower in stone; and a broken comb in ivory. All these came from Chaitya Site No. 12. The only other object found at the site this year was a colossal earthenware jar which seems to have been used as a private granary and to have been partly or wholly buried in the ground. It was recovered from the new Approach Road to the site and is now kept on a pedestal in front of the Museum. It measures 6'2" high and 12'1" in circumference. The lower half of the jar tapers downward ending in a solid knob.

Efforts were made during the year to obtain from the neighbouring villages any ancient statues which might have been in their possession and with which they were willing to part. Thus a headless Buddha image of stone was removed from a piece of high ground to the west of the village Kapatia and brought to the Museum. The sculpture shows the Buddha seated on a lion throne in the *dharmachakra-mudrā*; the Wheel of the Good Law is flanked by two deer on the pedestal, with five devotees below and the Buddhist creed above it.

Report for the year 1932-33.

By Mr G. C. Chandra.³

The excavations carried out during 1932-33 yielded a considerable number of objects of great interest to the Museum. In fact the money spent during the

¹ A four-armed Avalokiteśvara has been found in 1930-31, at the same site. (See the previous page.)—*Editor*.

² A description has been given *supra*, p. 134, foot-note.

³ This report has been considerably abbreviated and altered by the Editor. I have especially changed the description of the images.—*Editor*.

year was more than compensated by the discovery of a large and important collection of antiquities, comprising 75 bronze and stone images, fine clay sealings and terra-cotta plaques of different types, iron straps, nails and various other objects in clay, stone, ivory, iron, bronze, bricks, etc. (Plates CXXXIV to CXXXVIII).

The bronze and stone images generally are figures of the Buddha, Bodhisattvas and Tārā, in different forms and attitudes, and some of them are inscribed with the Buddhist creed—*ye dharmā hetu, etc.*, with the name of the donor in certain cases. Among the many images discovered a few figures of outstanding merit deserve special mention. Three standing bronze images of the Buddha (heights 22½", 20½" and 18"; found 2'6" below surface; 6' b.s., and 5' b.s.), are in a fairly good state of preservation and are shown in Plate CXXXIV, figs. *a*, *b* and *c*, after chemical treatment. Two of these are depicted in the *varada-mudrā*, while the third one stands in the *abhaya* attitude. In fig. *c* the eyes and the *ūrṇā* on the forehead are inlaid in silver. The left hand of each of these three figures holds the hem of the garment. They evidently belong to different periods; fig. *b* being remarkable also for its stylistic affinity to Indo-Javanese plastic art. There are also three seated bronze figures of the Buddha (heights 10¾", 9¼" and 9"). One of these is seated in the preaching attitude (*dharmachakramudrā*) and is complete with halo and umbrella (Plate CXXXVI, *b*); while the remaining two are in the *bhūmisparśa-mudrā* or earth-touching attitude (Plate CXXXVIII, *c*). Other Buddha images are shown in Plate CXXXVII, figs. *a*, *b* and *c*, all in the last-named attitude.

Of the Bodhisattva images, special mention may be made of a figure of a four-faced *Vajrapāṇi* (height 9½"); seated cross-legged on a high pedestal and holding the *vajra* or thunderbolt in the two hands held against the breast. This image seems to have been originally gilt; the symbol of the *vajra* appears on the calyx of the lotus throne. (Back and front view in Plate CXXXV, figs. *c* and *d*.) Another bronze image of *Vajrapāṇi* (height 8"; Plate CXXXV, fig. *b*), the pedestal of which is damaged, is seen holding a sword in the raised right hand and a *vajra* in the left.¹ In the four corners of the lotus pedestal of the image are set four small red rubies and it is more than probable that other images were also originally set with rubies, sapphires and the like, as can be conjectured from the empty holes noticed in several of them. A very interesting bronze image of *Trailokyavijaya* (height 8"; Plate CXXXV, fig. *a*) which is unfortunately broken in two pieces, shows the deity trampling on the prostrate figures of Śiva and Pārvatī who are holding tridents in their hands. The image indicates the attempt of the Buddhists to establish superiority of their deities over those of the gods of the Hindu Pantheon. This figure has four heads and eight arms, two hands being clasped against the breast in an attitude suggesting extreme determination and anger. Besides the images mentioned above, there are a number of small images of the Buddha, Bodhisattvas, Tārā, etc., some of which are illustrated

¹ This is Mr CHANDRA's identification. I do not know, however, of a *Vajrapāṇi* in human form with a sword; only a four-armed form called *Achala-Vajrapāṇi* holds a sword. The image is probably one of *Mañjuśrī's* forms, viz. the *śiṅha-nāda*, in which case the object held in his left is a book, not a *vajra*; indeed, in the present image it is not a thunderbolt but a bundle of book-leaves.—Editor.

in Plates CXXXIV to CXXXVII (after their chemical treatment). It will be seen that they vary considerably in quality, some of them being real masterpieces whilst others evidently are products of "mass-manufacture" or primitive peasant craftsmen. No doubt their age ranges from the 8th to the 13th century A.D.

Mention may also be made of three Brāhmanical bronze images found during the year. These are (1) a *Vishṇu* (height 6") standing with his usual symbols of the *śaṅkha*, *chakra*, etc.; (2) a broken image of a four-armed *Chandī* (height 5") standing on a pedestal with three animal figures, viz. a lion, a *godhā* and a bull, besides a kneeling devotee and a figure of *Gaṇeśa*. The goddess holds her usual symbols, the rosary, the branch of a tree, the *kamaṇḍalu*, etc., and the Sun and the Moon enshrine the halo; and (3) a *Sūrya* (height 9") standing on a lotus throne with his usual high boots. Two attendants, *Daṇḍa* and *Piṅgala*, stand on either side of the image.

Of the stone images special mention may be made of a couple of red stone figures of the Buddha (height 8' and 8½") seated in the *bhūmisparśa-mudrā*, and bearing the creed *ye dharmā hetu*, etc. engraved on the back. Another stone figure of a crowned Buddha (height 8½") seated on a *viśvapadmāsana* in the *bhūmisparśa-mudrā* is inscribed with the usual creed (Plate CXXXVIII, b). An interesting stone figure (height 11½"; Plate CXXXVIII, fig. d) shows a person seated on a *viśvapadmāsana* in the *dhyāni-mudrā* with two standing male attendants on either side. On the pedestal front is the emblem of the *dharma-chakra* (the Wheel of the Good Law) and two deer. A triple umbrella is seen over the head of the image; above his shoulders appear a vase with a lid (or a reliquary?) and a peculiar double-lotus-like object with a handle. The hands of invisible *devas* play musical instruments floating in the air. The style of the image suggests its identification as one of the Jaina Tīrthaṅkaras, though the symbols would accompany an image of the Buddha in the Deer Park. A small red-stone image of the Buddha (height 3¾") seated on a *viśvapadmāsana* in the *bhūmisparśa-mudrā* bears at the back a line of inscription reading: *deya-dharmoyan paramopāsaka sarvasya*, written below the Buddhist creed *ye dharmā*, etc. Another small red-stone image of the *Bodhisattva Padmapāṇi* (height 2¾") mentions the name of a physician's wife as the donor. The usual creed *ye dharmā*, etc. is followed by another inscription reading: *deya-dharmoyam vaidya Baghadatta-satkapatni Ebbakaya*, i.e. "The pious gift of Ebbaka the wife of the physician Baghadatta."¹

Another red sand-stone image unearthed this year (height 4¼") shows a three-headed personage with six arms holding the symbols of a rosary, bow, arrow, etc.; his two original hands holding a *vajra*. The deity is attended by his *śakti* to his left and is seen clasping her with one of his hands. The *śakti* is painted red all over her body, while the god is painted white except in some parts where the paint is red. The image bears at the back, the creed *ye dharmā hetu*, etc. with the name *Vairochana* written below. This name either refers to the donor or to *Vairochana*, the Buddhist deity.

¹ Probably *Bhoga*,—Editor.

The presence of Brāhmanical and Jaina images among the Buddhist deities is very interesting. These images have been introduced into Mahāyāna Buddhism gradually between the 7th and the 13th centuries A.D. While testifying to the tolerance of Hindu gods and goddesses by the Buddhists, these Hindu images (of which there are several in the Museum discovered in previous years, including those of Kuvera, Sarasvatī, Gaṇeśa, etc.) seem to have been adopted by the Buddhists in order to popularize their own religion. It is not uncommon to find a Hindu god or goddess occurring near a Buddhist deity in a subordinate position. As a rule, Buddha and the Bodhisattvas were given the principal rôle, anyhow as far as Nālandā finds are concerned.

Among the finds of 1932-33 there is a very interesting stone image depicting a four-armed female deity seated on a *viśvapadmāsana* in the *vilāsa* attitude under the canopy of a five-hooded serpent. Her right leg is stretched down with the foot resting on a lotus flower. She holds an axe and a noose in the left hands, and a sword and a fruit-like object in the right hands. It is difficult at the present moment to identify this goddess or *nāginī*. The image (height 15 $\frac{3}{4}$ ") is unfortunately broken in two pieces (Plate LXVIII, b). Lastly there is a broken stone panel measuring 2'10" in length and 6 $\frac{1}{2}$ " in height (found 6' b.s.) depicting nine out of ten *avatāras* of Viṣṇu, each in a carved niche. This purely Brāhmanical sculpture is unique among the finds made at Nālandā.

Among the bronze objects mention may be made of a couple of miniature votive *stūpas*, the larger of the two (height 11") depicting figures of the Buddha seated in the *dhyāna*, *bhūmiśparśa*, *abhaya* and *dharmachakra mudrās* in four small niches sunk into the drum above the pedestal (Plate CXXXVI, fig. c); and a broken pedestal (8" square, height 8 $\frac{1}{2}$ ") inscribed with the creed *ye dharmā hetu, etc.* A similar find of bronze images from Kurkihār in the Gaya District now in the Patna Museum is referred to in Section VII—Treasure-trove.

Other objects worth mentioning are as follows:

- (1) Fragmentary pieces of a pair of ivory sandals (*pādukā*). Evidently this delicate object could not withstand the heavy pressure of *débris* below which it was found (5' b.s.). The marks of its use on the front portion, as well as the broken pieces of the peg with its iron nail are still existing. This *pādukā* has now been reconstructed to give an idea about its original size and shape (Plate CXXXIX, a). This object was probably respected as a memento of some *guru*.
- (2) A collection of terra-cotta, stone, bone and crystal beads of different sizes and shapes. Among these a very fine collection of small tubular glass beads with red and yellow enamel paint on them (about $\frac{1}{8}$ " dia. and about $\frac{1}{4}$ " long each) is rather interesting; these have now been threaded on to a string about six feet in length for exhibition. (Plate CXXXIX, b).¹
- (3) A number of moulded bricks, mostly fragmentary, with figures of men, demons and animals.

¹ An analysis of these beads will be found in the Archaeological Chemist's Report for 1933-34, *infra*.—Editor.

- (4) A couple of small iron bells (heights 3" and 2½").
- (5) A large number of iron straps, nails, long padlocks with keys, etc., mostly fragmentary. Some of the padlocks are cylindrical while the others are square in section. Among the nails there are a few long ones, about 18" to 22" in length; these were probably used for fixing wooden beams.
- (6) A red-stone *vajra*, or thunderbolt (9½" long) as is generally seen in the hands of the Bodhisattva Vajrapāṇi. (Plate CXXXIX, g).
- (7) Fragmentary pieces of blue glazed pottery.
- (8) A pair of small spring scissors of iron (3½" long).
- (9) A mango-shaped terra-cotta pot (4¼" long) with a hole on its top. (Plate CXXXIX, d).
- (10) A terra-cotta lamp with stand (height 4"; Plate CXXXIX, e).

Among the finds recovered during the year 1932-33 are over 600 clay sealings of the commonest type found at Nālandā, viz., those depicting the emblem of *dharmachakra* (the Wheel of the Good Law) and two deer with the Buddhist legend *śrī Nālandā mahāvihāre ārya-bhikṣu-saṅghasya*, i.e. '[Seal] of the Venerable Community of Monks in the Great Monastery at Nālandā'. The palm-leaf marks at the back of almost all of the seals and the hole in them indicate that the sealings were attached when unburnt. In some of the sealings even the mark of a flat tape and that of its knot at the end are distinctly noticeable. There are other sealings which are also very important inasmuch as the names of certain *janapadas* or 'corporate bodies' are mentioned on them. Such for example, are the sealings (average dia. 1" to 2½") with the epigraphs: *Ālikāp-rishṭhagrāma-janapadasya*, *Chandekayagrāma-janapadasya* or, the corporate bodies of the villages *Ālikāp-rishṭha* and *Chandekaya*.

It is therefore quite reasonable to suggest that the villages mentioned in the sealings were situated near the celebrated Monastic School of Nālandā.

Some sealings bear representations of *chaityas*, figures of the Buddha and Kuvera, with the Buddhist creed *ye dharmā hetu, etc.* embossed thereon; while a large number of small sealings are inscribed with the names of persons. (Plate CXXXIX, c.) Among these are sealings bearing the names of *Sīhasena*, *Nāgasena*, *Ahirakṣita*, *Bodhimitra*, *Dharmarakṣita*, *Devarakṣita*, *Rāhula*, *Śrī Vigrahakāra*, *Nirvāṇasānti*, *Buddhatrāta*, *Dharmatrāta*, *Jinarakṣita*, *Tathāgata*, etc.; and one of them is inscribed with *Śrī Devapāladevasya*, i.e. '[the seal] of the Illustrious [King] Devapāladeva'. There are a few sealings showing the emaciated figure of the Buddha (Plate CXXXIX, c, second row from bottom).

There is a terra-cotta die or seal (1½" dia.; Plate CXXXIX, f) with an inscription which probably reads: *Harabandadakiyagrāma mudrayam*, i.e. 'the seal of the Village Harabandadaka'.

Among the finds of the year is a fragmentary terra-cotta tablet (4"×4") which is inscribed on both the obverse and the reverse. It bears a portion of the *Pratītya-samutpāda* (Pāli, *Paṭichcha-samuppāda*) of the *Nidāna-Sūtra*. The reverse seems to have been the continuation of the subject written on the other side. The inscription is written in the script of about the 6th century A.D.

The Government Epigraphist visited Nālandā immediately after the close of the working season, and the above inscriptions have been deciphered by him.

Report for the year 1933-34.

By Mr G. C. Chandra.

The necessity of a proper Museum building, like the one at Sārnāth or Taxila, is beginning to be felt now, as there is hardly any accommodation left in the existing building to exhibit all the antiquities discovered during the nineteen years since 1915-16.

The antiquities unearthed during the year 1933-34 in Monasteries 10 and 11 and Chaitya Site No. 12 were added to the Museum. 83 objects were discovered in Monastery No. 10; 87 came from Monastery No. 11; and only one was found at the Chaitya Site No. 12.

The Buddhist images are figures of the Buddha, Bodhisattvas, Tārā, Vajrapāṇi, Trailokyavijaya, Kuvera or Jambhala, etc. in different forms and attitudes. Some of the images found during the year under report are again inscribed with the Buddhist creed. Among the images discovered a few figures of outstanding merit deserve special mention. The stone image of Trailokyavijaya (height 4½") is well executed and is in an excellent state of preservation. (Plate CXLI, 15). The deity is four-armed, and is seen trampling on a prostrate figure of Śiva who holds his usual symbols. The two frontal hands of the Trailokyavijaya figure are held against the breast in an attitude showing extreme anger. The right upper hand holds a *vajra*, while the upper left one holds some indistinct object. The back slab is entirely covered with lines indicating flames. The deity, who is regarded as 'the Conqueror of the Three Worlds', is evidently symbolising Buddhism destroying its enemies. This image of Trailokyavijaya is slightly different from the Trailokyavijaya images discovered at Nālandā in previous years, inasmuch as it is shown trampling on the Hindu god Śiva only, instead of both on Śiva and Pārvatī as is usually found.

Another stone sculpture (height 4") is that of the Bodhisattva Vajrapāṇi seated in the middle, and surrounded by four seated and haloed female figures. (Plate CXLI, 9). The left hand of Vajrapāṇi is placed on the left thigh, while he holds a *vajra* in the right hand held against the breast. The two female figures seated at the upper two ends of the slab are seen each holding a garland. The figure at the right lower end of the slab has her hands placed against the hips and appears singing, while the one at the left end is seen playing with a pair of cymbals. The sculpture is in an excellent state of preservation.

There are two stone figures (heights 2¾" and 2⅝") of the Buddha seated in European fashion. The Tathāgata is depicted in the attitude of preaching the Good Law (*dharmachakra-mudrā*). On the pedestal front of each image is shown the Wheel of the Good Law and two deer. On both sides of the Buddha are seen two Bodhisattvas standing in the *abhaya-mudrā* and holding lotus stalks in their left hands. The back of each of the images bears the Buddhist creed *ye dharmā hetu, etc.* One of these images is of red-stone, and they are both in

an excellent state of preservation (Plate CXLI, figs. 14 and 16). There is another stone image of the Buddha, seated on a high pedestal in the *dharmachakra-mudrā*. On the back of this image the creed *ye dharmā hetu, etc.* is written a reversed way, i.e. *like a negative*. This is most peculiar, if done intentionally. There are other stone images of the Buddha, Bodhisattva, Kuvera or Jambhala, etc., of which one depicting the figure of *Simhanāda Mañjuśrī* (height $5\frac{1}{2}$ ") deserves special mention. It is slightly damaged on the back-slab. The Bodhisattva is seated in the *lalitāsana* posture. The right hand of the deity rests on the raised knee, while the left holds a lotus stalk which, ending in a flower, supports the Book of Knowledge. The back of the image bears the creed *ye dharmā, etc.* (Plate CXLI, fig. 3). There is among the finds another small stone figure of a Bodhisattva (height $2\frac{3}{4}$ "), four-armed, standing on a lotus. His right lower hand is stretched down in the *vara-mudrā*, and the left lower one holds some indistinct object; while the remaining two hands are placed on the heads of attendant figures standing on either side of the deity. A long garland of flowers is seen hanging from the neck. At both ends of the pedestal a tiny figure of a devotee is shown. (Plate CXLI, fig. 10). Another fine stone figure of *Simhanāda Mañjuśrī* (height $2\frac{1}{8}$ ") is similar in all respects to the one described above, though this one is undoubtedly much superior in execution and style to the former image. (Plate CXLI, fig. 2). Another stone image represents *Revanta* (son of *Sūrya*, height $4\frac{3}{4}$ ") shown as riding on horseback and attended by followers. Unfortunately the upper portion of this figure is gone.

Of the *bronze images*, special mention may be made of a figure of the Buddha (height 14" without pedestal and the niche) standing in the *abhaya* attitude. The Tathāgata wears a long robe, the end of which is held in his left hand. The halo of the image is practically gone but the pedestal, a portion of the niche and two slender pillars supporting it have been recovered and fitted together. (Plate CXL, fig. b, no. 2). There are two bronze images of the Buddha (heights $13\frac{1}{2}$ " and $7\frac{1}{2}$ ") shown seated in European fashion, and in the attitude of preaching the Law. Both the images are intact, only the umbrellas are missing. The smaller figure can be seen in Plate CXL, fig. b, no. 3. Another bronze image of the Buddha (height $12\frac{1}{2}$ ") shows him seated on a *padmāsana* placed on a high pedestal which is supported by two lions. The Tathāgata is in the *bhūmiśparśa-mudrā*. The image, of which the halo is missing, seems to have been gilt originally and is in a good state of preservation (Plate CXL, fig. b, no. 1).

Of the other stone and bronze images excavated during the year 1933-34 mention may be made of a tiny stone figure (height $1\frac{3}{4}$ ") of a male deity holding with the hands a lotus, which rises out of his navel; a canopy of a three-hooded serpent protects his head. (Plate CXLI, fig. 13). The square tenon piece at the end suggests that this figure was fixed to a base, along with similar other figures at regular intervals, as is seen in a group of small Kuvera figures in the Museum. Two objects, one of stone and the other of clay with particles shining like gold (lengths 4" and $2\frac{3}{4}$ ") in the shape of a half-*śaṅkha* (conch) probably used for divine service, are interesting, as such finds were not recovered previously (Plate CXLI, figs. 5 and 6). Another small cup-shaped object (dia.

1½") with two holed lugs and the rim cut to fit in with another similar piece, unfortunately missing, is also interesting. (Plate CXLI, fig. 8.)

Mention may be made further of two small *stone images* of the Buddha (heights 2½", 2¼") seated in the *bhūmisparśa-mudrā*. The Buddhist creed is carved on the back-slab of one of them. The style of these figures is different from those mentioned above (Plate CXLI, figs. 4 and 7). A *bronze figure* of a *Kinnara* (height 2½") holding a lute with both hands is another remarkable find made during the year. The upper part of the body is human and the lower is that of an animal. From Monastery No. 10 was recovered a fine, but unfortunately damaged, *stone image of a reclining female figure* (height 14"); portions of the body, including the head, the left hand, and the feet are missing. The figure is depicted as almost naked and with the garment held in her left hand.

Among the finds was also a *bronze temple of the Bodh-gayā type* broken in pieces, the middle portion of which is missing. From the middle of the shrine rises a square pillar which seems to have supported originally some emblem as can be conjectured from the tenon piece. Round the base of the pillar there are four square sockets intended originally to receive four figures. A miniature seated figure of the Buddha adorns one of the four niches on the top. At one corner of the shrine is seen a small couchant elephant. The pedestal front is inscribed on all four sides with an inscription. (Plate CXL, a.)

One of the most interesting of the bronze objects found during 1933-34 is a *small crown* (undamaged, height 3") which appears to have been set originally with precious stones, now missing (Plate CXL, d, 2). Another bronze object represents an *umbrella of a miniature stūpa* (height 3¼") with three tiers and a white crystal inlaid in the moon-shaped finial on the top (Plate CXL, d, 1).

A rectangular gold-plated copper coin (plated on one side only) with one letter on the gilt side was discovered at the Chaitya Site No. 12 at a depth of 9'2" below the present ground surface. It is very important from a numismatic point of view, and is believed to have been issued by *senāpati* Pushyamitra Śuṅga for distribution to the Buddhist monks during the performance of an *aśvamedha* ceremony.¹ Another hoard of 54 billon coins (average dia. ¾") of the Hun dynasty was found in one of the cells in Monastery No. 10. On examination it appears that all the coins were stamped with different types of die (Plate LXXV).

Two other small stone figures of Kuvera or Jambhala (heights 2½" and 2¾") deserve to be mentioned here. The smaller one is seen seated on a pedestal resting on overturned vases of plenty with the right foot placed on a similar vase. The right hand holds a lemon, while the left holds a mongoose out of whose mouth pearls are seen falling. The deity is attended by two standing female devotees on either side. Vases, out of which wealth is falling, are depicted on either side of the halo. The back of the image is inscribed with the Buddhist

¹ Notwithstanding the tolerance so characteristic of Ancient India, this assumption is slightly hard to believe. Buddhists, no doubt, could not take part in an *aśvamedha* ceremony and in all the *śikṣā* that followed it. Neither would the Brāhmaṇas tolerate the presence of Buddhists during their ritual.—*Editor*.

creed. The other image is seen seated on a decorated cushion with the right foot resting on an overturned vase of plenty. His right hand is placed on the right knee and holds a lemon, while the left holds a mongoose out of whose mouth pearls are falling. The Buddhist creed is written on the back-slab. Both the images are in an excellent state of preservation. (The difference between the Hindu God Kuvera and the Buddhist deity Jambhala is that a bag of wealth accompanies the icon of the former, while with the latter's images a mongoose must appear.) (Plate CXLI, figs. 11 and 12.)

Among the clay seals and plaques unearthed during 1933-34 there are a few seals bearing personal names such as *Dharagupta*, *Dharmatrāta*, etc. The plaques mostly bear the Buddhist creed formula *ye dharmā*, etc., written below the figures of Buddhas, *chaityas*, etc. Clay seals bearing the inscription *Śrī Nālandā mahāvihārīya ārya-bhīkṣu-saṅghasya* below an emblem of the *dharmachakra* (Wheel of the Good Law) and two deer, were also received during the year. Some of the seals seem to bear quotations from Buddhist texts; and there is one interesting mould of a seal (dia. 2 $\frac{3}{4}$ ") bearing a figure of the Buddha seated in the *bhūmisparśa-mudrā*, and attended by two standing personages, on either side. Six rows of miniature *stūpas* are carved above the figures, and below them is written the Buddhist creed, with three rows of similar tiny *stūpas* at the bottom. There are two vertical rows of such *stūpas* by the side of the figures also (Plate CXL, fig. c, nos. 1 and 2). A *terra-cotta* image of the Buddha (height 7") with the hands held in the *dharmachakra-mudrā* is also interesting. The head of this image was found separated from the neck; the lower portion is missing (Plate CXL, d, no. 3).

Other minor finds include a large collection of moulded bricks (mostly fragmentary) with human and animal figures mainly from Monastery No. 10; iron objects such as padlocks, rings, sockets for door-sills; ivory dice, fragmentary animal bones, etc.

LAHORE FORT MUSEUM.

By Mr J. F. Blakiston.

During the year 1930-31 ten pictures of the Sikh Wars and a portrait of the Mahārāja Dalip Singh were purchased for display in the Museum. Some expenditure was incurred on constructing racks for old muskets etc., and for arranging and exhibiting other articles. (Plate CXLII, d.)

Arrangements have been made at the Museum for the sale of photographs of the principal places in the Lahore Fort, and their sale brought in a small additional income to the Department.

A further addition at a cost of Rs. 120 was made during the year 1933-34 to the collection of coloured views by the purchase of three more prints, viz., (1) of the Fort of Kot Kangra (2) of the Battle of Feroze Shah and (3) of the outpost of Rhodawala. New vellum was fitted to five Sikh drums in the Museum at a cost of Rs. 52.

MOHENJO-DARO MUSEUM.

By Mr E. J. Mackay.

The Museum at Mohenjo-daro, which is remarkably well patronized even by the illiterate, was kept open to the public during the winter of all the four years under review. Every year thousands of visitors, many from abroad, came to see the collections exhibited here.

As the floods of the summer of 1929 had caused a certain amount of damage to the sun-dried brick wall of the Museum, chiefly owing to salt, we have had them cemented inside and out to a height of about 3 ft. above the plinth during 1930-31. At the same time the Museum was whitewashed and the cases, which are far from dust-tight, were cleaned out and the objects re-arranged.

MUSEUMS IN BURMA.

By Maung Mya.

Fresh acquisitions made for the museums in Burma for the years 1930-31, 1931-32, 1932-33, and 1933-34 consisted of inscribed stone slabs, votive objects, such as terra-cotta tablets, stone *stūpas*, sculptures *etc.*, and bricks with epigraphs. Many of them were recovered from the excavated sites at Pagan and Hmawza. The discovery of these objects has already been referred to *supra* in the Report on Exploration.

A few stone sculptures which, owing to their bulkiness had been left at sites excavated in previous years at Hmawza (Old Prome), were removed to the temporary museum west of the Old Palace site there during the Superintendent's visit to the place in December 1933.

CENTRAL ASIAN ANTIQUITIES MUSEUM, NEW DELHI.

Report for the year 1930-31.

By Mr Q. M. Moneer.

All the floor space available in the two galleries of the Section of Minor Miscellaneous Antiquities (Buddhist silk paintings from Chinese Turkistān, and pre-historic and later pottery from Balūchistān) on the first floor of the Imperial Record Department building in New Delhi has already been occupied; only the walls of the North Gallery could be utilized for the exhibition of select examples of the larger sized Buddhist silk paintings brought back by Sir Aurel STEIN from the Chien-fo-tung or "Caves of the Thousand Buddhas", near Tun-huang in Chinese Turkistan. Seventeen paintings representing mostly scenes from the *Sukhāvātī* or "Paradise of the West", and large scale images of Mahāyāna deities were properly mounted and exhibited in the gallery.

These paintings were so fragmentary and tattered that they had to be put through a series of curative and preservative processes before they could be hung up for public view. A method of holding the loose paintings taut on

light open-work wooden frames, papered over on either side, such as is practised in the British Museum, was suggested and practically demonstrated on a couple of pictures by the Archæological Chemist in India, during his visit to the Museum in March 1930. (Plates CXLIII, *a*, *b* and CXLIV, *a*.)¹ The Curator took up the mounting of the remaining 15 paintings. Proper teakwood frames with sheet glass protect these silk paintings against the effects of weather.

During the year 1930-31 two collections, mainly of prehistoric pottery and other miscellanea, were received in the Museum. One of these collections represents the Government of India's share of the ceramic finds and other objects in shell, stone and metal, recovered by Mr HARGREAVES in 1925 from his excavations of ancient mounds at *Sampūr* near Mastung and *Sohr Damb*, Nāl, in the border wastes of Baluchistan. An account of these antiquities has been published in the Archæological Survey of India *Memoir No. 35*. Owing to limitations of gallery space it was not found practicable to devote more than one free standing show case (8"×8"×4") for the display of a representative range of this pottery. Much the greater portion of this ceramic find is now stored in the reserve collection.

The other collection deposited in the Museum in October 1930 consists of the archæological finds made by Mr N. G. MAJUMDAR, Assistant Superintendent of Archæology, in Northern Sind, during the winter of 1929-30. Pending receipt of final orders for its distribution and disposal, this collection is to remain in the custody of this Museum. The entire pottery portion of Mr MAJUMDAR's collection has been thoroughly cleaned by the Museum personnel.

A collection of 593 Kharoshthī documents on wood and leather was also received in this Museum during the year under report. These documents were recovered by Sir Aurel STEIN from different sites in the Niya region of Chinese Turkistan. They are written in an ancient Indian alphabet in a mixture of Prākṛit and a non-Indian language, and they belong to the 3rd and 4th century A.D. Want of suitable exhibition space in the Museum stands in the way of these documents being displayed in the show-cases at present.

During the year under report a list of the entire collection of Central Asian Antiquities (*minus* fresco paintings), as now contained in the Museum, was also prepared and supplied to Mr F. H. ANDREWS, late Officer on Special Duty in this Museum, now in England.

The Museum was well visited, and among the visitors there were a considerable number of foreign scholars.

Report for the year 1931-32.

By Mr Q. M. Moneer.

In the second half of April 1931, when true hot weather conditions set in abruptly, a tendency to shrivel and shrink manifested itself with alarming rapidity in the art board mounts and glazed frames of all the seventy-two Buddhist silk paintings of the small motive banner variety from Chien-fo-tung or "The Thousand Buddhas", which had during the previous cold weather hung smooth

¹ In Mr Arthur WALEY's *Catalogue* (British Museum: 1931) described on pp. 300, 257 and 238 respectively.—*Editor.*

in the double-faced glazed screens in the Gallery of Silk Paintings. In the circumstances immediate release of the pictures from their shrivelled mounts and frames could only save them from irreparable harm. This was followed by a process of straightening each picture and fixing it flat on silk rather than mesh backing in the manner practised by the Archæological Chemist for the treatment of such objects. Almost a thousand years old, each of these 72 objects done in water colours on silk and, where not fragmentary, in an extremely brittle condition, required cautious and skilful manipulation in treatment, so that full five months' sustained work, from May to September 1931, was needed to restore them. During their treatment in the Work Room one of these paintings (Ch. 0030) measuring $2' \times 6\frac{3}{4}"$ long reproduced in Plate LXXVI of *Serindia*, Vol. IV, disappeared from its place on a table where it had been left to dry and set in position under a weight of glass sheets. Even Police investigation, it is regretted, failed to recover the picture, which was, beside the Curator himself, accessible only to the attendants of the Museum. The failure of these attendants to account for the loss of the painting in question exposed them in the eyes of the Police to grave suspicion and although the picture remained untraced—possibly it was destroyed by them—both the attendants had to be discharged from Museum service. The last hope of recovering the picture, if it has escaped destruction, now rests on the co-operation of Museum Curators and better type antique dealers in the country, who have been supplied with a detailed description of the missing picture in order to report to this Department, if any picture answering the description comes their way for purchase or opinion.

The Archæological Chemist during his visit to the Museum in February and March 1932 employed himself in mounting two large sized silk paintings of the Chien-fo-tung series of the famous T'ang era of Chinese Art. These paintings were mere jumbles of painted silk shreds and fragments when taken out of the rolls of untreated pictures lying in the unexhibited collection. The remarkable skill with which these fragments have been reassembled in their original form on a fresh silk lining will be evident from Plates CXLIV, *b* and CXLV, *a*.¹ Lack of space in the galleries does not allow the exhibition of these two pictures and they will, for the present, remain in the reserve collection.

The only addition to the Museum during 1931-32 is the entire proceeds of the archæological tour undertaken by Mr N. G. MAJUMDAR, Assistant Superintendent for Exploration, in certain areas of Sind during the winter season 1930-31. Ten large cases of antiquities recovered on his tour were received for deposit in September 1931. Arrangement has been made to store these boxes in one of the large Work Rooms in the main building, where also the trays containing Mr MAJUMDAR's collection of last year's finds have been transferred. For the methodical assortment of these finds one hundred trays were ordered, but even these proved insufficient.

Some years ago the Government of India had agreed to a proposal of the Trustees of the British Museum to jointly finance the publication of a *Catalogue*

¹ WALEY, pp. 238 and 306 respectively. None of the silk paintings reproduced here have so far been published elsewhere.—*Editor*.

of *Paintings* recovered from Tun-Huang by Sir Aurel STEIN, and now preserved in this Museum and in the British Museum, London. This catalogue was published in London during the year under report. Printed at the Oxford University Press, the catalogue owes its compilation to Mr Arthur WALEY, formerly an Assistant in the sub-department of Oriental Prints and Drawings in the British Museum. Arrangement has been made to keep a few copies ready for sale at the Museum.

The number of visitors during the year under report showed a distinct increase over the previous year's figure. The most distinguished among the visitors of the year were Their Excellencies the VICEROY of India and the Countess of WILLINGDON, who were pleased graciously to pay a private visit to the Museum in both its premises in the afternoon of March 7th, 1932. During his visit to Delhi in November 1931, Sir Aurel STEIN, K.C.I.E., F.B.A., etc., to whose antiquarian researches this Museum owes its existence, spent three days in studying the arrangements made to exhibit and safeguard the collection of his priceless Central Asian finds in New Delhi.

Report for the year 1932-1933.

By Mr Q. M. Moneer.

Though no fresh accessions of antiquities were registered in it during the year 1932-33, the exhibition range of the Museum of Central Asian antiquities has, during that period, been enlarged by the addition of one more room on the first floor of the Imperial Record Department building, Queensway, New Delhi. Formerly used as the reserve collection depository for prehistoric pottery finds from Baluchistan and Sind, this room, now forming the third gallery in the Museum Annexe, shows on its walls seven large Buddhist silk paintings of the T'ang era of Chinese Art, which Sir Aurel STEIN secured from the Keeper of the Chien-fo-tung shrines in the Tun-huang oasis in Chinese Turkistan, during his second journey of exploration in that country between 1906-08.

For want of exhibition space, much the greater proportion of this Museum collection continues to lie stored away in trays and cupboards not ordinarily accessible to the average visitor. For their preservation against decay and deterioration these unexhibited antiquities need constant examination of their condition. During 1932-33 the entire pottery portion of Mr N. G. MAJUMDAR's finds from his reconnaissance survey of ancient mounds in Sind during 1929-30 and 1930-31, was put a second time since its deposit in this Museum through a prolonged process of washing and scrubbing, in order to eliminate the destructive salt efflorescences which were noticed to be re-appearing over many objects. Forming part of the same collection, three separate lots, each comprising more than a hundred potsherds and representing the broken remains of three large vessels, were rejoined by the Curator. (Plate CXLVI.)

The last instalment of the ancient Central Asian textiles which were sent to the British Museum, London, in March 1929, for restorative treatment, were received back in January 1933. This instalment comprised 194 pieces, out of

which 33 pieces, mainly duplicates, have been loaned to the Victoria and Albert Museum, South Kensington, London, under the orders of the Government of India.

The Archæological Chemist in India paid his visit to this Museum in February and March 1933, and finished the treatment and mounting on fresh silk backing of a large Central Asian Buddhist silk painting (Ch. 00452)¹ illustrated in Plate CXLV, *b*. This painting has since been provided with a glazed frame and is now on view in the new gallery opened in the Museum Annexe.

The number of visitors during the year was satisfactory and included numerous foreign scholars as well as groups of students of colleges in Delhi.

Report for the year 1933-1934.

By Dr M. A. Hamid.

I took over charge of the Museum on the 4th August 1933, from Mr Q. M. MONEER. During the year under report I also held charge of the current duties of the post of the Archæological Chemist in India besides those of my own from the 24th December 1933 to the 15th March 1934.

No fresh acquisition of antiquities was registered in this Museum. Six hundred and six selected specimens of pottery brought by Sir Aurel STEIN from Baluchistan and Makran in 1927 and 1928 were despatched, under the orders of the Government of India, Department of Education, Health and Lands, on temporary loan for three years to the British Museum, London, for the purpose of examination and comparison with similar wares from Southern Iran discovered by Sir Aurel STEIN during the last two field seasons.

A glazed wall-case of teak-wood measuring 8'8"×8'×1'9" was purchased during the year for exhibiting antiquities.

The Museum was well visited by scholars from all parts of the world.

CURZON MUSEUM OF ARCHÆOLOGY AT MATHURĀ.

By Rai Bahadur Ramaprasad Chanda.

The Archæological Museum at Mathurā (Muttra) was started in 1881 through the exertions of F. S. GROWSE, with sculptures and inscriptions recovered by him from different mounds round the city, and exhibited in the old Museum building originally intended as "a rest-house for the reception of native gentlemen of rank." Sir John MARSHALL, Director General of Archæology in India, arranged that various local archæological collections, which were often in a somewhat neglected condition owing to want of proper supervision, should be placed under the Superintendents of the Archæological Survey. In this way Dr J. Ph. VOGEL, C.I.E., then Superintendent, Northern Circle (now Professor, Leyden University, Leyden, Holland), came to be connected with the Archæological Museum at Mathurā as Honorary Officer-in-charge. Dr VOGEL not only undertook to compile a Catalogue of the collection, then deposited in the Museum, but also to augment it by all possible means. He succeeded in re-acquiring four Mathurā sculptures with inscriptions which the late Sir Alexander CUNNINGHAM

¹ WALKER'S Catalogue, p. 249.—Editor.

had placed in the Lahore Museum, and the female statue in Gandhāra stone and style from the Saptarshiṭīlā (F. 42), and three inscribed Jaina sculptures from Mathurā which he found in the Delhi Museum. In December 1907, a collection of nearly a hundred Mathurā sculptures, which for many years had been lying in the Public Library at Allahabad, were transferred to the Mathurā Museum at his request. Early in 1908 Lt.-Col. W. VOST, I.M.S., consented to act as an Honorary Curator of the Museum, and the late Rai Bahadur RADHAKRISHNA as an Honorary Assistant Curator. The collection now began to be further augmented by purchases made by Dr VOGEL through Pandit RADHAKRISHNA with funds placed at his disposal by the Director General of Archaeology in India. In 1910 Dr VOGEL published his *Catalogue of the Archaeological Museum at Mathurā* undertaken six years earlier.¹ Very important additions, including inscribed statues of King Kanishka and another Kushāna King were made in 1911-12 as a result of excavations at Mat, Mora, Ganeshra, Jaisinghpura and Katra carried out by Rai Bahadur Pandit RADHAKRISHNA.² After the retirement of Dr VOGEL, Pandit RADHAKRISHNA as Honorary Curator of the Museum went on collecting specimens for the Museum with funds provided by the Archaeological Survey of India. The collection outgrew the accommodation available in the small building and the necessity for a suitable Museum building was felt for a long time. The Government of the United Provinces erected a well-designed Museum building named Curzon Museum of Archaeology in 1928-29. The Committee of Management of the Museum met with some difficulty in getting the very large collection of sculptures and other antiquities exhibited in the new building in a suitable manner, and Mr W. C. DIBLE, I.C.S., Chairman of the Committee, sought the advice of Mr H. HARGREAVES, then Offg. Director General of Archaeology in India. At the suggestion of Mr HARGREAVES a plan for the exhibition of specimens was prepared by Mr A. L. MORTIMER, Consulting Architect to the Government of the United Provinces, in consultation with me. In January 1931 I was deputed to Muttra to supervise the work of re-arrangement entrusted to Rai Bahadur Pandit RADHAKRISHNA, and was engaged there for three weeks.

The building of the Curzon Museum of Archaeology is octagonal in plan, of which five sections only have been built so far. One of these, the western section, has been divided into rooms for accommodating the offices, the library and the reserve collection of specimens. The interior of the other four sections forms a continuous series of courts or halls. As far as possible, exhibits have been arranged in these courts in a chronological sequence, in order to illustrate the development of plastic art in Mathurā. Efforts have been made to display the best and most typical sculptures and carved architectural pieces effectively by excluding ill-preserved and inferior duplicate specimens to avoid over-crowding. Beginning with the west, these courts may be numbered A, B, C and D. In the western half of Court 'A' have been displayed sculptures of the

¹ This was the first important study of the Mathurā school of sculpture; many years later, in 1930, Van Oest in Paris published Dr VOGEL's masterful study, *La sculpture de Mathurā*, doubtless the most comprehensive study of any school of Indian art.—Editor.

² A. S. R. for 1911-12, pp. 120-133.

Sunga period (200-50 B.C.). Among these the colossal statue of the standing Yaksha Manibhadra (?) from Parkham (C.1) occupies the most prominent place (Plate CXLII, fig. a). Behind this statue is placed the upper part of another colossal Yaksha statue of similar type from Baroda of which the back portion only is intact. In the remaining part of Court 'A' and in Courts 'B' (Entrance Hall) and 'C' is displayed the magnificent collection of sculptures and architectural pieces dating from the Śaka-Kushāna period (c. 50 B.C.—200 A.D.). The art of Mathurā of the Śaka-Kushāna period is of great historical importance. In this memorable epoch three different streams of civilization met and mingled at Mathurā, i.e., the indigenous Śunga, the Perso-Hellenistic from Western Asia, and the Śaka or Scythian from Central Asia. A large number of male figures in Scythian costume, including the statues of the Kushāna kings, indicate that the Śaka and the Kushāna invaders were no more copyists, but contributed something of their own to the building of Hindu civilization. Early in this epoch the craftsmen of Mathurā carved for the first time the images of *tīrthāṅkaras* seated in the so-called *panyāṅka*, cross-legged, posture and engaged in meditation.¹ The Buddha type is but the *tīrthāṅkara* with a loin-cloth and upper garment added to it.² In the middle of the Entrance Hall (Plate CXLII, fig. b) are exhibited the three inscribed portrait statues. One of these, to the left of the visitor entering the hall, is the headless standing figure of the *mahārāja rājātīrāja devaputra Kanishka* (the Great King, the King of Kings, the Son of God, Kanishka); to his right is the colossal figure seated on a lion throne of *rājātīrāja devaputra Kushānaputra Shāhi Vama* (or *Vema*).³ On the same side, next to Vema, is fixed the torso of another portrait statue with a fragmentary Brāhmī inscription evidently giving the name. The first letter of this record is ambiguous in form. So the name may be read either *Mastana* or *Chastana*.⁴ The other most prominent exhibits in the western section of the Museum are two inscribed pillars. One of these, in a fair state of preservation, is a *yūpa*, or sacrificial post, installed by a Brāhmaṇa in the year 24 in the reign of the *mahārāja rājātīrāja Devaputra Shāhi Vāsishka*.⁵ The inscription on the other pillar, one of the latest acquisitions made by the late Rai Bahadur Pandit RADHA-KRISHNA with funds provided by the Director General of Archaeology in India, records the endowment of a *punyaśālā* in the reign of the Kushāna Emperor Huvishka.⁶ In the centre of the hexagonal bay between Courts 'A' and 'B' is fixed the famous Bacchanalian group from Pāl Kherā (No. C.2).⁷

¹ A. K. COOMARASWAMY :—*The Origin of the Buddha Image* (*The Art Bulletin*, Vol. IX, No. 4), New York, 1927, p. 37, figs. 4-42.

² This is too simple a solution of a very difficult problem; although I firmly believe that Gandhāra only gave a last push to the development of the Buddha image for which all elements were present in Indian art, I do not think that the *tīrthāṅkara* images had much to do with it. Indeed, the great majority of the Buddha images show the Enlightened One in numerous postures, many of them standing, preaching, admonishing, talking and mixing with people and princes, and those showing him in meditation are, quite rightly, in a small minority.—*Editor*.

³ *A. S. R.*, 1911-12, p. 124, Pl. LIV; K. P. JAYASWAL :—*The Statue of Vema Kadphises and Kushan Chronology*, *J. B. & O. R. S.*, Vol. VI (1920), p. 12; VOGEL :—*La sculpture de Mathurā*, p. 22, plate II, a-b.

⁴ *A. S. R.*, 1911-12, p. 125, pl. LV, figs. 7-8; Benoytosh BHATTACHARYA :—*Statue of Chastana* in *J. B. & O. R. S.*, Vol. VI, p. 51; VOGEL :—*La sculpture de Mathurā*, p. 22, pl. III.

⁵ *A. S. R.*, 1910-11, pp. 40-48, plates XXIII-XXIV.

⁶ *Annual Report on the Working of the Curzon Museum of Archaeology, Multan, for the year ending March 31, 1930*, p. 3.

⁷ VOGEL :—*Catalogue, etc.*, pp. 83-86, plate XIII.

The Jaina sculptures of the Śaka-Kushāna period are displayed in the eastern half of the Entrance Hall (Court 'B'). The most remarkable among these is the famous Tablet of Homage (*āyāga-paṭa*) from the Holi Gate (Q.2) bearing the representation of a *stūpa* with balustrades, a gateway and two dedicatory columns. Other inscribed tablets of homage of the same period recovered from the Kankālī Tīlā at Mathurā by FÜHRER, some of which bear seated figures of the Jinas, are now deposited in the Lucknow Provincial Museum. A few typical tablets from the group may be transferred to the Curzon Museum of Archaeology to complete the collection.

In the centre of the hexagonal bay between Courts 'B' and 'C' is fixed the life-size Nāga image (No. C.13) from Chhargaon near Mathurā. The votive inscription on the back of this image records its installation by two friends, Senahasti and Bhonuka, in the reign of the *mahārāja rājātirāja* Huvishka, in the year 40. Other Nāga figures are exhibited along the walls of the Bay.

The rail pillars of the Śaka-Kushāna period are arranged in three parallel rows in Court 'C' (Plate CXLII, fig. c). A considerable number of these pillars bear figures in Scythian costume. The female centaur (F.1) ridden by a male at the head of the middle row bears witness to Greek influence.

In the hexagonal bay between Courts 'C' and 'D' and against the wall of the hall opposite to the entrance of the bay are exhibited images, one of the Buddha,¹ (No. A.4), and another of a Bodhisattva,² (No. E.6), that mark the transition from the Kushāna to the Gupta art. The best preserved image of the Buddha produced by the artists of Mathurā in the Gupta period (No. A.5), a masterpiece of Gupta art,³ is fixed against the back wall of this bay facing the entrance. The Gupta and the post-Gupta sculptures are exhibited in Court 'D'. Among the architectural pieces of the Gupta period exhibited in this hall is a small pillar with the trident carved on the top and a votive inscription of great historical importance dated in the year 61 of the Gupta era (i.e., A.D. 380), in the reign of the *bhaṭṭāraka mahārāja rājādhirāja Śrī-Chandragupta*, the worthy son (*satputra*) of the *bhaṭṭāraka mahārāja rājādhirāja Samudragupta* and recording the erection of two Śiva temples. This pillar discovered within the city of Mathurā was also secured for the Museum mainly through the exertions of Rai Bahadur Pandit RADHAKRISHNA.⁴ Some of the post-Gupta Brāhmaṇic sculptures are exhibited in the hexagonal bay at the further end of the Court, one of which, an image of Viṣṇu seated cross-legged in meditation, is reproduced in Plate CXXII, fig. c.

¹ VOGEL:—*Catalogue of the Archaeological Museum at Mathurā*, Allahabad, 1910, p. 49, pl. XVa.

² *Ibid.*, p. 107.

³ *Ibid.*, pp. 49-50, plate IX.

⁴ *Annual Report on the Working of the Curzon Museum of Archaeology, Muttra, for the year ending March 31, 1930*, p. 3.

SECTION V.—OFFICERS ON SPECIAL DUTY.

During the four years under report only one officer was placed on special duty. This was Sir John MARSHALL whose special duty had already started on September 6th, 1928; in March 1931 he reached the age of superannuation, but was re-employed, by order of Government, for a further period of five years on special duty.

During the cold weathers of 1930-31 and 1931-32, and for shorter periods during the subsequent two seasons also, Sir John MARSHALL continued to conduct the excavations at Taxila; a summary account of his work at that site is being given *supra* under the heading Exploration and Research.

The primary reason, however, of Sir John MARSHALL's re-employment on special duty was that he should be able to undertake the writing of a series of books on the excavations at the prehistoric sites of Mohenjo-daro and Harappa; on the ancient city of Taxila; on the monuments at Sanchi, Bhopal State; and on the antiquities at Mandu, Delhi, Agra and Multan. During the year 1930-31 Sir John completed the writing and editing of three volumes on *Mohenjo-daro and the Indus Civilization*, published by Probsthain in London at the end of 1931. The Monograph on the monuments at Sanchi (written in co-operation with Mons. A. FOUCHER and Mr N. G. MAJUMDAR) was completed in two volumes, and sent to the press in January 1934. The text of the monograph on the excavations at Harappa was prepared by Mr M. S. VATS, who has been in actual charge of the work since 1926; Sir John MARSHALL has, however, undertaken to thoroughly revise and edit the text submitted to him. As to the monograph on his excavations at Taxila, Sir John has collected all the necessary materials, and he has been engaged since March 1934 (when he left India on leave) in writing this volume. He has also revised his *Guide Books to Sanchi and Taxila*, and both have been already sent to the press. Finally, Sir John MARSHALL has taken notes on the monuments at Agra and Delhi in order to complete his descriptions of these places, and has given instructions regarding the preparation of such drawings and maps as will be needed for the illustration of his forthcoming monographs.

SECTION VI.—ARCHÆOLOGICAL CHEMIST.

By Khan Bahadur Mohammad Sana Ullah.

Report for the year 1930-31.

During the year 1930-31, the total number of antiquities received in the laboratories of the Archæological Chemist for chemical treatment was 1,886, besides 56 miscellaneous specimens for chemical analysis or examination. The work on the preservation of the Buddhist silk paintings in the Central Asian Antiquities Museum, New Delhi, has also been continued and four large paintings (which had been provided temporarily with a paper support) have been carefully transferred on a silk backing and mounted on stretchers, after the Japanese method.

The analytical work included the analyses of copper and bronze objects found in the Indus Valley as well as those from Sir Aurel STEIN's recent tours in Baluchistan. Two more specimens of lime mortar have been analysed, showing again that the ancient Indus Valley people were quite familiar with the use of lime as mortar, although it has been employed only very sparingly. The results are given in the accompanying tables.

Preservation of the Black Pagoda, Konarak.

The problem of the preservation of the famous Black Pagoda at Konarak, Orissa, was referred to me for advice. In my report I wrote: "The sculptures with which this beautiful monument is profusely decorated, are gradually crumbling away and in several places serious damage has already occurred. There are two principal agencies which are responsible for this process of disintegration: (a) the action of lichens and moss with which it is covered to a considerable extent, and (b) the action of the sea-salt which has been deposited in the porous stonework by the sea-breezes Apart from these agencies which are responsible for most of the damage to the sculptures, attrition caused by the sand when strong winds prevail here, as well as the solvent action of the rain-water must also be taken into account." To cope with these evils, I recommended that "steps should be taken, at the outset, to eliminate the overgrowth of the lichens and moss. For this purpose a 3-5 per cent. soda solution will be handy, as it will soften and thus facilitate their removal. After the application of the solution the surface should be scrubbed with vegetable fibre brushes and washed with plain water. When the area thus treated has been carefully freed from the vegetable matter and washed thoroughly, it should be left over to dry completely, till the advent of the hot and dry season. Finally, it should be rendered waterproof by repeated applications of paraffin paste. A suitable fungicide, e.g., creosote, will have to be mixed with the paraffin paste." These measures have since been taken in hand.

Disintegration in the Jami' Masjid, Delhi.

The Imam of the Jami' Masjid, Delhi, has drawn the attention of the Government of India to the problem of the disintegration of the ceiling slabs

of the *dālāns* of this historic and beautiful monument. Formerly the decaying slabs were redressed but the disintegration re-appeared on the new surface, necessitating a repetition of this expedient. In this manner some of the slabs have been chiselled away to such a degree, as to cause anxiety regarding the stability of the roof. I examined the scrapings from the decaying slabs, and found that the principal constituents of the water soluble portion are sodium chloride, calcium nitrate and sodium sulphate, while ammonium, potassium, and magnesium salts are also present though in very small degrees. I, therefore, attribute the disintegration of the stonework to the physical action of these salts. In my report I wrote: "These salts travel to the exposed surface of the stone slabs, through the agency of rain-water, and concentrate there gradually by the evaporation of their solution. It is obvious that the porosity of the layer of concrete, *etc.*, and its salt content would determine the rate and extent of disintegration. For instance, a compact and impervious layer would resist the penetration of rain-water effectively and keep off the injurious salts from the slabs altogether. It is, therefore, possible to explain the variations in the state of preservation of these slabs. The fact, that disintegration has re-appeared on the new surface, is a very strong argument in support of the view that the process is due to the action of the salts." As a remedy I suggested the removal of the uppermost 3" layer of plaster (which was added later), rendering the roof watertight by means of a layer of asphalt on the top, and the application of paraffin paste to the exposed lower surface.

Decay in other Monuments, and its Remedies.

The Archæological Chemist attributes the cause of the decay of the *Bhawani Temple at Barsi Takli*, to (a) the oxidation of the magnetite particles, and (b) the solvent action of rain-water on lime and magnesia which are present as constituents of the stone employed for the temple. Paraffin paste treatment has been recommended for the preservation of this monument.

The case of the *sculptures at Paharpur* is peculiar, as they remain immersed in water for a long time during the rains, and have suffered consequently. It has been decided to render the sculptures thoroughly waterproof, after freeing them from saline matter.

The carved *wooden doors of the Sun Temple at Katarmal*, in the Almorah District, have been treated with a weak sodium arsenite solution followed by 'Cerric' paint.

Paraffin paste has been recommended for waterproofing the roof of the *Bajjnath Temple*.

Experiments were carried out with various stone cements, and a mixture of magnesia and magnesium chloride has been found to be the most suitable for repairing sculptures.

'Wolfite', a new preparation of wax (melting point about 100°C.) has been found useful for hardening plaster casts and imparting an old ivory effect to them. 'Wolfite' is also handy for restoration and repairs of small objects, (*vide Museum Journal*, Vol. 30, No. 1, July 1930, pp. 11-13).

The Archaeological Chemist has recommended suitable measures for the destruction of roots on historic buildings and made suggestions for the preservation of photographic negatives.

Dr HAMID, Assistant Archaeological Chemist, held charge of the field laboratory at Mohenjo-daro from 7th January 1931 till 5th March 1931. He completed there analyses of fourteen specimens of copper and its alloys from Mohenjo-daro and Baluchistan, besides one of löllingite and two of chalcedony

I. Chemical Analyses of Copper and its Alloys, from the Indus Valley and Baluchistan, 1930-31.

Serial number.	Specimen.	Copper.	Tin.	Antimony.	Arsenic.	Lead.	Iron.	Nickel.	Zinc.	Sulphur.	Total.	Analyst.
1	Rectangular rod, No. 5133, Harappa.	97.20	0.84	0.19	0.70	nil	0.98	0.09	..	..	100.00	K. B. Mohammad SANA ULLAH.
2	Dagger point, No. 1208, Harappa.	91.00	6.76	0.44	0.04	0.88	0.74	0.14	..	..	100.00	Do.
3	Fragment of dagger (?), Harappa.	89.88	nil	nil	6.69	2.85	0.40	0.18	..	..	100.00	Do.
4	Fragment of casting of copper, Harappa.	98.32	0.07	nil	0.66	tr.	0.41	0.26	..	0.28	100.00	Do.
5	Copper celt, Harappa	98.36	..	..	1.41	0.11	0.02	0.10	..	..	100.00	Do.
6	Bronze chisel, Harappa	92.61	6.43	0.31	0.36	tr.	0.09	0.20	..	..	100.00	Do.
7	Bronze celt, Harappa.	91.32	7.85	..	tr.	0.20	0.41	0.22	..	..	100.00	Do.
8	Helmet sheet metal, Harappa.	97.69	0.15	tr.	1.19	0.85	0.07	0.05	..	..	100.00	Do.
9	Bronze chisel, Harappa	87.42	10.45	..	1.10	0.52	0.34	0.17	..	..	100.00	Do.
10	Bronze needle, Harappa	88.79	8.75	0.42	0.40	0.10	1.37	0.17	..	..	100.00	Do.
11	Dk 8649, Mohenjo-daro	97.79	0.07	0.77	tr.	0.00	1.24	0.13	..	..	100.00	Dr HAMID.
12	Dk 8663, Mohenjo-daro	65.27	0.01	..	0.81	32.17	1.51	0.23	..	..	100.00	Do.
13	Dk 8969, Mohenjo-daro	98.20	tr.	0.33	tr.	tr.	1.29	0.18	..	..	100.00	Do.
14	Dk 8998, Mohenjo-daro	99.02	0.00	..	tr.	0.00	0.22	0.76	..	..	100.00	Do.
15	Fulcrum bar, No. 9922, Mohenjo-daro.	96.16	0.88	..	2.23	0.10	..	..	..	0.63	100.00	Do.
16	Dk 8725, Mohenjo-daro	99.63	0.00	0.00	0.00	0.00	0.09	0.28	..	..	100.00	Do.
17	Bronze fragment, D. N. d. 21, Baluchistan.	81.45	15.77	0.49	1.39	0.00	0.26	0.09	..	0.55	100.00	Do.
18	Bronze bowl, Mehi III. 6. 3, Baluchistan.	83.66	13.72	0.13	0.19	0.73	0.94	tr.	..	0.72	100.00	Do.
19	Bronze cat-bell, M. NW 1, Baluchistan.	63.80	5.79	2.39	0.48	0.56	1.69	..	24.36	0.93	100.00	Do.
20	Bronze fragment, D. E. i. 47, Baluchistan.	65.43	2.49	0.46	0.34	18.32	0.75	..	11.41	0.80	100.00	Do.
21	Bronze fragments, Mehi III. 7, Baluchistan.	91.73	5.83	0.96	0.26	tr.	0.42	0.25	..	0.55	100.00	Do.

*II. Chemical Analyses of Lime Mortars from Harappa.**By Khan Bahadur Mohammad Sana Ullah.*

Specimen.	Calcium carbonate.	Magnesium carbonate.	Sand and soluble salts.	Water.
Lump	56.01	4.81	34.85	4.33
Floor T. I.	26.50	8.46	61.60	3.44

*III. Chemical Analysis of löllingite from Mohenjo-daro.**By Dr M. A. Hamid.*

Iron, 52.47 per cent.; Arsenic, 30.92 per cent.; Insolubles, 2.38 per cent.

IV. Chemical Analyses of Specimens of Chalcedony from Taxila.

Sk 1550. Silica, 89.9 per cent.

Sk 1350. Silica, 86.06 per cent.; Alumina and Ferric Oxide, 4.79 per cent.; lime, 7.56 per cent.

Report for 1931-32.

During the year 1931-32 881 antiquities of various kinds were sent to the Archaeological Chemist for their preservation and restoration by chemical treatment. Most of these were metallic objects from the excavations or museums. The work on the preservation of the Buddhist silk paintings in the Central Asian Antiquities Museum, New Delhi, was also resumed during the winter season, and two more large paintings have been finished, after the Japanese style, as before. Forty-six specimens, consisting of metals, alloys, mortars, stone, minerals, fats, etc., were received by me for chemical analysis or examination; and the evidence obtained by this means was very interesting in certain cases.

Examinations and Analyses.

The examination of a white substance found sticking to the sides of certain faience and terra-cotta flasks, which have been unearthed at *Harappa*, showed that it was carbonate of lead, which must, therefore, have been its chief constituent. It is well known that lead carbonate preparations were employed in ancient times by women, for 'making up' their faces, and as medicines.¹ There is little doubt, therefore, that this substance, which was so carefully kept in

¹ *PLINY'S Natural History*, XXXIV, 176.

these dainty flasks, was employed for similar purposes in the Indus Valley also. A quantity of grease discovered in the course of excavations, at the *Shivneri Hill near Poona*, has been identified as cocoanut oil. The examination of a black powder from the same site, which was found sticking inside some fragmentary iron pipes, revealed that it was a mixture of charcoal and sulphur. This leads, obviously, to the inference that it consisted originally of gun-powder, which has since been deprived of its nitre by the solvent action of rain-water percolating through the *débris*. Another interesting specimen was a *silvery bangle found at Taxila*. The analysis of the material showed that it was an alloy of copper and nickel, the latter constituent being 19 per cent. It is very probable that this alloy was imported into India during the time of the Bactrian kings to be used for coinage and jewellery; and that it was prized on account of its close resemblance to silver. The analysis of a specimen of mortar from a concrete flooring discovered at *Harappa* showed that lime mortar free from gypsum was used early at this site. Another specimen of gypsum mortar which has been employed there for pointing, has also been analysed and found to be free from lime.¹ The results of the various quantitative chemical analyses carried out during this year are given in the tables that follow.

The Asoka Pillar in New Delhi.

In March the Director General of Archæology and the Archæological Chemist inspected the Asoka pillar at Kotla Firoz Shah, Delhi, with a view to devise measures for its preservation against atmospheric decay; but the matter, which is of considerable importance, is still under investigation.

New Stone Preserving Preparations.

Under the instructions of the Director General of Archæology trials with 'Szerelmey', Paraffin-wax paste and another preparation (manufactured by Messrs. Vohra & Co., Ahmedabad) which it is claimed preserves stone from decay of all kinds, have been carried out on small portions of the decaying stone walls of Humbyūn's Tomb, New Delhi. The results are being watched with interest.

As it is considered necessary that the excavation staff should be acquainted with simple preservative methods for treating without delay the most common materials found during excavations, like pottery, stone, *etc.*, a detailed memorandum on this subject has been drawn up by me and issued to the various Circle Officers for their guidance. Several enquiries from the Officers of the Department have, as usual, been received by the Archæological Chemist, for guidance on various technical matters, and show an ever growing appreciation of the value of scientific chemical methods. Necessary instructions were issued by me for the preservation of burnt birch-bark manuscripts, cleaning of sculptures coated with incrustations, paints, smoke, or colours; control of bees and other pests; preservation of woodwork; *etc.*

¹ Cf. A. S. R. for 1929-30; and the Chemist's report for 1930-31 published herewith *supra*.

I. Chemical Analyses of Objects of Copper and its Alloys, 1931-32.

Serial number.	Specimen.	Copper.	Tin.	Arsenic.	Antimony.	Lead.	Nickel.	Iron.	Zinc.	Sulphur.	Analyst.
1	Spear-head (J 125, Harappa).	97.66	0.33	0.06	nil.	0.70	0.14	1.11	..	..	Mohd. SANA ULLAH.
2	Neck of a vase (1915-284, Taxila).	55.39	4.25	..	0.26	3.08	0.40	1.77	34.34	..	Do.
3	Base of a statue cast (Taxila).	77.47	21.72	0.25	..	..	..	0.63	..	..	Do.
4	Bronze bowl (Sk 1115, Taxila).	75.54	23.20	0.28	0.30	..	0.49	..	..	..	Do.
5	Umbrella (Ch 283, Taxila).	98.11	..	0.18	0.28	tr.	0.08	0.47	..	0.88	Dr M. A. HAMID.
6	Plate (Sk 1779, Taxila).	98.93	..	tr.	0.16	..	0.52	0.17	..	0.22	Do.
7	Sheet (Sk 2194, Taxila).	98.13	..	0.23	0.59	..	0.30	0.24	..	0.51	Do.
8	Stand of a goblet (Sk 1015, Taxila).	80.98	15.03	0.10	0.13	2.59	0.27	0.09	..	0.81	Do.
9	Rod (F 556, Taxila).	76.50	9.39	0.25	..	12.71	0.05	0.21	..	0.89	Do.
10	Rod (Bm 558, Taxila).	87.24	8.28	0.55	0.46	0.94	0.91	1.23	..	0.39	Do.
11	Bangle (Bm 290, Taxila).	78.50	0.64	tr.	..	..	19.00	1.54	..	0.32	Do.
12	Ear cleaner (Bm 275, Taxila).	97.11	..	0.25	0.09	0.20	0.29	0.70	..	0.46	Do.

II. Chemical Analyses of Mortars from Harappa, 1931-32.

Serial number.	Specimen.	Gypsum.	Calcium carbonate.	Magnesium carbonate.	Clay and Sand.	Water.	Analyst.
1	Pointing of Circular platform (Sq J 12/20, E wall, Harappa).	56.90	0.94	..	42.16	..	Mohd. SANA ULLAH.
2	Lime mortar from concrete floor (Harappa).	traces	37.63	2.18	59.29	0.90	Do.

Report for 1932-33.

At the commencement of the year 1932-33 the Archæological Chemist had to visit Mohenjo-daro and Harappa, to wind up the field laboratories which were set up at these sites in 1925 for the preservation of the antiquities found there in the course of excavations; these laboratories were lying in disuse as a result of the suspension of operations in the Indus Valley for an indefinite period. The total number of antiquities of various kinds received this year for chemical treatment amounted to 1,027. The Archæological Chemist was, therefore, fully occupied at his headquarters with the chemical treatment of this large number of antiquities sent from Nālandā; the Indian Museum, Calcutta; Sārnāth; Harappa, and other places.

Activities in Delhi.

Early in October I was able to leave for Delhi to start the overhauling of the fine collection of Mughal paintings and illuminated manuscripts in the Fort Museum, which are badly in need of preservation. The treatment generally consists of the elimination of a variety of stains and the fixation of the loose colours. Organic solvents, ammonia, hydrogen peroxide, and Chloramine-T have been used for the removal of the stains; and vinyl acetate for the impregnation of the layer of pigments. The paintings were then fumigated with thymol vapour to sterilize bacteria and fungi, and finally mounted on pure pulp boards. Altogether 43 of these paintings have thus been treated so far. During this cold season I have also mounted another large Buddhist silk painting in the Central Asian Antiquities Museum collection in the Japanese style and some more of these were coated with vinyl acetate for strengthening their weakened fabric and fixing the loose pigments.

Visits to Patna and Calcutta.

Early in November, I visited Patna Museum, to examine the important collection of bronze figures found at Kurkihar, Gaya District, in order to advise the Curator and his Chemist regarding their cleaning and preservation. Subsequently I proceeded to Calcutta in connexion with the problem of the deterioration of lead coins which has been attributed to the injurious acids given off by the wood of the cabinets and the paper envelopes. Steps have been taken now to transfer all the lead coins in all-metal cabinets free from woodwork. At the same time questions regarding the preservation of the Pearce Collection of Indo-Greek gems, the Sibsagar monuments, and the stone images at Paharpur were discussed with the Superintendent, Eastern Circle.

How to treat the Main Stūpa at Nālandā.

On the return journey, I made a brief halt at Nālandā, to study the problem of the deterioration of the stucco reliefs which adorn the Main Stūpa. In my report on the subject I attributed this to the action of salts. "It appears that the soluble salts which were present in this structure have been gradually drawn to the surface through its wetting and drying alternately, according to the changes of weather. The concentration of the salts at the surface is evidenced by their efflorescence and the numerous cracks. As water is essential for the movement of the salts, therefore it is absolutely necessary to protect the whole structure against rain by means of suitable sheds; waterproofing of the plaster alone will not be sufficient. The application of vinyl acetate, which has been recommended by Sir Alexander Scott, is necessary also, as this would render the surface hard and waterproof, but before the application of vinyl acetate it is very desirable to reduce the concentration of the injurious salts, as far as possible. For this purpose, it will be necessary to apply wet blotting paper (or pulp) to the surface and to take it off when dry. By a repetition of this simple process enough of the salts can be eliminated."

The Stone Relievoes at Paharpur.

Dr M. A. HAMID, the Assistant Archæological Chemist, was deputed to Paharpur during this winter season for the preservation of the stone relievoes which adorn the *stūpa* there. After his return he reported as follows: "The images at Paharpur are, on the whole, in a well preserved condition. They are sixty-three in number. Thirty-four of these were very carefully taken out and put back after preservation, others were preserved as such. They were not found to contain any salts. I do not think it is desirable that these images should be removed for washing purposes as their removal might necessitate the complete destruction of the ornamental brickwork with which some of them are surrounded."

Muttra Museum.

At the special request of the Curator, Curzon Museum of Archæology, Muttra, I paid a brief visit to that famous collection, in order to advise him regarding the restoration and preservation of some of the antiquities. It has consequently been proposed that the Curator should be deputed to receive practical training in our laboratory at Dehra Dun in such simple methods as do not require much chemical knowledge. Subsequently I intend to carry out myself the more difficult part of the work.

Chemical Analyses.

The specimens of various kinds received for chemical examination or analysis numbered 75 and the results of the latter are given in the tables that follow. Six more specimens of bronze from *Taxila* have been analysed for Sir John MARSHALL, and these indicate the use of lead in this alloy for casting purposes. Four interesting objects from *Harappa* have also been analysed and the results point to a sparing use of tin as a hardening ingredient in bronze; although the composition of the needle (or awl) leaves no doubt that the Indus people were well aware of the right proportion required for sharp tools. The analyses of three bronzes from *Adichanallur*, on the other hand, point to the abundant supply of tin in late times. A soft blue earth, with a soapy feel, which was found at *Harappa*, has been analysed and it is evidently a variety of Fuller's earth (locally known as *multānī mattī*) probably employed as a detergent for washing hair, etc. A specimen of green earth, also from *Harappa*, appears to be identical with the natural material found in the crevices of trap rocks of the Peninsula, and it was probably employed as a pigment for colouring pottery, etc. A similar specimen actually obtained from Bhaja near Poona, has also been analysed for comparison.

A seal of a very friable white material, found at *Harappa*, was analysed and identified as talc. As this mineral in its natural condition is compact and translucent, strongly resisting decomposition by the action of water, its present friable condition leaves no doubt that the original seal must have been ignited for hardening it. The original material had been deprived of its combined water by the ignition but it has been regained through the long period

of its interment in the moist soil, the material becoming soft through these chemical changes. A dirty white material covering a drain at the same site was found to consist of calcium phosphate and carbonate. As the employment of phosphate mineral for the manufacture of mortars is inconceivable, it appears most likely that ordinary lime plaster has undergone transformation by the action of phosphatic waters which could only have been derived by the decomposition of animal bones present in the soil.

I. Analyses of Copper and its Alloys from Taxila, Harappa, and Adichanallur, 1932-33.

By Khan Bahadur Mohammad Sana Ullah.

Serial number.	Description and origin.	Copper.	Tin.	Antimony.	Arsenic.	Lead.	Nickel.	Iron.	Zinc.	Total.
1	Sk '20-318, Lion, (Taxila) . . .	83.75	7.34	..	0.20	5.42	0.78	1.94	..	99.43
2	Dh '30-20, Bangle, (Taxila) . . .	76.75	2.58	..	..	6.33	0.11	..	13.07	98.84
3	Sk '30-159, Cock, (Taxila) . . .	83.35	5.62	..	..	0.61	1.00	0.56	..	100.14
4	Bm '30-916, Bowl, (Taxila) . . .	76.76	21.55	..	0.16	..	0.48	0.95	nil.	99.90
5	Sk '16-252, Spout of a pot, (Taxila) . .	77.45	0.74	..	0.24	18.65	0.43	0.56	tr.	98.07
6	Celt No. 277, (Harappa) . . .	98.37	nil	..	1.40	0.11	0.10	0.02	..	100.00
7	Needle or Awl 150 A (6), (Harappa) . .	88.35	9.16	0.42	0.42	0.10	0.18	1.37	..	100.00
8	Saw 277 g/2, (Harappa) . . .	98.12	0.33	..	0.65	0.10	0.39	0.41	..	100.00
9	Chisel 277 k/3, (Harappa) . . .	94.92	3.60	..	0.60	0.20	0.29	0.39	..	100.00
10	Pot No. 64, Adichanallur, (Madras Museum)	75.03	23.50	..	..	nil	0.45	0.44	..	99.42
11	No. 94, Adichanallur, (Madras Museum) .	80.24	18.45	..	..	0.69	0.28	0.34	..	100.00
12	No. 95, Adichanallur, (Madras Museum) .	80.34	18.46	..	..	0.59	0.28	0.33	..	100.00

II. Analyses of Coloured Earths and a Decomposed Seal from Harappa, 1932-33.

By Khan Bahadur Mohammad Sana Ullah.

Serial number.	Description and origin.	Silica.	Alumina.	Titanium oxide.	Ferrie oxide.	Lime.	Magnesia.	Soda.	Potash.	Water combined.	Moisture.
1	Blue earth No. 2764, (Harappa) .	57.89	18.70	0.88	4.38	0.35	2.93	0.38	9.80	4.32	1.97
2	Green earth No. 7443, (Harappa) .	49.59	15.27	..	7.95	7.95	4.31	..	..	10.50	2.82
3	Green earth, Bhaja, Poona District .	54.10	11.90	..	11.79	2.01	3.98	..	..	6.58	5.61
4	Decomposed seal, (Harappa) . .	61.36	1.08	..	..	0.46	33.24	..	..	4.65	..

Report for 1933-34.

In the year 1933-34 the antiquities received by the Archaeological Chemist for chemical treatment and preservation amounted to 1,906. Most of these were metallic including the important and unique lot of 89 bronze figures found in the previous year at Nālandā as well as a copper casket discovered at Mohenjodaro containing gold and silver jewellery, a very large number of badly corroded beads of semi-precious stones and a girdle of tubular red carnelian beads. In addition to these, about sixty specimens of various materials were sent to me by the departmental officers for chemical examination or analysis. These comprised metals, alloys, faience, pottery, mortar, glass, decaying stone, and certain commercial preparations for use as insecticides or removing old paint.

Analyses of Metals and Beads.

In old Sanskrit literature an eight-metal-alloy, called *ashṭa-dhāta*, is often mentioned, and there can be no doubt that this was employed for casting sacred images. Several specimens of castings from Paharpur and Nālandā have been examined with a view to ascertain their composition. The analysis of a heavy lump of casting metal found at the former site showed that it was composed of copper, tin and zinc principally, with minor proportions of lead, nickel and iron. The examination of specimens of figures from Nālandā also showed that they were mostly composed of copper, tin, zinc and lead but some were free from tin. It is noteworthy that precious metals (i.e., gold and silver) were entirely absent in all these specimens although these two metals are mentioned in the texts referred to above as part of the eight-metal-alloy. Their omission by the old artisans might have been a matter of economy so as to enable them to reap rich profits; but it is more likely that they had gained better knowledge of the technique of casting copper alloys and had arrived at certain compositions which were more suitable for such purposes, bringing down at the same time the cost of the images also so as to suit the pocket of the average donor.

Some beads of opaque red material, which were also found at Nālandā, have been analysed by the Archaeological Chemist with the following results:—

SiO₂, 61.50 per cent.; Al₂O₃ etc., 9.82 per cent.; FeO, 7.01 per cent.;
CaO, 5.20 per cent.; MgO, 0.06 per cent.; Na₂O+K₂O, 15.92
per cent.; Cu₂O, 0.49 per cent.; total, 100.00.

It is obvious that this is a variety of glass or paste, which owes its colour to the presence of ferrous silicate and cuprous oxide. No such material has been discovered elsewhere in India so far, and it appears to have served as an imitation of coral.

Preservation Problems.

The problem of the preservation of the monuments at Sibsagar (Assam) is beset with great difficulties on account of the prolonged and excessive rains prevailing there. Consequently their exposed surface never gets sufficiently dry for treatment with water-proofing materials. In the previous years, however, trials were made on some of these monuments with paraffin paste by the Executive

Engineer, Public Works Department, Lakhimpur Division; but the results have not been satisfactory. This year a solution of vinyl acetate in toluene has been employed, as an experimental measure, and the results will be watched with interest. Vinyl acetate solution has also been employed for the preservation of the decaying stone in the soffit of the dome of Makhdum Shah's tomb at Maner, Patna District.

The General Secretary of the Mahabodhi Society expressed some anxiety regarding the safety of the sacred relics, probably of the Buddha, which the VICEROY and Governor General of India has presented to the newly erected Mūlagandhakūṭi Vihāra at Sārnāth, and approached the Director General of Archæology in India for our expert advice in the matter. I was, therefore, deputed to Sārnāth in December 1933, to study the problem and to give suitable advice to the General Secretary, Mahabodhi Society. The relics, which were kept in the subterranean vault of the Vihāra, were suffering from the excessive dampness which prevailed inside, due undoubtedly to the absence of any provision for proper ventilation in the chamber. The Archæological Chemist has recommended that the relics should be transferred immediately into a dessicator; and that steps should be taken to stop the access of moisture from the masonry around, by lining its walls and flooring of the vault with glazed tiles.

Practical Chemical Instruction given to Officers.

Necessary training for the preservation of terra-cotta and stone objects was given to the Custodian of the Sārnāth Museum. Mr V. S. AGRAWALA, Curator, Curzon Museum of Archæology, Muttra, also received instruction in the laboratory of the Archæological Chemist at Dehra Dun, for the cleaning and preservation of copper coins, pottery and stone antiquities.

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SECTION VII.—TREASURE-TROVE.

Report for the year 1930-31.

Panjab. Two finds of coins were reported in the Panjab during the year 1930-31. These consist of 187 copper coins of Sher Shāh and Islām Shāh of the Suri dynasty and of Akbar which were found in Tahsil Pakpattan in the Montgomery District, and 43 silver rupees and 160 billon coins discovered at the village of Mehiana, Tahsil Sonapat, District Rohtak. The silver rupees are of 'Alāu-d-Dīn Khaljī and his son and successor Qutbu-d-Dīn Mubārak Shāh Khaljī, while the billon pieces include the known types of Mu'izzu-d-Dīn Muḥammad bin Sām, Ghiyāthu-d-Dīn Balban, 'Alāu-d-Dīn Khaljī, Mubārak Shāh Khaljī, Ghiyāthu-d-Dīn Tughlaq and Muḥammad Shāh Tughlaq. A copper coin of the Muhammadan period was found in the course of clearance of silt from the Suraj Kund in the Gurgaon District and sent to the Numismatist of the Panjab Government for report.

The hoard of 340 silver rupees discovered last year at Sargodha and referred to in the *Annual Report for 1929-30* (p. 212) included a rupee of Shāh Jahān of a new type. It was struck in the 25th regnal year of that Emperor and minted at Junir in 1060 Hijra. It bears on the obverse the name of the ruler with the title Shihābu-d-Dīn Ṣāhibqirān Ṭhānī and the name of the mint on the border. The reverse contains the Muslim creed and the Hijra year, the borders being occupied by the names of the four Khalifahs. The mint of Junir, modern Junnar, 57 miles north of Poona, is not mentioned in any of the published catalogues of coins and its name has probably not been noticed so far on any other coin. It was during his stay at Junir that Shāh Jahān received the news of his father's death, which was communicated to him by his father-in-law, Asaf Khān, through a runner named Benarasi.¹

N. W. F. Province. No finds of treasure-trove were reported in the N. W. F. Province. The 533 coins of Kushāna date referred to in the *Annual Report for 1925-26* (p. 167) have since been cleaned and distributed among the principal museums in India in the order of precedence prescribed in the Distribution List of Treasure-Trove Coins.

Bihar and Orissa. The 254 punch-marked coins of silver found at Trogna and noticed in the *Annual Report for 1925-26* (p. 168) have been distributed to the principal museums; so also the gold and silver coins and other miscellaneous objects found at Halipal and mentioned in the *Annual Report for 1927-28* (p. 183). They all belong to the Muhammadan period. The 38 punch-marked silver coins found in the Jalloy Police Station area in the Darbhanga District and referred to in the *Annual Report for 1928-29* (p. 159) have also been distributed to the principal museums of India.

An interesting discovery of treasure-trove not consisting of coins was made by a local Zamīndār of Kurkihar, about 16 miles from Gaya, in one of the cells

¹ *Elliot's History of India*, Vol. VI, p. 437; *Khulāsat-i taṣwīr* of Sujan Rai BHANDARI, edited and published by Maulvi ZAFAR HASAN, 1918, pp. 282 and 284.

of a Buddhist monastery. The Archaeological Department has recommended the acquisition under the Treasure-Trove Act of the entire find consisting of 223 bronze and other metallic figures of the Buddha, Bodhisattvas and other gods and goddesses and the declaration of the site as protected under Section 3 of the Ancient Monuments Preservation Act (VII) of 1904.¹

A mutilated headless stone image was found on the bank of a tank at Chamui Sahi, Cuttack town. Another find of five maunds of cowries was made in a mound at Mohandih, some five miles from Sitamari. All the cowries belong to the "chitti" or "flat" variety and seem to have been used as ordinary currency. The mound at Mohandih is only 2 to 4 feet high above the surrounding fields but covers an area of about ten *bīghās*.

Eastern Circle. The following cases of treasure-trove were dealt with during the year under record.

One gold and two silver coins received from the Political Agent in Bundelkhand were examined by the Superintendent, Archaeological Section, Indian Museum. The gold coin was minted at Constantinople in 982 A.H. (1574 A.D.) by Murād III, a Turkish Sultan. The two silver pieces dated in the years 993 A.H. (1584 A.D.) and 998 A.H. (1589 A.D.) respectively were of the Mughal Emperor Akbar.

Two important finds not consisting of coins deserve special mention. One of these is an image (*circa* 11th century A.D.) of Varāha Vishṇu (Boar incarnation of Vishṇu) in black stone, measuring about 3' 8" × 1' 11", which was brought to light in the course of digging in an old tank at Salimpur, about 2 miles to the south-west of the town of Bogra. The deity (Plate CL, *b*) has a human body and boar's head wearing a *kirita*. He is represented in the *ālīḍha* pose with his right foot resting on the tail of the three-headed serpent Śeṣha, and the left on a full-blown lotus held up by a figure of Nāginī, the wife of Śeṣha.

¹ When writing these lines (June 1935) the Local Government have not yet acquired the hoard of bronzes under discussion; the bronzes have been chemically cleaned and restored by the Archaeological Chemist of this Department; photographed by the Superintendent, Central Circle; placed provisionally in the Patna Museum; and an article has been published on them by Mr K. P. JAYASWAL in the *Journal of the Indian Society of Oriental Art*, Calcutta, Vol. II, No. 2, pp. 70-77, to which an exhaustive *Note* of great interest is attached by Frau Dr Stella KRAMRICH, pp. 77-82. These two articles are illustrated by 27 figures. In view of the outstanding importance of this find the Editor felt himself justified in publishing 27 objects now deposited in the Patna Museum, four only of which have so far been published. Mr JAYASWAL very kindly placed at my disposal photographic prints out of which four have been chosen for reproduction (Plate CXLVII, *a-c*). I wish to record here my gratitude for his generous co-operation with this Department. These four objects comprise an image of the Bodhisattva Avalokiteśvara (fig. *a*); a crowned standing image of the Buddha (fig. *b*); a two-armed, seated image of the goddess Tārā (fig. *c*); and a seated image of a Bodhisattva identified by Mr JAYASWAL as a Lokanātha (fig. *d*). The rest of our photographs have been made by the Superintendent of the Central Circle. They illustrate some excellent examples of the plastic art of the period ranging from the 7th to the 12th century A.D. Crowned Buddhas are illustrated in Plate CXLVIII, figs. 1, 3, 9, and Plate CXLIX, figs. 9, 10 and 11, testifying thus to the spread of this type in later times. These images vary very much in quality; the last named two are, *e.g.*, of a very inferior craftsmanship and style, whilst the first two are remarkably fine pieces. Buddhas in the *abhaya-mudrā* are abundant in the hoard (Plate CXLVII, figs. 2, 4, 5, 6, 7), all without crowns, in the traditional attire of the *bhikkhu*, with spirally curled hair-locks, cranial protuberance (in one case pointed like a spire), and the other *mahā-puruṣa-lakṣaṇas*. The image illustrated in Plate CXLVII, fig. 5, can justly claim to be a masterpiece in the tradition of the Gupta times, though undoubtedly somewhat later. A seated Buddha in the earth-touching attitude with an elaborate background is shown in Plate CXLIX, fig. 8; a perfectly barbarous four-armed Tārā next to it, with which the charmingly bent figure of the same goddess (?) in Plate CXLIX, fig. 3, and the other lady standing as stiffly as a soldier in Plate CXLVIII, fig. 7, form vivid contrasts, and speak of great difference in time and quality. Altogether the hoard is a very mixed one; a few objects of great skill include a slender *stūpa* and an inscribed bell, evidently for religious use (Plate CXLVIII, figs. 10 and 11). Readers' attention is invited to the excellent discussion given by Dr KRAMRICH in the article referred to above; and especially to the important list of dated sculptures of the period between 670 and 1188 A.D. which she publishes at the end of her paper. The Kurihar bronzes together with the magnificent find of Nālandā published with this *Report* will considerably strengthen our knowledge of early mediæval sculpture in Central and East India.—*Editor*.

The intertwined tails of the Nāga couple are resting on a double-lotus pedestal. The deity holds the usual attributes of Vishṇu, of which the lotus is so arranged as to form a canopy over the head of the image. The female figure holding a *nīlotpala*, seen to the left shoulder of the deity with her legs supported on his *chakra* (discus), must be the goddess Prithivī. This sculpture together with two other fragmentary images of Sūrya (Plate CL, a) recovered by the Archaeological Superintendent in a village named Jora, west of Bogra town, have been loaned for exhibition to the Varendra Research Society's Museum, Rajshahi.

A carved stone pedestal, a lintel, a Digambara Jaina image and a stone Siva-*linga* with Nandi were found in the villages Kantabenia and Karangoli, Sub-Division Diamond Harbour, District 24 Parganas. It has been recommended that these antiquities may be acquired under the Treasure-Trove Act.

Particulars of another discovery made in the *garbhagriha* of a Śiva temple at Govindpur in the Sundarbans, District 24 Parganas, were supplied by Mr Kalidas DATTA of Jayanagar-Mozilpur. This comprised four stone images of Vishṇu and a figure of Naṭarāja (ht. 3' 1") (Plate CL, c). The latter is an interesting piece of sculpture. The god wears an elaborate headdress, a garland of skulls and other ornaments, and has ten hands of which the two normal ones express the rhythm of dance. Of the weapons the sword, trident, *damaru* and lance can be recognised in the right hands, and the staff marked with a skull (*khaṭvāṅga*), noose, shield and skull-cup in the left extant hands. The bull, the vehicle of the deity, has fine trappings and is shown standing on a double-lotus pedestal looking, in a somewhat unhandy way, in the face of its lord. On both sides of the bull are depicted musicians playing on a drum and cymbals, while other *ganas* including Gaṇapati and Bhṛṅgī are represented as dancing in an ecstatic mood. The sculptures may be assigned to the 10th or 11th century A.D. They have been notified as protected under Section 18(1) of the Ancient Monuments Preservation Act (VII) of 1904.

Southern Circle. Treasure-Trove cases in the Madras Presidency are now dealt with by the Superintendent, Madras Museum, and the following account is taken from his report for the year 1930-31.

12 finds of coins were reported in the Presidency under the Treasure-Trove Act. These comprise: 2 gold coins of three Swami Pagoda of the Vijayanagara dynasty, which were found along with 89 gold fanams in a field at Se. Gangambat in the Chengam taluk of the North Arcot District; 13 gold coins of the same dynasty from the Sirugappa Channel of the Bellary District; 598 South Indian gold fanams from Kiloy, Sriparumbadur taluk, Chingleput District, and Thevayyur, Perambalur taluk of Trichinopoly District; 293 gold Virarāya fanams of five varieties found at Kadambazhipuramamsam, Walluvanad taluk, Malabar District; 36 fanams of Rāmarāja from Vadanerkanam, Tindivanam taluk, South Arcot District; 5 gold *mohurs* and four gold coins of the Delhi Sultans from the districts of Kistna and Bellary; 25 silver coins of Tippū Sultān, five silver issues of the French East India Company and 24 silver pieces of Shāh 'Ālam II from Attayampalayam, Erode taluk, Coimbatore District; 34 copper coins of Muḥammad Shāh, Shāh 'Ālam II and Akbar Shāh II from Ramakrishnampatti, Uttankarai taluk,

Salem District, and a large number of copper coins issued by kings of various dynasties from Hiramandalam, Parlakimedi taluk, Ganjam District. Besides these, five copper images of Durgāmbā, Kṛishṇa, Venugopāla, Rukmiṇī and a *chauri*-bearer of various sizes were found in the districts of Nellore and Tanjore. Three images of Somaskanda, Umāsahitamūrti and Chandikeśvara were brought to light at Nidur village, Mayavaram taluk, Tanjore District. A broken copper plate of the Eastern Chalukya king Guṇaka Vijayāditya, son of Kāli Viṣṇuvardhana, recording a grant of land to Brāhmaṇas was found in the Vizagapatam District. The language is Sanskrit and the script the Telugu-Kannāḍa of the 9th century. Another copper-plate inscription of a Chālukya king, Arikesari, recording the grant of the village Belmogum in Ramaduvishaya to a Śaiva teacher of Elesaram deserves mention. It was found at Kollipara, Guntur District, some 20 years ago and has now been acquired for the Archaeological Section of the Madras Museum during the year under record. The language is Sanskrit and the script Telugu-Kannāḍa. The date, which appears to be recorded in the Kāli era, is equivalent to 1020 A.D.

Report for the year 1931-32.

Panjab. Khan Bahadur Maulvi ZAFAR HASAN, Numismatist to the Government of the Panjab, reports as follows: "Three finds as detailed below were reported during the year under review. (a) Two silver rupees and 29 copper pice discovered at the Government Agricultural Farm, Fatna, in the district of Montgomery; (b) Seven silver and 2190 billon coins discovered at the village of Ghamrauj, Tahsil and District Gurgaon; (c) Sixty silver rupees discovered at the village of Thikrivala, Tahsil Batala, District Gurdaspur.

"The coins found at the Fatna Agricultural Farm are common and well-known types of the Emperor Akbar. The find from the village of Ghamrauj consists of issues of the early Muslim Kings of India. Out of these one silver and 1645 billon coins bearing Sanskrit legends and Hindu devices have been transferred for disposal to Mr Madho Sarup VATS, Honorary Numismatist to the Panjab Government for Hindu coins, while the remaining 6 silver and 545 billon coins with Muslim legends have been retained by me and are under examination. This collection includes issues of (1) Muḥammad Bin Sām (2) Maḥmūd Bin Muḥammad Bin Sām (3) Tāju-d-Dīn Yalduz (4) Shamsu-d-Dīn Altutmish (5) Rāzīa Sultāna (6) Nāsiru-d-Dīn Qabācha (7) Saifu-d-Dīn Al-Ḥasan Qarlagh and (8) Ghiyāsu-d-Dīn Iwaz of Bengal, but none of them can be called rare. One of the coins found at the village of Thikrivala is a silver rupee of Ahmad Shāh Durrāni's and the remaining 59 of the Mughal Emperor Muḥammad Shāh. They are of the usual types and do not call for any particular comment.

Bihar and Orissa. The Deputy Commissioner of Hazaribagh reported the discovery on the 15th of February, 1931, of 48 silver coins of the time of the Mughal Emperors by five persons named (1) Mitua Bhogta (2) Chamana Bhuia (3) Sanichara Munda (4) Pardhanwa Munda and (5) Mutra Munda, while excavating an embankment in Kapurtala, in the village of Ramgarh, situated within the jurisdiction of Ramgarh Police Station for one Pachkowri Sahu of

the same village. The Treasure-Trove Officer recommended their acquisition at Rs. 31 which the Local Government accepted. The Treasure is kept in the Coin Cabinet of Bihar and Orissa pending further orders of the Government about their distribution to the other Coin Cabinets.

During the course of excavation for the purpose of levelling the ground for a Public Park near the Kashtaharini Ghat at Monghyr a stone image of Śiva-Pārvatī and three ornamental pilasters were discovered. The image and pilasters possessed sufficient archæological value to be acquired for the Patna Museum and this was recommended by the Department.

Eastern Circle. Two men while digging earth in the village Kusumba, P. S. Manda, District Rajshahi in Bengal, discovered a black marble slab measuring 3' 6" in length and 3' 0" in breadth, bearing an Arabic inscription. From an incomplete impression of the record, supplied by the Collector of the District, to the senior Assistant Curator of the Indian Museum, Archæological Section, it could be made out that the document belonged to some Governor under the Sultans of Bengal. It was recommended that the find might be acquired under the Indian Treasure-Trove Act. The District Magistrate, however, with a view to alleviate strong feeling amongst the local Muhammadans, decided to keep the inscribed slab in the courtyard of the local *masjīd* under the Custody of its *khaṭīb*, and not to allow it to be removed to the Varendra Research Society's Museum at Rajshahi for exhibition.

In May 1931 during the construction of the Union Board Road from Alukdia to Ghatail near the Madhupur jungles on the borders of the Districts of Dacca and Mymensingh, the labourers found by the side of a built-up tomb five silver coins of the Muhammadan period. On examination by the Honorary Numismatist to the Government of Bengal, the coins were found to be of (1) 'Alāu-d-dīn Husain *Shāh*, (2) Ghiyāsu-d-dīn Muḥammad *Shāh* III, mint Fathābād (3) Ghiyāsu-d-dīn Muḥammad *Shāh* III, different type, mint Husainābād, (4) *Sher Shāh*, mint Shergarh, date 948 H. (1541 A.D.) and (5) *Shāh* 'Ālam II, mint Murshidābād issued by the East India Company. The value of the find which was declared ownerless by the Collector of Mymensingh, was estimated to be less than Rs. 10 and consequently no action could be taken under the Indian Treasure-Trove Act. The coins were, however, distributed to the different coin-cabinets.

It was reported in the month of August 1931 that Hakim Habibar RAHMAN of Dacca had secured a silver coin of *Sher Shāh* dated 945 H. (1539 A.D.). The Collector of Dacca was advised to acquire the coin, but no further information was received about it during the year.

Babu S. P. KAR of Kenjakura, P. S. Chhatna in the District of Bankura, brought to the notice of the Superintendent, Archæological Section, Indian Museum, Calcutta, the discovery of three stone images and three architectural pieces in stone for a door frame, in the village of Deulberia or Deulbhira, P. S. Chhatna, District Bankura. These finds were brought to light on the 18th of August, 1931, by the villagers while digging out the ruins of a brick-built temple situated close to the bank of the river Andakosha. The temple is very small; its *garbhagriha* and the *maṇḍapa* measure 5'×5' and 13' 6"×13' 6"

respectively. The whole area of the ruins belongs to one Jalim Roy SAMANTA of Deulberia. Of the three stone sculptures one is a circular disc bearing almost identical images on its two sides. Each of them has 8 hands holding *chakras* swords, *vajra*, *musala*, *paraśu* and club in their right and left hands. The images are in the dancing pose. One of their left hands is in the *jñāna-mudrā* and the corresponding right hand of each is extended to the knee (*katyāvalambita-hasta*). The figures no doubt represent *Śiva* dancing and can well be assigned to the 14th or 15th century A.D. (Plate CLI, *a* and *b*: front and back). The second image standing on a double lotus (*viśvapadma*) has two hands holding a ball-like object (probably sweetmeat-ball) in his right and a *padma* in his left hands. He wears a decorated cloth *dhōti* fastened by a belt, a crown, thick ear-rings, a long garland, necklace, armlets and anklets. The protuberant belly of the image covering the belt is generally seen in figures of Kuvera, though this figure can hardly represent that god. There are two attendants by its sides and two flying figures (*gandharvas*) holding garlands. The image probably represents Bāla-Kṛishṇa; it is very poor in style and must belong to a late date, perhaps the 15th century (Plate CLI, *c*). The third image has 12 hands, holding almost identical objects, except the plough and another indistinct object. There are two attendants standing on elephants by its sides and two more figures also standing on lotus thrones by the side of the latter. Below the lotus throne two kneeling devotees are also visible. The presence of a plough and the seven-hooded serpent lend support to the identification of the image as Kṛishṇa-Balarāma, the 8th incarnation of Viṣṇu. (Plate CLI, *d*). It cannot be earlier in date than the 14th or 15th century A.D. It has been recommended to acquire the finds under the Indian Treasure-Trove Act, but it appears that the people of the locality will not agree to their removal to any Museum for exhibition.

Western Circle. In the month of October the Bombay Municipal workmen while digging the side of a road under construction at Parel incidentally discovered a sculptured large sandstone slab about 12 feet long, 6 feet broad and 2 feet thick. On examination the sculpture was found to be of great interest as it is the first of its kind ever found in India; the Local Government was requested to take necessary action under the Treasure-Trove Act (VI) of 1878.¹

Southern Circle. Six finds of 570 gold and silver coins have been reported in the Madras Presidency under the Treasure-Trove Act and another of 15 gold coins in the Cochin State. Of the former, 17 gold and 125 silver coins have been acquired by the Madras Museum and all of the latter forwarded to it by the Darbar for distribution. These finds comprise: (1) 9 gold fanams, *viz.*, 1 without impression, partly cut and of unknown dynasty, 7 belonging to Rāmarāja of the Mahratta dynasty, and 1 with no inscription, found in Umayalapuram village, Papanasam taluk, Tanjore District; (2) 21 gold coins found in the brick-work of a well in Gudavalli village, Guntur District, *viz.*,

¹ This image has aroused great interest in Indian and foreign archaeological circles. For a fine reproduction and a thorough discussion, see *Annual Bibliography of Indian Archaeology for the year 1937*, pp. 6-10 (by Dr Alexander ZINNESISS), and plate II of that volume.

19 with the legend: *Eruva diśāpatepāleśarāja*, 1 with the legend: *Rāja Gajakeśarī* and 1 with no inscription; (3) 121 silver coins of Augustus Cæsar, Emperor of Rome, and 23 unstruck silver pieces, found in a land in the Vellalore village, Coimbatore District; (4) 47 silver rupees of the East India Company found in Kilapalayam village, Salem District; (5) 343 British silver rupees ranging from 1835 to 1819 found in British Singapore village, Vizagapatam District; (6) 6 unidentified gold coins belonging to the Mughal dynasty found in Shrotriyam Pesalabanda village, Bellary District and (7) 15 gold pudiya fanams of the Zamorins of Calicut found in Pazhanji village, Cochin State.

Of the finds other than coins, the following has also been reported:

- (1) Two copper images of Chandrasekhara and Pārvatī found while digging in the neighbourhood of the shrine in Anniyur village, Nannilam taluk, Tanjore District. The image of Chandrasekhara (71 cm. in height) has been acquired by the Museum, whereas the image of Pārvatī (weight 56 lbs.) by the School of Art, Madras.
- (2) A copper image of Somaskanda, i.e., Śiva with Pārvatī and Skanda; another copper image of Nāṭeśa together with 2 copper water-vessels, 2 bells and incense-burners of bronze, 22 broken brass pieces found in Tharakkudi village, Mudukalattur Taluk, Ramnad District.
- (3) Two bronze images of Chandikeśvara and Pārvatī and a number of copper and brass pots, sandals, cups, lamps, bells, etc., have been found in Sathangudi village, Mayavaram Taluk, Tanjore District. Of these the image of Chandikeśvara has been acquired by the Madras Museum and the image of Pārvatī by the Archaeological Section of the Prince of Wales Museum of W. India, Bombay.
- (4) Three images of Veṇugopāla, Rukmiṇī and Satyabhāmā and 1 discus of copper from the village of Kalichedu, Rapur Taluk, Nellore District, have been acquired by the Museum.
- (5) A few *pūjā* utensils such as lamps, drums, bells, tripod, etc., from the villages of Killugudi and Pudupathur, Negapatam Taluk, Tanjore District, and from Palni village, Madura District.

Report for the year 1932-33.

Panjab. Pandit Madho Sarup VATS, Numismatist to the Government of the Panjab for Hindu and Buddhist Coins, reports as follows: Only two finds of coins were reported during the year 1932-33. One of these was found in the course of digging a *kacchā* tank as a work of famine relief in the village of Ghamrauj, Tahsil Gurgaon, and comprises, besides 6 silver and 592 billon coins bearing Arabic legends, 1592 billon and ten silver coins of the Sultāns of Delhi and of their contemporaries. As the latter bear Hindi legends, they were transferred to me for examination by Khan Bahadur Maulvi ZAFAR HASAN, Honorary Numismatist to the Panjab Government. The other find of a small earthen pot containing five gold coins was accidentally made by children at play on a mound situated in the vicinity of the village of Machhrala, Tahsil Nankana Sahib, Sheikhpura District.

All coins from Ghamrauj, except those of silver, are of the "Bull-and-Horseman" type, which was originally started by the Hindu Kings of Ohind, and may be classed under the generic name of Dehliwāls. Of these, 617 are the issues of Mu'izzu-d-Dīn Muḥammad Bin Sām, of which seven are debased, 214 of Shamsu-d-Dīn Altutmish of four different varieties including 15 which bear the joint names of Altutmish and Chāhaḍa Deva of Ajmer—illustrating the tendency of the Muḥammadan Sultāns, after acquiring Hindu territory, to assimilate the local coinage with very slight modifications,—14 of Ruknu-d-Dīn Fīroz Shāh I, and 4 of 'Alāu-d-Dīn Mas'ūd Shāh of the First Dynasty, 71 of Nāsiru-d-Dīn Qabācha of Sindh, 92 of Jalālu-d-Dīn of Khwārizm, 1 of Saifu-d-Dīn Al Ḥasan Qarlagh, general of Jalālu-d-Dīn, and 191 of Nāsiru-d-Dīn Muḥammad Qarlagh, son of Al-Ḥasan Qarlagh, ruler of Sindh. Besides these there are 178 coins of the "Bull-and-Horseman" type, apparently of the Sultāns of Delhi, on which the legend is either very fragmentary or quite illegible.

The remaining coins of this lot belong to the contemporary rulers of the Early Sultāns of Delhi. Of these 2 are of Sāmanta Deva of the Ohind Kings, 2 of Asāta Pāla, which may be dated about 1000 A.D. or later, and are rare, 5 of Sallakshanapāla of the Tomara dynasty of Delhi and Ajmer, 28 of Madana Pāla of the Rāthor or Garhwār dynasty of Kanauj, 6 of Someśvara Deva, and 7 of Prithivī Rāja of the Chauhān dynasty, 56 of Chāhaḍa Deva of the dynasty of Narwar and 2 bearing the legend *Kuta* on the 'bull' side, perhaps of Rājā Pīpala (?) of Māchārī. There are two more billon coins with unfamiliar legends, which cannot be identified.

The five gold coins from the mound near Machhrala in the Sheikhpura District are all of well-known types. One of them is of Chandragupta II of the 'Archer' type, Class II; 2 of Skandagupta also of the 'Archer' type, which call for no remarks; and two of the chiefs of the Little Yueh-chi (Kidāra). The two last named coins show on the obverse a Kushāna King before an altar with the legend *Kidā* under the left arm and on reverse Ardochsho enthroned. Kidāra gold coins are mentioned by C. J. RODGERS on page 52 of his *Catalogue of Coins in the Lahore Museum*, and similar types but with different inscriptions on coins belonging to sundry chiefs ruling in the Panjab and neighbouring countries during the 3rd and 4th centuries A.D. are also illustrated by Mr V. A. SMITH in his *C. I. M.*, Plate XIV, 4-9.

This little find of Kidāra with Gupta coins within the same pot is important. The two issues of Skandagupta it contains cannot be earlier than the latter part of the fifth century A.D., and the fact of these having been found with the Kidāra coins corroborates the view of Mr V. A. SMITH that the debased Kidāra coins were issued by chiefs of the Little Yueh-chi¹ horde in the Panjab and other parts of North-Western India during the fifth and sixth centuries.

Khan Bahadur Maulvi ZAFAR HASAN, Numismatist to the Government of the Panjab for Muḥammadan coins reports as follows: "Only two finds were reported to me during the year under review, one from the village Anowali, Tahsil Narowal, District Sialkot, and the other from the village Dhok Meki,

¹ *C. I. M.*, p. 64.

Tahsil Fatehganj, District Attock. The find from the Anowali village consisted of 36 silver rupees out of which 34 were the issues of the Mughal Emperors Aurangzeb, Shāh 'Ālam I, Jahandar Shāh, Farrukhsiyār, Rafi-u-d-Darjat, Muḥammad Shāh, Ahmad Shāh and 'Ālamgīr II, and of the remaining two rupees one was a Sikh coin and the other an issue of Ranjit Deo, the ruler of Jammu. The issues of the Mughal Emperors and the Sikh coin were of a common type and call for no comment. The coin of Ranjit Deo was, however, rare and possesses numismatic interest. Ranjit Deo is related to have been a hill-Rājā who reigned in Jammu from 1742 to 1780, and struck coins in the name of the then Mughal Emperor Shāh 'Ālam II and also independently in his own name. The coin under notice was struck by him in his own name at Jammu. It is dated 1841 of the Samvat era and also the 27th year of accession, apparently of Shāh 'Ālam II. The coins of Ranjit Deo were first noticed about half a century ago by C. J. RODGERS who had been successful in obtaining several specimens of them. He published his finds in the *Journal of the Asiatic Society of Bengal* for the year 1885, pp. 60-66. A report on the coins discovered in the village Anowali was submitted to the Panjab Government and approved of by them, but they have been sent to the Commissioner, Lahore, for valuation and formal acquisition, and as soon as they are received back they will be distributed as sanctioned by the Panjab Government.

"The find from the village Dhok Meki, Tahsil Fatehganj, District Attock, included 23 silver rupees and 3 copper pice. Out of the silver rupees 8 were the issues of the Mughal Emperors Muḥammad Shāh, Ahmad Shāh and 'Ālamgīr II and 15 of Ahmad Shāh Durrāni, the Afghān Emperor. The copper pice were very much corroded and worn out, and could not be identified. They seem to be Greek coins. A list of these coins has been circulated to the institutions on the distribution list and a report on them will shortly be submitted to the Panjab Government for their approval."

United Provinces. During the year 1932-33 fourteen lots of coins were discovered in the various district of the United Provinces. Some of these coins were of the ordinary class and were not classified or deciphered; nor were they distributed to coin cabinets. These consisted of a gold coin from Kheri district and 2,855 copper ones from Bahraich. The coins that were examined and reported upon came from Hamirpur (2), Agra (2), Hardoi, Bijnor, Sultanpur, Saharanpur, Unao, Farrukhabad, Shahjahanpur and Fatehpur districts and comprised 14 gold, 508 silver and 107 copper or billon coins which were recommended for acquisition and distribution to various cabinets in the order of precedence given by the Act.

Out of the 213 coins that were returned 3 gold, 10 silver and 4 billon or copper coins were recommended for the Allahabad Municipal Museum.

A rupee of Jahāngīr with the title Burhānu-d-dīn and two rupees of Aurangzeb minted at Sambhar and Muzammabad respectively are amongst the rarities yielded by the above finds.

Bihar and Orissa. During the year under report the Collector of Cuttack reported that 32 gold coins (of which five were converted into ornaments) weighing

18 tolas and 24 grains, and 177 silver coins weighing $168\frac{1}{2}$ tolas, were recovered in January 1932 by a labourer named Karup JENA of Chandanpur while digging earth to level the floor of the house of Chandramoni MAHANTI and others in the village of Nilakanthapur, Thana Patamundai, District Cuttack. The family members of the house recovered the treasure which had been distributed among the labourers, and subsequently the local Police reported the matter to the Collector. The treasure was alleged to have been buried since the time of one Bhikari Mahanti, an ancestor of the present owners of the house. The family members attempted to find it by digging the floor five or six times before, but in vain. The approximate market value of the treasure was found to be Rs. 550. On inspection of the Iranian inscriptions on the coins it was found that they were in currency at the time of the Mughal Emperors of India, Muḥammad Shāh and Shāh 'Ālam. Of this find five gold and five silver coins only were forwarded as specimens to the Treasure-trove Officer, Bihar and Orissa, Patna, for their detailed examination and report.

The whole lot of 121 silver coins found in Mouza Khorota, District of Purnea, as described in the *Annual Report for the year 1928-29* was examined by the Treasure-trove Officer, Bihar and Orissa, Patna, and found to be of Vighrahapāla I, Vighrahapāla II, and Vighrahapāla III, as described and illustrated in the *Indian Museum Catalogue*, Plate XXV, No. 10, and p. 239, Nos. 2 and 3. They were distributed to the various recognised Museums during the year under report according to the rules of distribution.

The Treasure-trove Officer, Bihar and Orissa, Patna, reported that 26 copper coins discovered at Mohalla, Police Station Swaspur, Dhalbhum Sub-Division, District Singhbhum, were received from the Local Government in May 1931. On examination they were found to be of the type illustrated in the *Indian Museum Catalogue*, Vol. I, Plate XIV, No. 14, and were distributed to the various Museums in India. Only one coin was allotted to the Indian Museum, Calcutta.

The Collector of Monghyr reported that a hoard of 177 whole silver rupees and one half-rupee of the time of Shāh Muḥammad 'Ālam, the last Mughal Emperor of India, of the Hijri year 1177, i.e., of 1758 A.D., was discovered on the 21st October 1932 by one Misri PASI, son of Bhiki PASI, village Sahmalpur, Thana Surajgarh, within the jurisdiction of the Sadr Sub-division of Monghyr. The approximate value of the treasure was reported to be Rs. 195. The Collector also stated that these coins were reported by the Police to have been buried underground in a small earthen pot, in a piece of homestead and to have been recovered when the land was being dug for the construction of a well. None of the coins were recommended to be acquired by Government as they were of little numismatic value.

The District Magistrate of Monghyr reported that a treasure consisting of three complete small Śiva-lingas of black stone (heights $4\frac{1}{2}$ ", $7\frac{1}{4}$ " and $7\frac{1}{2}$ ") were accidentally discovered by the villagers of Katho, P. S. Bukhtiarpur, Monghyr District, while digging a large mound to a depth of 2 feet for taking out old bricks at the request of a Sādhu for the completion of a half-finished temple on another considerably larger mound nearby. The finds were removed by the Sādhu to the

northern mound and kept under a tree; and he acted as *pujārī* of the Hindus for worshipping them. The value of the finds was estimated to be Rs. 15 only. The District Magistrate thought it undesirable to acquire them on religious grounds; he considered the two mounds, however, to be archæologically important and suggested that excavations should be undertaken in them.

Eastern Circle. A gold coin of the Kushāna period was discovered outside Mahasthan by a local Muhammadan woman. It is of the late Kushāna period and the legend on the reverse appears to read *Nanashao*. The coin may be referred to the 3rd century A.D. and seems to have been issued from some part of Eastern India. It has been presented to the Coin Cabinet of the Indian Museum, and has been published along with two other Kushāna coins from Bengal in the *Journal of the Asiatic Society of Bengal*.¹

Six cases of Treasure-trove not consisting of coins were brought to notice in the Eastern Circle, of which 3 were reported from the district of Dinajpur. The discovery of 2 copper-plates at Baigram in P. S. Nawabganj, district Dinajpur is of unusual interest. They were originally discovered in 1927 in the course of the re-excavation of an old tank by the side of a mound locally known as the Siva-Mandap and situated within the estate of Rai Sahib Kumud Nath Das of Hilli. One of the plates was left with a local Muhammadan and the other was taken away by the coolies who hailed from the Saran district in Bihar. The former ultimately found its way into the hands of Prof. R. G. BASAK who has since edited it for the *Epigraphia Indica*. The other plate was cut into pieces and divided among several persons. A single fragment recovered from one of the persons who had been using it as an amulet is now deposited in the Indian Museum. The epigraphical importance of the find has been dealt with separately.

A colossal Vishnu image of black basalt measuring 7'×3' (Plate CL, d) was found by Mr J. C. MAJUMDAR, M.A., Sadr Sub-Divisional Officer, Dinajpur, at a lonely spot at the foot of a banian tree about 500 yards to the west of P. S. Itahar. It was extricated from the jungle and roots in which it had been embedded and brought by Mr MAJUMDAR to Raiganj, the nearest Railway Station on the 5th February 1933. It has since been removed to the Archæological Section of the Indian Museum where it has been exhibited. The hands of this figure are lost but the other details and the fine polish with which the image was finished are still preserved. Besides the usual attendant figures of Lakshmī and Sarasvatī there are the personifications of the conch (*śaṅkha*) and discus (*chakra*) flanking the image of Vishnu. The style of ornamentation on the figure leaves no doubt that it must be attributed to the 10-11th century A.D.

A stone image measuring 10"×6" representing Hara-Gaurī was discovered at Hajratpur, Tapan Thana, Dinajpur District, during the course of excavation of a tank by Babu Manmotha Kumar ROY, M.A., B.L., of Balurghat. Negotiations for its acquisition under the Treasure-Trove Act and transfer to the Indian Museum, where there are no similar images from Bengal, are in progress.

A Vishnu image bearing an inscription in characters of the 11th-12th century A.D. on its pedestal was discovered on the bank of the river by the students of the

¹ *J. A. S. B.*, Vol. XXVIII (1932), p. 127.

Krishnath College at Berhampur, Murshidabad District. The proceedings under the Treasure-Trove Act are still in progress.

Two cases of discovery of antiquarian objects have been reported from the Native States of Tripura and Manipur respectively. One of these is an unusual image of Vishnu in black stone which was discovered by a Muhammadan villager in the course of ploughing his land near the town of Agartala and is now in the possession of His Highness the Maharaja of Tripura. The iconographical peculiarity of the image consists in its having 10 hands, 8 of which hold different weapons while the other two are placed on the heads of the attendant deities, Lakshmi and Sarasvati. The antiquities from the Manipur State comprise a number of earthenware and metal objects seemingly of Chinese origin and of a late date excavated at Kameng in the west of the Manipur valley by Sj. Wahengeban Yumjo SINGH. The Darbar has since presented them to the Indian Museum.

Southern Circle. The following information is gathered from the report of the Superintendent, Government Museum Madras: "Thirteen finds of altogether 1,977 coins have been reported in the Madras Presidency under the Treasure-Trove Act. Out of these 274, acquired for the Museum, comprise 24 Mughal copper coins from the village of Isukapudi, Razole Taluk, East Godavari District; 2 Mughal Rupees from the village of Ambapuram, Dhona Taluk, Kurnool District; 47 gold coins from the village of Dammanapalle, Badvel Taluk; and 2 copper coins from the village of Paddamudiem, Jammalamadugu Taluk, Cuddapah District; 74 Chilli-seed gold coins from the villages of Vadacheri, Melpuludiyur, and Thumbur, North Arcot District; 39 gold coins from the village of Vembedu, Chingleput District; 6 Roman gold coins from the village of Karivalamvand-anallur, Sankarankoil Taluk, Tinnevely District; and 80 gold Pudu Panams from the village of Ozhur-amsam, Ponnani Taluk, Malabar District. Important finds other than coins are four unclaimed copper images of Śiva, Umā Chandrasekhara and Pārvatī, believed to have been found some 15 years ago in the Sorakkudi village, Nannilam Taluk, Tanjore District, and since then kept in a private house but ultimately confiscated by Government in 1930. These with other copper images of Rāma and Sitā found from the village of Adirangam, Tiruturaipundi Taluk, Tanjore District, have also been acquired by the Museum.

Report for the year 1933-34.

Panjab. Khan Bahadur Maulvi ZAFAR HASAN, Numismatist to the Panjab Government for Muhammadan Coins, reports as follows on the Treasure-trove Coins found in the Panjab during the year under review: "The coins discovered in the districts of Sialkot and Attock and discussed in the last year's report were distributed as were also the 44 billion coins returned to me by the Honorary Numismatist to the Panjab Government for Hindu Coins. The 44 billion coins mentioned above were found by him to be issues of the Muslim Emperors and were, therefore, returned to me for disposal. They included the coins of the early Sultāns of Delhi and their contemporaries, viz., Muḥammad bin Sām, Altutmish, Razā, Ruknu-d-dīn Firoz Shāh, Ṣaifu-d-dīn al-Ḥasan Qarlagh, Tāju-d-dīn Yalduz and Qabācha.

"The new finds reported during the year under review were (a) 16 silver rupees discovered at Mathiana Tibba, Tahsil Rupa, District Ambala, (b) 63 rupees found by villagers of Jhatanwali Village in the District of Gujranwala, and (c) one copper pice discovered by the Sub-overseer of the office of the Superintendent, Archaeological Survey, Frontier Circle, Lahore, in clearing silt from the Suraj Kund, District Gurgaon. The finds (a) and (b) were common types and consisted of the issues of the Mughal Emperors Shāh Jahān, Aurangzeb, Farrukhsiyār, Muḥammad Shāh, Ahmad Shāh and Shāh 'Ālam II. These have all been returned to the Deputy Commissioners concerned for formal acquisition after which a report on them will be submitted to the Panjab Government. The copper pice discovered in the Suraj Kund was much worn. It appeared, however, to be an issue of Shāh Jahān and with the approval of the Panjab Government it has been sent to the Curator, Central Museum, Lahore, for sale".

Mr M. S. VATS, Honorary Numismatist for Hindu and Buddhist coins writes: "During the year under report no Hindu and Buddhist coins were discovered in the Panjab. At the village of Bhutri, Ilāqa Kandi Kahal, about seven miles from Haripur, Hazara District, the **North-West Frontier Province**, five hundred and six Treasure-trove coins were found in a vessel. Of these, 486 are silver issues of Indo-Greek and Indo-Parthian kings and 11 of copper, of which 8 belong to Azes and three are local Taxilan. Two of the latter show a three-arched *chaitya* on the obverse and a taurine symbol on the reverse, whereas the third Taxilan coin has a *svastika* and 4 taurines on the obverse, but the reverse is defaced. Of the silver coins one belongs to the Indo-Greek King Zoilos, 8 to Strato I and 486 to the Indo-Parthian King Azes II (type I), King of Taxila and the Western Panjab. Most of these coins are in a very good state of preservation and show the types and legends clearly."

Central Circle. The whole Treasure-trove find of 5 gold ornaments, 29 gold coins and 177 silver coins in the village Nilakanthapur, Thana Patamundai, District of Cuttack, as described in the report for the year 1932-33, was examined by the Secretary, Bihar and Orissa Coin Cabinet, Patna. Of the 29 gold coins, 15 are gold tokens, 13 are gold coins of Muḥammad Shāh, Mint Daru-l-Khilāfat Shāhjahānābād of different years, and one gold coin is of Farrukhsiyār, Mint Daru-l-Khilāfat Shāhjahānābād. 177 silver coins belong to Shāh 'Ālam II of which 140 are of the Arcot Mint, regnal year 32, Hijri year 1198; 14 are half-rupees, 2 are full rupees of the Surat Mint; 16 silver coins of the Mint Murshidābād, two coins are of the Mint Azimābād and 3 silver coins are without mint names. The Secretary, Bihar and Orissa Coin Cabinet, reported the Treasure-trove to be interesting, and recommended its acquisition at Rs. 177 which the Local Government accepted. The treasure was distributed to the various recognised Coin Cabinets during the year 1933-34.

The whole lot of 48 silver coins discovered in the village Ramgarh, District of Hazaribagh, and described in the report for the year 1931-32, was examined by the Secretary, Bihar and Orissa Coin Cabinet, Patna. The coins were found to be of Shāh Jahān, Aurangzeb, Shāh 'Ālam I, Farrukhsiyār and Muḥammad Shāh.

The duplicate coins and the coins that were not wanted by the Bihar and Orissa Coin Cabinet, were distributed to other Coin Cabinets by that Officer.

The Deputy Commissioner of the Santal Parganas reported to the Secretary to the Government of Bihar and Orissa in the Finance Department the discovery, on the 26th April, 1933, of an earthen pot containing 16 old silver coins, weighing $14\frac{3}{4}$ tolas, of a value of Rs. 8-13-9, by a labourer named Munshi LOYA of Manikpur, P. S. Parayahat, while digging earth from the field of one KINO Pandit of Nawdiha. The labourer took the coins for sale to the Local Sardar Pariag Sah of Circle II of P. S. Parayahat; and the latter brought them to the Police Station. The Sub-inspector reported the matter to the Superintendent of Police and he also reported that KINO Pandit claimed the coins to be his on the ground that his natural grandfather BHIKHU Pandit who had become a Sādhu has told his father at the time of his death that there was money in cash in the same ground. The coins were, however, examined by the Treasure-trove Officer and Secretary, Bihar and Orissa Coin Cabinet, Patna, and two of them were found to be of 'Ālāu-d-dīn Hasan Shāh (899-925 A.H.) and the remaining 14 to be of Nāsiru-d-dīn Nāsuru-l-Shāh (925-939 A.H.). The acquisition of the treasure at a cost of Rs. 10-10-0 was recommended, and the Local Government accepted the proposal. The coins were distributed to the various Coin Cabinets.

The Secretary, Bihar and Orissa Coin Cabinet, Patna, reported that a hoard of 2,873 silver punch-marked coins was found at Patraha, P. S. Dhandatra, District Purnea, sometime in 1912, and that the coins were with the late Professor R. D. BANERJEE up to 1924 after which they were brought to the Patna Museum. The Local Government decided to publish the list of these coins as it exists but owing to financial stringency actual printing of it has been postponed. It was further decided by the Local Government to distribute the duplicate coins. Of these, 112 duplicate coins were distributed to the various Coin Cabinets. One of the coins was decomposed in acid by the late Professor R. D. BANERJEE at the time of cleaning; and another coin was assayed under orders of the Local Government. The remaining 2,759 have been retained in the Coin Cabinet of the Patna Museum. This hoard of punch-marked coins has been reported to be very interesting.

The Financial Secretary to the Government of the Central Provinces, Commerce and Industry Department, reported, on enquiry, the discovery on the 3rd July, 1932, of a stone image in the ruins of a fort at Mana (Survey No. 240) in the Murtizapur Taluq, Akola District. This fine standing stone image ($4' 1\frac{1}{2}'' \times 2' 1''$) of Rāma, Sītā, Lakshmaṇa and Hanumān, is more or less of the Chālukyan type of art of the 10th to the 12th century A.D. The figure of Rāma has two hands, the right holding a long lemon. The figure of Sītā standing to the left side of Rāma holds a citron in her right hand; the figure of Lakshmaṇa holds a bow and an arrow. Hanumān is seen kneeling by the side of Sītā. Two devotees, a male and a female, are seen seated near the feet of Lakshmaṇa. This image is now exhibited in the Central Museum, Nagpur.

Eastern Circle. No new case of Treasure-trove consisting of coins was reported during the year. It is, however, noteworthy that some coins of the

earliest period have recently come to the hands of the authorities of the Varendra Research Society's Museum and the Dacca Museum, originating no doubt from ancient localities in Northern and Eastern Bengal respectively. There seems to be a tendency for finders of coins to keep them aside or sell them to the nearest money-changers instead of bringing them to the notice of Police Officers as required by the Treasure-trove Act. Many really important hoards of coins are thus lost to science unless they happen to find their way into the hands of an expert Curator of a Museum, or some intelligent private collector of ancient coins. The present rules under the Treasure-trove Act which allow only 20 per cent. above the metal value of an ancient coin seem to operate in such a way that finders of ancient coins find it more profitable to dispose of their finds surreptitiously to coin dealers than to surrender them to Government. Unless therefore the law assures the finder that he will obtain the market value of the coins, there is no likelihood of the present position being substantially altered.

Only one new case of the discovery of certain images was reported during the year, near Guptipara in the Hooghly district. On examination the images were found to be ordinary ones representing Gaṇeśa and Śiva and no further steps were taken under the Treasure-trove Act.

The copper-plate discovered at Baigram and referred to in last year's Report has been obtained on permanent loan from the Gouda Research Society at Howrah.

The stone image from Hazaratpur in the Dinajpur district discovered by Babu Manmotha Kumar Roy, M.A., B.L., of Balurghat, which was also referred to in the last year's Report, has been generously presented by the discoverer to the Indian Museum.

Southern Circle. Eighteen finds of coins are reported by the Superintendent, Government Museum, Madras. "They comprise 738 gold coins of Varāha, of the Chilly-seed kind and also of *pudiya panams*; 687 silver coins, the most important of which belonging to the time of Haidar 'Alī, Virarāya and the Mughal Emperors, found in the districts of Chittoor, Arcot, Madura, Kurnool, Salem, Coimbatore, Malabar, Ganjam, Tinnevely and Bellary; and 7 copper coins of the Mughal Emperor Aurangzeb found in the village Kilakattur, Chingleput District."

Of seven finds other than coins three are noteworthy, viz., (1) Copper images of Kṛishṇa with his consorts, Rukmiṇī and Satyabhāmā; Balakrishṇa dancing on a *padmāsana*; Viṣṇu with Śrī-Devī and Bhū-Devī, found in Adikudi village, Trichinopoly district; (2) copper images of Appar; Tirujñāna Sambandha; Mānikyavāchaka (Tamil Saints); Sundaramūrti with his consort Paravai; Pārvatī and Balasubrahmanya; found in Madukkur village, Tanjore District; and (3) stone images of Shaṇmukha with 12 hands seated on a peacock with the right leg hanging down and the left one placed on the back of the peacock; Chandikeśvara seated in the *lalitā* pose with an axe in the right hand; a standing Virabhadra with four hands; a standing Bhairava and Sūrya; found in Satyamangalam village, South Arcot district. All the images found in the villages of Madukkur and Satyamangalam were acquired, with the exception of the image of Appar, by the Madras Museum.

SECTION VIII.—MISCELLANEOUS NOTES.

A NOTE ON TWO MEDIAEVAL ROCK-CUT SCULPTURES IN THE KALANJAR FORT.

By Mr M. S. Vats.¹

At Kālāñjar, on the extreme left hand of the rock flanking the steps leading down to the Nīlakaṇṭha Temple is, among others, a relief measuring 3' × 1' (Plate CLIII, c). It represents the worship of a *līṅga* surmounted on the *yoni*. To the right and left of this sacrarium are standing Brahmā and Viṣṇu, each with four hands; and behind the latter the figures of a man and a woman—probably the donor and his wife—seated with hands in the *añjali* pose. Brahmā and Viṣṇu both have the lower right hand held in the *vara-mudrā*. The former has a *śruk* (sacrificial ladle), *pustaka* and *kamaṇḍalu* in the remaining three hands, while the latter has the *śaṅkha*, *chakra* and *gadā*. In the *Līṅga*-, *Kūrma*-, *Vāyu*- and *Śiva-purāṇas*, Śiva is said to have appeared between Brahmā and Viṣṇu in the form of a blazing pillar of immeasurable size to quell their pride when both were quarreling as to which of them was the creator of the universe. Upon this, both wanted to find out the top and bottom of the blazing pillar. Brahmā assumed the form of a swan and flew towards the top and Viṣṇu in the form of a boar began to burrow into the earth. But having failed in their attempt they began with folded hands to praise the pillar from which Śiva revealed himself and explained that they were both born from his right and left thigh respectively. This scene is depicted in detail on the *līṅgodbhavamurti* in the Daśāvatāra Cave at Ellora and a drawing of it is reproduced by Mr T. A. Gopinatha RAO in his Hindu Iconography.² The present sculpture is uncanonical and may be an illustration of the above mentioned story, since in some sculptures Brahmā and Viṣṇu are shown only in their ordinary forms without being also shown as a swan and a boar. In such cases, the *līṅga* is not fixed in the *piṇḍika*, but represented only as a blazing pillar, and Brahmā and Viṣṇu are posed reverentially standing with two hands folded and two other hands holding their attributes. It may also be pointed out that both of them have a *kapāla* in their headdress which is a peculiarity of Śiva. To quote Mr Gopinatha RAO: "The *Dhruvaberas* in all Śiva-temples is the *līṅga* surmounted upon the *yoni* or the *piṇḍika* (pedestal). It is only in very rare instances we meet with the anthropomorphic representations of Śiva set up as the principal deity in Śiva-temples".³ The present sculpture really seems to be a combination of the usual form of Śiva with the story of the blazing pillar interwoven to show the subordinate position of Brahmā and Viṣṇu.

To the right of the above is another interesting panel (3' × 1' 4½") showing to the left a seated *nandi* bearing the *Śiva-līṅga* on his back and to the right, in a

¹ Submitted with the Report for 1930-31. Readers are referred to A. S. R. for 1911-12, p. 49 and Plate XVIII, where two seals "of the lord of Kālāñjara" are discussed and reproduced.—Editor.

² Volume II, Part I, Plate XIV, fig. 1.

³ *Ibid.*, Volume II, Part I, p. 56.

row, a man and two ladies seated with folded hands in devotional attitude (Plate CLIII, *d*). I know two other instances at Kālāñjar where the *nandi* is shown bearing the *liṅga* on his back. This sculpture again is remarkable from an iconographical point of view. "In the *Mārkaṇḍeya-purāṇa* there occurs the following story: Mārkaṇḍeya says that Rudra and Viṣṇu are the creators of the universe and they form the Ardhanārīśvara aspect of the former deity. Here the allusion is to the Haryardha form of Śiva, in which the female generative principle is identified with Viṣṇu. That the male and the female principles are inseparable and are ever found together in cosmic evolution is the real import of the Ardhanārīśvara or Haryardha forms of Śiva; the same idea is also conveyed in a brief way by the symbols the *liṅga* and the *yoni*."¹ Almost of similar import are the explanations of the *liṅga* and the *yoni* as given in the *Bhāgavata*-, *Viṣṇu*- and the *Liṅga-purāṇas*. The latter states that "Pradhāna (nature) is called the Liṅga, and Parameśvara is called the Liṅgin (the sustainer of the *liṅga*), and that the pedestal of the Liṅga is Mahādevī (Umā) and the Liṅga is the visible Maheśvara".² But being merely the vehicle of Śiva, Nandi can in no case be taken to stand for the *yoni*, Umā or Viṣṇu who are identified with the female generative principle. This sculpture must therefore represent Śiva in his abstract form seated over his vehicle—a form unknown elsewhere and based, like the sculpture described above, on a mistaken notion of the real import of these legends.

DOUBLE BRAHMANICAL SHRINE AT DEOTHAN.

By Mr M. S. Vats.³

During the course of an inspection tour I visited Deothan on the 22nd April, 1934. It is a small village in the Yeola Taluqa of the Nasik district, some 16 miles east of Yeola whence it may be approached by car for 14 miles on the metalled road to Aurangabad; the last two miles off the main road the village cart track is not motorable. Here, in the centre of the village and enclosed by a low stone compound wall is a double Brāhmaṇical shrine of a peculiar plan standing on a 5-foot high plinth (Plate CLII, *a-b*). It is an unpretentious, crumbling⁴ mediæval temple with a flat roof supported on a double row of pillars and with a verandah in front. Projecting from the centre of the west verandah and facing east is a small sanctum measuring 6 ft. 3 in. square which is said to be sacred to Mahādeva. Each side of its roof is bisected by huge slabs placed diagonally across the corners, between which the resulting square panel at the centre is closed by a single piece relieved with a full-blown lotus. The adjoining shrine⁵ facing north is a rectangular hall measuring 27 feet by 17 feet 6 in., supported on 18 pillars capped by quadruple brackets for carrying lintels on which the roof

¹ *Ibid.*, Volume II, Part I, pp. 58-59.

² *Ibid.*, p. 59.

³ Submitted with the Report for 1933-34.—Editor.

⁴ It is made of a friable variety of trap-stone and is badly weathered all over the façade.

⁵ This might be the *maṇḍapa* or a *dharmaśālā*, and if the former, its occurrence on the side rather than in front of the temple is unparalleled. As a *dharmaśālā* it would be quite inappropriate, as much of the floor space is taken up by pillars which will not allow parties of pilgrims to lie in rows except by stretching themselves between the pillars.

slabs are laid. All these pillars are plain, square in the lower half, then octagonal, sixteen-sided and round over the remaining half. They have square bases and round capitals. Facing the entrance is a small niche, presumably meant for enshrining the image which is now missing (Plate CLII, *d*). As shown by dotted lines on the plan, there are two temple chests in its north wall, and whether answering to them there were similar chests in the opposite wall also, it is not possible to say now (Plate CLII, *a*). A villager, who was unfortunately in possession of this shrine, had partitioned it and the outside verandah into a number of chambers which were removed by Mr G. C. CHANDRA who also cleared a part of the compound. In the L-shaped verandah, too, there are three projecting empty niches also meant for images of deities, but they are of a larger size than the niche inside the pillared hall referred to above. Five pillars in the inner row of the verandah, *viz.*, the last two on either side of the entrance to the small shrine facing east and the last one at the east end of the verandah, are plain, and similar to those in the pillared hall; the remaining ones in the inner row and all but three pillars forming the outer line are carved above the lower half with a foliate ornament which is followed by a narrow band relieved by a series of diamonds alternately carved horizontally and vertically and then by a pot-and-foliage motif, *etc.* The remaining three pillars in the outer row, *viz.*, the corner one and the fourth pillar in both wings of the verandah which stand symmetrically immediately across the entrance bay to each of the two shrines, are sculptured in the lower half on all the four sides with figures of Hindu deities. The eastern pillar in the north verandah bears the figures of Brahmā, Viṣṇu and Śiva on the east, south and west faces respectively, but the figure on the north face is blurred beyond recognition. The pillar at the angle is carved with the figures of Chāmūṇḍā, Gaṇeśa, Pārvatī and Śiva on the east, south, west and north faces respectively. All figures on the north pillar in the east verandah are defaced and cannot be identified.

The doorway of each of the two shrines is profusely ornamented. The shrine facing east has three dilapidated images standing on the lower part of either jamb, and a series of five seated figures in separate panels on the lintel alternating with sunk panels carved as diamond-shaped flowers. In the centre of the lowest part of the lintel is seated Gaṇeśa eating *modakas*. Of the figures on the jambs, the centre one on the right indicated by a small *nandi* in the background is that of Śiva, and the corresponding figure on the other jamb, as far as it can be made out, is Brahmā. The male and female figures on either side of these gods are attendants. This shrine would therefore appear to have been dedicated to Viṣṇu and not to Śiva as believed locally. Its direction facing east would also favour its dedication to Viṣṇu.¹

The doorway to the adjoining pillared shrine or hall is even more richly carved. Its jambs consist of five bands or fascia which run up the sides and around the lower part of the entablature above (Plate CLII, *c* and *d*). Prominently standing on the projecting pilaster over the central facet of each jamb and supported by an

¹ According to the *Mānasāra* "The temples of Viṣṇu in whatever form that deity may be worshipped, should be erected within the village facing towards the east, except in the incarnation of *Nara-Siṃha* (The Man-lion), whose temple should be built without the wall with its face turned from the village or town". Ram Raz :—*Architecture of the Hindus*, p. 45.

Atlas is the figure of Vishṇu with two attendants on either side over the subsidiary facets. From above the heads of each of the five figures mentioned above rise ornamental bands which cover the remaining part of the doorway. Starting with the innermost face of the door jamb we have an arabesque scroll ending in the centre with the figure of Gaṇeśa. The second face shows couples of male and female figures, sounding cymbals, beating drum, playing on *vīṇā* and other musical instruments; the upper part of this band shows a procession of garland-bearing figures converging towards the central panel in which Lakshmi is enshrined above the head of Gaṇeśa. The third frieze starting from above the head of Vishṇu shows some empanelled human figures in three tiers one above the other, then a pot-and-foliage motif, *etc.* as in the pillar seen in Plate CLII, *d.* In the fourth frieze we have first a man with a sword and dagger followed by figures of lions with riders on. The fifth frieze consists of a deep, semi-circular roll within the panels of which are shown peacocks, monkeys, lotus flowers, *etc.* The top lintel of this door is carved into ten panels (five sunk and five projecting) within each of which is represented an incarnation of Vishṇu. Starting from the left we have the Matsya, Kachhapa, Varāha, Narasiṃha, Vāmana, Paraśurāma, Rāma, Balarāma, Buddha and Kalki *avatāras*.

The pillared hall looks like a *mandapa*, but as *mandapas* always precede the shrines, its position on the side of the Vishṇu temple suggests that it might have been a shrine with a small image in the backwall niche. Being a mediæval temple, the shrine facing east may be supposed to have had a *śikhara*¹ over it, like others in the Deccan; in which case the pillared hall, however large, would have been overshadowed by it, and been only an adjunct shrine—to all appearance nothing more than a side-room. The reason why the image niches in the verandah were made larger than the niche in the pillared hall might have been that, as two of them would go with the Vishṇu Temple, the third one at the west end of the verandah would naturally have been made to correspond with the one opposite. It is difficult to say what exactly was the purpose of the pillared hall and, if it was an adjunct shrine, to which particular deity it was dedicated. Structural evidence, it may be pointed out, clearly shows that the pillared hall referred to above was a part of the temple as originally conceived and designed and is by no means a later addition.

A NOTE ON THE BUDDHA'S FOOT-PRINTS IN BURMA.

By U Mya.²

Buddhist children in Burma are taught to say at night, before going to bed, a prayer in honour of Buddha's foot-prints which, it is said, the Enlightened One

¹ As far as I am aware, in no shrine in the Deccan or Central India that is later than the Gupta period is the *garbhagriha* without a *śikhara* of some sort.

² Submitted with the Report for 1932-33.—I have somewhat curtailed the text here and there, but most of U MYA's materials are published here in the belief that his article is of outstanding interest for all students of Buddhism as well as of ethnography, religion and symbolology.—Editor.

had left on earth before his Nirvāṇa. They are also made to understand that these foot-prints are three in number: one in Ceylon and two in Burma. The latter are placed at Shwezettaw in Sagu township, Minbu district. They had been left there by the Buddha, at the request of a *rishi* and a *nāga*, by the side of a stream called Nammadā, on the occasion of his visit to Vānizagāma, now known as Legaing, a village in the same district, in Sonaparanta, among hills and wild tribes, as told in the *Punnovāda-sutta* of the *Samyutta-nikāya* and its commentaries. This story with the sources of its origin and the reliability or otherwise of its Burmese version has been told at length by Mons. Ch. DUROISELLE in his *Notes on the Ancient Geography of Burma*¹ and I need not repeat it here. The same story may be also found in Singhalese and Siamese garbs; and Ceylon, Burma and Siam vie with one another in claiming, each for herself, the site or sites where those foot-prints had been left. My object here is not to enter into a discussion with regard to the truthfulness or otherwise of those stories, but to make a preliminary study of the foot-prints in Burma, as far as they have come under my notice, and to examine them from the historical and symbolistic points of view.

At least one or two of Buddha's foot-prints can be found in monasteries or temples or on pagoda platforms in almost every town or village in Burma. They may be either carved on stone slabs or rocks, or represented in paintings on the roofs of temples.

Originally, there were two foot-prints at Shwezettaw, one being on the top and the other at the foot of a hill by the side of a stream. The one on the top was on a ledge over a precipice, and it was damaged in the course of an attempt made by a certain monk to have it shifted to a safer place. With a view to preserving it from further damage, a solid *stūpa* was built over it later, and it has now thus disappeared from view. All that is visible of the other which is at the foot of the hill "is an egg-shaped depression, about 5 feet 9 inches long by 4 feet 2 inches broad and 9 inches deep in a large smooth faced rock..... This depression does not bear the faintest resemblance to the human foot. It has neither heel nor toes. It is covered with thin gold leaves, which pilgrims stick on it annually..... Two brass dragons, about 4 inches in diameter, encircle the foot-print....."² The one on the top of the hill over which a *stūpa* has been built is said to be a replica of it, both being the impressions of Buddha's left foot.

The fact that the impression at the foot of the hill is devoid of any mark or marks would make one inclined to think that it was one of the oldest of its class to be found in Burma and that it might belong to the early centuries of the Christian era, but the *Samaings* (traditional accounts) of these foot-prints do not give identical accounts. According to some, these foot-prints were lost sight of for nearly 2,240 years, that is, from the time they were first imprinted to the time of their rediscovery, and according to others just for 127 years or so owing to

¹ See also *B. E. F. E. O.*, Vol. V, pp. 146-167, for a French translation of it by the same author.

² *The Shwezettaw Shrine in the Minbu District, Burma*, by Charles DE FACIEU, pp. 12-13.

disturbances in the country; but they all agree in one point, namely, that those foot-prints were rediscovered in the time of Thalunmindaya, King of Ava (1629-1648). The principal monks of the time, the king's preceptors, had heard and learned of those foot-prints from the *Samaings* and the *Punnovāda-sutta* of the *Samyutta-nikāya* and the *Aṭṭhakathās*, and approached the king with a petition requesting that a mission might be sent in search of them. The king readily undertook to comply with their request; and a mission headed by four of those preceptors started from Ava in 1638 A.D. The Mission no doubt found them in due course among the hills at Shwezettaw, and the discovery was revealed, it is said, in dreams and accompanied by miracles. Since then, hundreds of pilgrims have been visiting them and paying their respects annually despite the fact that the journey to them over hills and across steep valleys was, till a few years ago, a very arduous one. Leaving aside those myths and fables found in the *Samaings*, the mission was certainly a sign of the time; a revival of the cult of the worship of Buddhapādas in Burma. On the other hand, how and when that cult really began in Burma is a question that remains to be answered. It would no doubt begin with the arrival of Buddhism in Burma, which has been placed tentatively in the early centuries of the Christian era; but proofs are yet wanting for that period and for many centuries after; and with such materials as are available at present, this question will remain unsolved for the present. However, we may begin our history with a stone slab bearing an impression of the Buddha's left foot. It was originally found on the platform of the Lokānanda pagoda and is now preserved in the Museum, Pagan. The Lokānanda was built by Anoratha, King of Pagan (1044-1077 A.D.), and the foot-print just referred to may be assigned to the same period. It was closely followed by four other foot-prints; two found on the platform of the Shwezigon pagoda, and the other two in the west porch of the Ānanda temple, both of which may be attributed to King Kyanzittha (1084-1112 A.D.). That is to say, we may safely begin our history with the 11th century A.D. This period may be pushed back by a few centuries on certain assumptions, for the marks in those impressions were already fully developed, and they follow very closely the lists as given in the *Jinālaṅkāra-tīkā* and the *Anāgatavaṃsa-aṭṭhakathā*, which may on stylistic grounds be placed in the 8th-11th century A.D.

For purposes of illustration, I have selected the foot-print from the Lokānanda and one of the two from the Shwezigon pagoda, Pagan, and their sketches are shown in Plate CLIII, *b* and *a*. The Lokānanda foot-print represents an impression of the left foot of the Buddha, and the Shwezigon the right foot.

The Lokānanda foot-print was carved on a slab of hard sand-stone of very close grain. It was found in three fragments and in a damaged condition. But many of the marks on it are still in a fairly good state of preservation. As it is, with the fragments pieced together, it measures nearly 4' 1" × 2' in its extreme length and breadth.

The Shwezigon foot-print was also carved on a similar slab of stone, and it measures 3' × 1' 4". In both these prints the marks on the toes are delineated

by whorls of circles and curved lines, and there are on the sole of each many marks in small panels arranged in rows, the wheel mark being placed near the centre.

It is well known that the Buddha was endowed with 32 principal marks (*mahāpurisa-lakkhaṇa*). There are two among them, which concern us chiefly for our present purpose; and they are, according to the *Lakkhaṇa-sutta* of the *Dīgha-nikāya*: (1) "He hath feet with level tread, and (2) Moreover beneath, on the soles of his feet, wheels appear thousand-spoked, with tyre and hub, and in every way complete and well divided".¹ The Pāli *Aṭṭhakathā* on the *Mahāpadāna-sutta* of the same *Nikāya* adds that, besides the wheels complete in themselves in every way, there are, on each sole, the marks of (1) Satti, (2) Sirivachchha, (3) Nandiya, (4) Sovattika, (5) Vaṭṭasaka, (6) Vaddhamānaka, (7) Machchhayugalaṃ, (8) Bhaddapiṭṭhaṃ, (9) Aṅkusaka, (10) Pāsāda, (11) Torāṇa, (12) Setachchhatta, (13) Khagga, (14) Tālavanṭa, (15) Morahatthaka, (16) Vālabijāṇī, (17) Unhisa, (18) Maṇi, (19) Patta, (20) Sumanadāma, (21) Niluppala, (22) Rattuppala, (23) Setuppala, (24) Paduma, (25) Puṇḍarīka, (26) Puṇṇaghata, (27) Puṇṇapāti, (28) Samudda, (29) Chakkavālaka, (30) Himavā, (31) Sineru,² (32) Chandima, (33) Sūriya, (34) Nakkhattāni, (35-38) Four great continents surrounded with two thousand smaller ones, and (39— *etc.*) the whole retinue of a Chakkavattirājā or 'universal monarch'. That is to say, besides the 38 marks just enumerated, there are others, all pertaining to a Chakravartin.³ But what are these additional marks? The *ṭīkā* on the above simply adds that they are *hatthiratanādi*,⁴ which probably refers to the seven treasures of a Chakravartin, *viz.*, the wheel, the elephant, the horse, the gem, the queen, the retinue of householders, and the crown prince. The lists in the *Jinālaṅkāra-ṭīkā* and the *Anāgatavaṃsa-aṭṭhakathā* are more lengthy on the subject, and according to the latter there are 108 auspicious marks in all. The lists in these two commentaries agree very closely except in the wording of a few names, and fairly closely with the list given above, so far as they relate to the portion contained in that list. For purposes of comparison, I give below also the lists from the *Jinālaṅkāra-ṭīkā* and the *Anāgatavaṃsa-aṭṭhakathā*. It may be noted that the latter is concerned more with Maitreya, the coming Buddha, and the list of marks, according to it, is in respect of that Buddha.










I add against each name in the lists given below a sketch (or sketches) of figures, instead of their equivalents in English, in cases where doubts exist. This will facilitate greatly the discussion that will follow. It may be also stated that the same term may be interpreted differently in different foot-prints. In such cases, sketches of those different marks will also be shown, and for convenient reference the letter *A* will be used for the Lokānanda foot-print, *B* for the Shwezigon, and *C* for later ones. The lists themselves will be known as lists *I* and *II*, *I* standing for that found in the *Jinālaṅkāra-ṭīkā* and *II* in the *Anāgatavaṃsa-aṭṭhakathā*.

¹ *Dialogues of the Buddha*, Part 3, pp. 136-137 (*Sacred Books of the Buddhists*, Vol. IV).

² This should probably be *Sumeru*.—Editor.

³ *Sutmaḥāvā Aṭṭhakathāpaṭṭha*, p. 34, Sudhammavati Press, Rangoon, 1913 edition.

⁴ *Sutmaḥāvā Ṭīkāpaṭṭha*, p. 34, Sudhammavati Press, Rangoon, 1915 edition.

<i>I Jñālaṅkāra-ṭīkā.</i>	<i>II Anāgataśāstra-āṭṭhakathā.</i>	Equivalents (or sketches where doubt exists) in English.
1 Satti	1 Same as in <i>I</i>	A spear.
2 Sirivachchha	2 Do.	  
3 Nandiyāvatta	3 Do.	  
4 Sovatthika	4 Do.	 
5 Vaṭamsaka	5 Do.	An ear ornament.
6 Vaḍḍhamānaka	6 Vaḍḍhamāna	A receptacle or cup for food.
7 Bhaddapiṭṭha	7 Same as in <i>I</i>	A seat or table.
8 Aṅkusa	8 Do.	A goad.
9 Pāsāda	9 Do.	A palace.
10 Torapa	10 Do.	An archway.
11 Setachchhatta	11 Same as in <i>I</i>	A white umbrella.
12 Khagga	12 Do.	A sword.
13 Tālavanṭa	13 Do.	A talipot fan.
14 Mayūrahāttha	14 Morapattam	Fan made of peacock's feathers.
15 Chāmara	15 <i>Nil</i>	<i>I</i> A fly-whisk, <i>II Nil</i> .
16 Uṇhisa	16 Same as in <i>I</i>	A headdress.
17 Patta	17 Do.	A bowl.
18 Maṇi	18 Do.	A jewel.
19 Sumanadāma	19 Do.	A garland.
20 Niluppala	20 Rattuppala	
21 Rattuppala	21 Setuppala	
22 Rattapaduma	22 Niluppala	
23 Setapaduma	23 Rattapūḍharika	
24 Pūḍharika	24 Setapūḍharika	
25 Pūṇṇakalasa	25 Pūṇṇaghaṭa	A full vase.
26 Pūṇṇapatta	26 Pūṇṇapāti	A full cup.

<i>I Jñānākāra-ṭīkā.</i>	<i>II Anāgatavāṇsa-atthakathā.</i>	Equivalents (or sketches where doubt exists) in English.
27 Samudda	27 Same as in <i>I</i>	An Ocean.
28 Chakkavāḷa-pabbata	28 Chakkavāḷa	The universe.
29 Himavanta-pabbata	29 Himavā	The Himālayas.
30 Merupabbata	30 Meru	Mt. Meru.
31 Sūriya Maṇḍala	31 Sūriya	The Sun.
32 Chanda Maṇḍala	32 Chandimā	Moon.
33 Nakkhatta	33 Same as in <i>I</i>	Constellations.
34 } to } Sāparivāra-chatumahādīpā 37 }	34 } to } Chaturmahādīpā-paritta- 37 } dīpā	The four great continents surrounded with smaller ones.
38 Sāparivāro satta-ratana-samaṅgī Chakkavatti	38 Sāparisochakkavatti	Chakravartin with attendants.
39 Dakkhināvattaseta-saṅkha	39 Same as in <i>I</i>	Right voluted conch.
40 Suvannamachchhayugaḷam	40 Do.	A pair of golden fishes.
41 Chakkāvudham	41 Chakka	A wheel or discus.
42 } to } Sattamahāgaṅgā 48 }	42 } to } Same as in <i>I</i> 48 }	Seven great rivers.
49 } to } Sattakulapabbatā 55 }	49 } to } Sattamahāselā 55 }	Seven great rocks.
56 } to } Sattasīdantasāgarā 62 }	56 } to } Sattamahāsarā 62 }	Seven great lakes.
63 Suvannamahāsarājā (?)	63 Supannarājā	<i>I</i> (?), <i>II</i> Garuḍa king.
64 Sumsumāra	64 Saṁsumārako	A crocodile.
65 Dhajapātaka	65 Same as in <i>I</i>	Flags.
66 Suvannasīvika	66 Ratanāpātāṅki	Golden litter or jewelled litter.
67 Suvannavālabhāṇī	67 Same as in <i>I</i>	Golden yak's-tail.
68 Kelasapabbata	68 Do.	Mt. Kailāsa.
69 Siharājā	69 Do.	Lion king.
70 Byaggharājā	70 Do.	Tiger king.
71 Valāhaka Assarājā	71 Valāhoassarājā	Valāhaka, king of horses.
72 Uposathachhaddanta-hatthirājā	72 Uposathavāranarājā	Uposatha Chaddanta, king of Elephants. <i>II</i> omits Chaddanta.

<i>I Jināṣaṅkārā-fikā.</i>	<i>II Anāgataṣaṅka-aṭṭhakathā.</i>	Equivalents (or sketches where doubt exists) in English.
73 Vāsukīnāgarājā . . .	73 Bāsukiuragarājā . . .	Vāsukī or Bāsukī, king of Serpents.
74 Hamsarājā . . .	74 Same as in <i>I</i> . . .	King of the <i>hamsas</i> .
75 Usabharājā . . .	75 Do. . .	Bull king.
76 Erāvapaṇaṭṭhirājā . . .	76 Erāvapaṇnāgarājā . . .	Erāvana, the Elephant king.
77 Suvappaṇmakara . . .	77 Same as in <i>I</i> . . .	Golden Makara.
78 Chatumukha suvaṇṇanāvā . . .	78 Chatumukhāni sovaṇṇanāvā . . .	Golden boat with four bows.
79 Savachchhakādhenu . . .	79 Savachchhakāgāvi . . .	A cow with a calf.
80 Kimpurisa . . .	80 Kinnaro . . .	A Kinnara.
81 Kinnarī . . .	81 Same as in <i>I</i> . . .	A Kinnarī.
82 Karaviko . . .	82 Do. . .	An Indian cuckoo.
83 Mayūrarājā . . .	83 Do. . .	Peacock king.
84 Koñjarājā . . .	84 Koñcharājā . . .	Heron king.
85 Chakkavākarājā . . .	85 Same as in <i>I</i> . . .	Ruddy goose king.
86 Jivāñjivakarājā . . .	86 Jivajivakarājā . . .	Pheasant king.
87 } to } Chadevalokā . . . 92 }	87 } to } Chakāmāvachara devalokā . . . 92 }	Six <i>devalokas</i> , or heavens.
93 } to } Soḷasabrahmalokā . . . 108 }	93 } to } Same as in <i>I</i> . . . 108 }	Sixteen Brahmaloḷas.
	Less 1 short (see against No. 15)=107.	

I Jināṣaṅkārā-fikāpaṭṭha, pp. 169-170, Sudhammavati Press, Rangoon, 1926 edition.

II The list given here is taken chiefly from that given in the *Gulḥatthavinichchhaya*, Vol. I, pp. 79-80, Hamsavati Press, Mandalay.

NOTE to No. 72. In a manuscript copy of the *Anāgataṣaṅka-aṭṭhakathā* in the office of the Superintendent, Archaeological Survey, Burma, which is rather corrupt, No. 72 in the list is followed by "Chhaddantahatthi".

Now if we compare these lists with the marks shown in figs. *a* and *b* in Plate CLIII, we notice that the order and arrangement as mentioned in *I* and *II* are almost identical with those in the plate. The marks in *b* begin with the one at the right corner immediately below the toe, while those in *a* begin with the one at the left corner. They go round the central figure, the wheel, in a spiral form, *b* anti-clockwise, and *a* in an opposite direction, and end with the centralmost figure in the last horizontal row of panel just above the heel.

The first mark in fig. *a* and fig. *b* represents "Satti", a spear. The second, no doubt, represents "Sirivachchha" (Śrīvatsa), but the figure in fig. *a* differs from fig. *b* while both again differ from later foot-prints. In fig. *b* it looks like a plant with long leaves, in fig. *a* it is a bud, probably a lotus-bud, placed on a lotus pedestal.

Śrīvatsa is, of course, well known in India. It is one of the eight auspicious objects among the Jains; it is a distinguishing mark of Jaina *tīrthaṅkaras*, and it is also a mark on Viṣṇu's breast. But each community represents it in its own way, as in the case of other auspicious marks also.

The next figure in the same row represents "Nandiya" or "Nandiyāvatta". It is a rosette with five petals in fig. *b* but in fig. *a* it is a cross within a circular border; the arms of the cross meeting at a circle in the centre are slightly bent and turned to the right. It is variously defined in the Pāli *ṭīkā*s as follows: *Nandīti dakkhināvattam*,—"Nandi means: turning to the right". (*Ṭīkā on the Mahāpadāna-sutta of the Dīgha-nikāya*). Or, *Nandiyāvattanti Nandiyāvatta pupphakārena mangalattham suvaṇṇena katam*,—"Nandiyāvatta is (an object) made of gold in the form of the Nandiyāvatta flower for auspicious purpose". The Burmese *Nissayas* add that the flower named is a kind of periwinkle with the petals turning to the right.¹ Again, the *Sāratthadīpanī Ṭīkā* glosses as follows: *Nandiyāvattanti kākapadasaṇḍhanā mangalattham katā suvaṇṇavikati*,—"Nandiyāvatta is (an object) made of gold in the shape of a crow's foot for auspicious purpose". The plaques round the base of the Ānanda pagoda show only one form, that is the rosette, and the term for it in Old Mōn is "Nandivar".

But what is most puzzling is the fourth sign in the same row. Here, in both fig. *a* and fig. *b* it is a spirally shaped object in three whorls tapering to the top. The same form is met with in the foot-prints in the Ānanda pagoda and in old paintings at Pagan, occupying the same position and in the same order. It represents the *sovattika* according to the *Mahāpadāna-sutta-aṭṭhakathā*; and *sovattika* according to lists *I* and *II* mentioned above. Our Burmese *Nissayas* define both these terms as "three folds in the neck" or "three whorls [of a spiral?]". In later foot-prints it is represented by three crescent-shaped objects. It is very tempting to take both words as Pāli equivalents for "svastika" or "sauvastika", but the figures represented in our foot-prints do not look either of these two religious symbols in any respect. It is also questionable whether *ṭika* and *thika* in "sovattika" and "sovattika" are interchangeable. Anyway, it seems quite clear from a reference to our figures and the Burmese *Nissayas* that the object meant to be represented is composed of three parts or members.

The figure that comes next represents a "Vatamsaka", an ear-ornament. The one following it, specially in fig. *a*, is clearly a kind of receptacle for food, and is generally understood as such. It represents "Vaddhamānaka" or "Vaddhamāna". The present Thathanabaing or Buddhist Archbishop considers that "Vaddhamāna" means "a kind of man's head-dress", from the gloss *Vaddhamānanti purisahāri purisaṅgam* as given in a *ṭīkā*.²

¹ *Vinaya Piṭaka—Vimativinodanī-ṭīkā*, Vol. II, p. 33, Sudhammavati Press, Rangoon, 1915 edition. See also *Gūḥatthasālinichchaya*, Vol. I, p. 84 and p. 102.

² If *vaddhamāna* should be interpreted as a head-dress, then it ought to be spelt either *vaddha* or *baddhu* [Skrt. *vardha*, *bandha*(na)].—Editor.

"Bhaddapīṭṭha" is a stool or a table. In the plaques round the base of the Ananda it is described as "Baddapīḍh" in Old Môn. "Bhaddapīṭṭha" is preceded by "Machchhayugalam" in the order of marks as given in the *Mahāpadāna-sutta-aṭṭhakathā*, but the latter comes as No. 40 in lists *I* and *II*.

The marks representing (8) *aṅkusa* (goad), (9) *pāsāda* (palace), (10) *toraṇa* (archway), (11) *setachchhatta* (white umbrella), (12) *khagga* (sword), (13) *tālavanṇa* (talipot fan) and (14) *mayūrahattā* or *morapattam* (fan made of peacock's feathers), may all be met with in fig. *a* and fig. *b*, and they do not require any comment. Figure (14) is missing in fig. *b* owing to the damaged condition of the stone.

The mark (15) representing *chāmara* (yak's-tail, fly-whisk) is also missing in fig. *b*, but it may be noticed in fig. *a*. The *Anāgatavaṃsa-aṭṭhakathā* makes no mention of it, and the *Mahāpadāna-sutta-aṭṭhakathā* uses the term "Vālibijani" for it, which according to the *ṭīkā* means "Chāmarivāla", yak's-tail. The term *Vālabijani* with the prefix *suvaṇṇa* occurs again as No. 67 in lists *I* and *II*. That is to say, "Vālabijani" or a term nearly equivalent to it occurs only once in the lists of marks supplied by the *Mahāpadāna-sutta-aṭṭhakathā* and *Anāgatavaṃsa-aṭṭhakathā* but twice in the list supplied by the *Jinālaṅkāra-ṭīkā*, and both are evidently represented in fig. *a* and fig. *b*.

The next three marks should, according to lists *I* and *II* represent *unhisa* (head-dress), *patta* (bowl), and *maṇi* (gem), and they were followed by *sumanadāma* (garland). But this order is not strictly followed in the list supplied by the *Mahāpadāna-sutta-aṭṭhakathā*. Instead of the word *patta* (bowl) preceding the word *maṇi* (gem), the order is reversed, and it has *maṇi patta*. I wish to make this point clear, because both fig. *a* and fig. *b* have evidently taken *maṇi patta* or *maṇi pattam* as one object meaning "a jewel-cup or -bowl", and have represented it so. A circular object representing that jewel-cup and placed on a stand in the form of a double lotus may be noticed in both fig. *b* (?) and fig. *a*. It comes immediately after the object representing the ornamental head-dress and is followed by a garland also placed on a stand.

The next in the order of marks mentioned in lists *I* and *II* are five kinds of lotuses, then a full vessel, a full cup and an ocean. The stone in fig. *b* is much damaged here and most of these marks are missing; those in fig. *a* are not very clear either, but there can be no mistake about them and their order.

A circular object in the form of a wheel represents the *Chakkavālapabbata* or *Chakkavāla*. In fig. *b* it is a toothed wheel, while fig. *a* has spokes bent to the left. *Himavanta-pabbata* is a forest in fig. *b* and Mt. Meru is represented by three small mansions each resting on a pillar-like object representing a hill. The latter stand for the Tāvātimsa heaven, the abode of the thirty-three *devas*. It is situated on the top of Mt. Meru. This figure is missing in fig. *a* as the portion of the stone there has been damaged.

Going up the other side of each foot-print we notice next the figure of a horse and then that of a hare, each in a circular orb. These certainly represent the sun and moon (*Sūriyamaṇḍala* or *Sūriya*, and *Chandamaṇḍala* or *Chandimā*), but I may remark that this is the first time for the sun being represented by a horse met with in sculptures in Burma. I am inclined to think that it is

altogether a Hindu idea. The horse has been taken to stand for the seven horses drawing the chariot on which Sūrya is represented.¹ In sculptures and paintings of a later period the sun is represented by the figure of a peacock, which was and is now considered as a national emblem of the Burmese. But how and when this latter idea originated among us is a question that remains to be solved. Our learned *sayadaws* (Buddhist monks), who have examined this question have not yet been able to come to a conclusion.²

Returning to our foot-prints, the next figure with many circular dots, and those that follow: a semi-elliptical object, a crescent, a parallelogram, a circle—each with a thick border—and again another group of circular dots, represent respectively the *nakshatras*, the four great continents, and two thousand smaller ones. The last, that is, the four great continents and two thousand smaller ones surrounding them, should, according to lists *I* and *II* and to that given in the *Aṭṭhakathā* of the *Mahāpadāna-sutta*, be counted as four in number, but they occupy five compartments in our examples, the smaller islands being shown separately. The figure coming next shows the Chakravartin in his regal dress (without attendants in fig. *b* and with attendants in fig. *a*).

We next follow with the conch in the inner row, and, passing the pair of fishes following it immediately, we come to the seven great rivers. But lists *I* and *II* have *Chakkāvudha* or *Chakka* coming between the conch and the seven great rivers, and according to many written sources in Burmese of later date, *Chakkāvudha* or *Chakka* should be taken as meaning a discus, a missile weapon, and it is suggested that it should be represented as such, apart from the wheel symbol. The absence of this mark in figs. *a* and *b* is significant and shows clearly either that the learned *sayadaws* of their time considered it redundant as the wheel in the centre might very well be taken for it, or that it was not mentioned in the lists of their time. This absence may also be noticed in the old paintings at Pagan, but in a sculpture found at Pagan and belonging to about the 14th-16th century A.D., it is represented by a flat circular object, and it comes between the pair of fishes and seven great rivers as enumerated in lists *I* and *II*.

Following the seven great rivers, there are seven great mountains and seven great oceans (*mahāsāgarā*, according to *I*) or lakes (*mahāsarā*, according to *II*). Fishes, one each, may be noticed in the seven great rivers. Then there follow the Garuḍa King (for which *I* has, wrongly, *suvaṇṇahamsarājā*), a crocodile, two flags in one compartment, a golden litter or *pāṭaṅka*, a golden fly-whisk or fan made of yak's tail, Mt. Kailāsa, the lion king, tiger king and Vajrahaka the horse king. With Vajrahaka Assarājā the figures in the inner row round the sides end, and with the next figure, the first elephant, the third row begins. Lists *I* and *II* mention here, against No. 72, only one elephant, but the terms used in *I* convey the idea of two; one, of the *Uposatha* breed, and the other, of the *Chaddanta*

¹ The Count GORLET D'ALVIELLA remarks as follows: "We may observe by the way, that the horse, and the cock, as well as the eagle, and the lion, are essentially solar animals". *The Migration of Symbols*, p. 58.—As Prof. PRZYLUCKI has clearly proved, the horse as a Sun-god symbol is of Irānian, and ultimately of prehistoric (animistic) origin.—Editor.

² It is conjectured that the Sun has been represented by the figure of a peacock in sculptures and paintings so as to perpetuate the memory of the golden peacock who at every morning used to recite a hymn in honour of the Sun as it rose, and another in the evening as it went down. (*Mora-jātaka*, No. 159, FAUSBÖLL'S *Jātaka*, Vol. II)

breed. Accordingly, both fig. *a* and fig. *b* show two elephants, each in a compartment by itself. We cannot mistake the Nāgarājā that comes next, and the duck king, the bull king, the elephant Erāvaṇa and the golden *makara* that follow. The elephant Erāvaṇa may be distinguished from the other elephants, in later representations, by its three heads. The figure coming after the golden *makara* should, according to lists *I* and *II*, represent a mythical boat with four heads or bows: *Chatumukhānisuvaṇṇanāvā*, but the figure in *b* is missing as the stone has broken away here, and that in fig. *a* shows only traces of a boat without its distinctive characteristics: the four heads or bows. In later foot-prints, however, we may notice a boat in a panel and four heads in another, and the author of the *Chakkāṅgavinichchaya Kyam* considers, erroneously, that *Chatumukhāni* or *Chatumukha* should be represented by the figure of Brahmā (with four heads).

The cow with its young comes next in both our figures. Following it, there are a Kimpurisa, a Kinnarī, and five different kinds of birds, after which there comes the first of the six *devalokas*. Here, four pillar-shaped objects each surmounted by a building fill up the whole panel. These represent the abodes of the Chatumahārājā, four Lokapālas, which are said to be situated on the summit of Mt. Yugandara. Next to it is the Tāvātimsa heaven on the summit of Mt. Meru followed by the Yāma, Tusita, Nirmanarati and Paranirmantavassavati heavens. Small buildings with receding ornamental roofs indicate those heavens. The sixteen Brahmā-worlds are similarly represented, and occupy the remaining sixteen panels, but the buildings there seem to be less ornate.

It will be noticed from the above that despite a few minor differences the lists *I* and *II* and the foot-prints in fig. *a* and fig. *b* try to keep up the traditional number of marks, that is 108. Fig. *a* and fig. *b* show 108 marks each without the wheel in the centre, and follow very closely the order of *I* and *II*.

At the same time, it may be of great historical interest to remark that the growth in the number of marks in the Buddha's foot-prints is clearly perceptible. According to the *Lakkhaṇa-sutta* referred to above, the only mark on each sole of the Buddha is a wheel with thousand spokes. The *Buddhavaṃsa* adds to it a streamer, a *vajra*, a flag, a *vaḍḍhamāna*, and a goad. Later the *Aṭṭhakathā* of the *Mahāpadāna-sutta* spoke of many other marks in addition, but the traditional number 108 had not yet been reached. Many were still wanting. It was completed by the *Jinālaṅkāra-ṭīkā* and *Anāgatavaṃsa-aṭṭhakathā*. The commentary on the *Mahāpadāna-sutta* belongs to the 5th century A.D., and the latter commentary and *ṭīkā* belong to about the 8th-11th century A.D., and there is a difference of many years between them and the original *Sutta* and the *Buddhavaṃsa*. A similar growth may be noticed in the sculptured slabs. The foot-prints on the gateways at Sanchi and Barhut are devoid of any marks except the wheel in the centre. The Amarāvati foot-print adds to it *svastikas*, flowers and a few other symbols,¹ and if we may find other foot-prints belonging to later periods, it is quite likely that the additions are gradual until we come to the number 108 in about the 5th-6th century A.D. However, there can be no doubt that most of

¹ FERGUSON'S *History of Indian and Eastern Architecture*, Vol. I, p. 223, fig. 126.—See also *Encyclopædia of Religion and Ethics*, Vol. 4, p. 324, fig. 19.

these marks were known long before the 8th century A.D. They are auspicious marks, and as such they may be noticed on coins, seals, and on sculptures in temples, gateways, etc., belonging to different periods.¹ All or most of these marks then known were made to appear, in the 5th century A.D., on the soles of the feet of the Buddha, as the King of Kings, the Lord of Lords, or in short, as the most exalted one among men and *devas*.

Buddha's foot-prints bearing those marks can be traced in Burma from about the 11th century A.D. to the present day, and the figures representing the auspicious marks change in their style and form from time to time. As works of art, the figures in the earlier foot-prints are more carefully delineated. They are elegant in style and finely modelled. Generally speaking, they are the work of Indian artists at Pagan of about the 11th-12th century A.D.

SOME HITHERTO UNKNOWN BURMESE COINS.

By U Mya.²

Mr G. H. LUCE, Reader in Far Eastern History to the University of Rangoon, kindly sent me for inspection nine old coins belonging to him and to U BA of the Teacher's Training College of the same University. The coins belonging to U BA are five in number, and they may be classed as Pegu coins (Plate CLIV, a, 1-5). They are said to have been found in Kawichaung, a field some 5 miles north of Pegu, by a farmer while ploughing in November 1932. As far as I could gather, coins of their type have never been noticed before. They do not figure among those shown in plates III-V of PHAYRE's *Coins of Arakan, of Pegu, and of Burma*, nor are they to be met with in the plates accompanying Sir Richard C. TEMPLE's *Notes on Currency and Coinage among the Burmese*.³ From the many valuable passages quoted in it from YULE's *Hobson-Jobson* and others, it is not at all evident that the system of coinage was known in Pegu. The Peguans were using as currency lump lead or lump spelter known as *Ganza* or *Gansa* to travellers. "In 1554 NUÑEZ found that there was no coined money in Pegu, but that pieces of a broken utensil of a metal like frosylegra (? spelter)" were used for coins, and that this was called *gamça* (in Portuguese). In fact, Sir Richard TEMPLE feels inclined to hold, so far as Burma is concerned, that "the Arakanese Coinage, as we have it, commenced in A.D. 1459 and was carried on regularly by the Arakanese kings to A.D. 1784, and then in the reign of Mintayaji, i.e., Bodop'aya, were issued the legendless coins, which European scholars held to be Pagoda medals of a much earlier date".⁴ The Pagoda medals are also known as symbolical coins. It may, however, be remarked that it has long been known, from the evidence afforded by the old coins themselves, which have been dug up

¹ Many of them, no doubt, are as old as mankind. To quote only a few, the Sacred Snake, the Sun Wheel, the Hare, the four Zodiacal animals (Bull, Lion, Horse, Elephant) etc., are found in Sumer and in the Indus Valley culture.—*Editor*.

² Submitted with the Reports for 1932-33 and 1933-34, and somewhat abbreviated by me.—*Editor*.

³ *Indian Antiquary*, Vol. LVI, Part DCCX, November 1927 and following Nos.

⁴ *Indian Antiquary*, Vol. LVII, March 1928, p. 41.

or picked up now and again, that there was a time in Burma long before Bodawpaya (1782-1819) when those old coins were issued either as currency or as medals for religious or other purposes of a quasi-religious nature. Witness the coins shown as figs. *e* and *f* in plate XLII of the *A. S. R.* for 1926-27. They were found at Old Prome in a relic-chamber of an old and ruined temple, with many other articles, some containing writings, which on palæographic and other stylistic grounds may be assigned to the 6th-7th century A.D. They are no doubt legendless but the symbols or marks they bear on either face are old. King Bodawpaya could have made copies of them from samples which he might have had in his Treasury. Old symbolical coins were also found at Halin near Shwebo. They are fairly distinct in type from those found at Old Prome, and one of their distinguishing marks is a symbol of the rising sun or wheel with many spokes on one face. They are also legendless and Bodawpaya could very well have them copied also. Old Pegu had also her own coins, and the same may be said of Old Arakan.¹ Most of the old coins found in the latter country bear legends and are clearly of the Gupta age.

The very fact that various groups of symbolical coins have been found nowhere else outside Burma, allows them to be classed as indigenous.² On the other hand, their Indian origin and Indian associations cannot be questioned and there must have been a time in Burma when they were being used as currency. After a time they were considered more as sacred objects than as currency, but how and when that period began cannot be said with any degree of certainty at present.

The coins received from Mr LUCE are shown in Plate CLIV, *a*, 1-9. Figs. 1-5 are those belonging to U Ba and found at Pegu. The latter are made of a mixed metal, probably lead and copper, and are stamped only on one side, each with the figure of a bird within a beaded border. The bird in figure 1 looks like a kind of heron, that in 2 a duck, in 3 and 4 a pheasant, and 5 a *hamsa* or Brāhmaṇī duck. It may be recalled that among the auspicious marks on the Buddha's feet are included (1) a *hamsa* (a brāhmaṇī duck), (2) a *karavika* (an Indian cuckoo), (3) a *mayūra* (a peacock), (4) a *koṇja* (a heron), (5) a *chakkavāka* (a ruddy goose), (6) a *jīvañjīvaka* (a pheasant). All the birds in our figures 1-5 may thus be sacred birds and auspicious marks.

The coin shown as fig. 6 in the same plate is said to have been found at the Bawrihat near Yaunghe in the Southern Shan States. It appears that a coin of the same type was also found near the Taluppaya at Bawnin (Mawnaung), South-West of Heho in the same States. It is perhaps a coin of the same type which the late Hon'ble SAWBWA of Yaunghe presented to the late Mr Taw Sein Ko in 1911 and which was mentioned in the *Annual Report of the Superintendent, Archaeological Survey, Burma*, for the year 1912, para. 57, p. 18.

The sun in our figure is represented by its rays enclosed within a circle and a beaded border. There are also round dots or beads between the tips of rays.

¹ Old Siam had hers too. For specimens of coins in old Siam see figs. 3 and 5 of Plate I of Reginald LE MAU's *The Coinage of Siam*.

² It is stated that coins of a type which is distinctly Burmese were also found in Siam. *Ibid.*, Plate I, fig. 4 and p. 3. From a statement made by Mr W. A. R. WOOD in his *History of Siam*, p. 50, it would appear that old coins were also found at Pagan, but so far I have not come across any.

The lower set of rays issue from a horizontal line below and the upper from a curved line above. In the more complete type from Halin the beaded border outside is placed within two circles.

There has been much controversy with regard to the names of the symbols on the other face. In a more complete coin from Halin, the symbol begins with a dot or a small round object in the centre close to the edge on one side. Two small crescent-shaped objects, in the form of a forked line, flow downwards and outwards from that dot on each side of which may be also noticed a circular object and a star-shaped one representing evidently the moon and stars, or the sun. From either side of the forked line there hang down the so-called *nāga*-shaped figures, one on each side, supported by a concave horizontal base beneath. Now a combination of these figures: the dot in the centre above with the forked line below, the two *nāga*-shaped objects, one on either side, and the concave horizontal base beneath, may be reduced in their simplest form to a symbol which may be noticed on the coins from Pegu shown as figures 6 and 7 in Plate V of PHAYRE'S *Coins of Arakan, of Pegu, and of Burma*. For purpose of convenient reference and comparison, sketches of these two figures: the device on our present coin and that on PHAYRE'S, are given here in Plate CLIV, c. These may be again compared with the central member of the *triratna* symbols surmounting the *toranas* of the main Sanchi *stūpa*. Figures closely resembling them are also met with on the railings discovered at Sārnāth and shown in Plate XX of the *A. S. R.* for 1907-08. The latter are placed on pedestals with railings round them. Others of the same type may be noticed on the seals found at Basarh, and also on the coins found at Besnagar.

Various names have been given to that symbol. PHAYRE calls it "Śiva's trident", but CUNNINGHAM thinks it to be a Buddhist emblem. It has been also called a *nāga* symbol, and such examples as have been found in India have been known as "ornamental *triśūla*", "shield" and "fire-altar". Lastly Dr COOMARASWAMY thinks that it represents the "Śrīvatsa".¹

I am inclined to place that coin in the same class as the old symbolical coins from Halingyi, and cannot agree with Sir Richard TEMPLE who thinks that all such coins were issued by King Bodawpaya. The hole in it indicates that it was once worn round the neck of a person or a child, as an auspicious object. In fact, the marks or symbols on such coins may be considered as auspicious marks.²

The coins shown as figs. 7 and 8 in the same plate are two historical ones of Arakan. They are silver coins and contain legends in Burmese each giving the name of the king who issued the coin and the year he ascended the throne. The same legend is repeated on both faces. No. 7 reads: 1093—*Shwenan Sakhan*

¹ *Orientalische Zeitschrift*, 1927-28, Vol. XIV, Plates 27 and 29.

² Mr G. H. LUCE has the following note attached to that coin: "Coin made of silver with some heavier alloy on assay. Keeps its colour better than the Burmese silver rupees. Found at Bawrihat (Mawlihsat), together with a good many others. Similar to an other coin found near the Taluppaya at Bawnin (Mawnang) South West of Heho. With regard to the rising sun above Mr C. E. BROWN reminds me that it is not uncommon as a tattoo pattern in the Shan States". (Mr C. E. BROWN is a resident of Taunggyi in the Southern Shan States.)

So far we know very little of the archæology of the Shan States. The coin noticed above is the first of its kind that has come under my notice. The image of the seated figure in the centre of the symbols on one face of it is more perfect than on any other coin of the same type.

Chanda Sūriya rājā (i.e., 1093 [sakkarāj], Lord of the Golden Palace, King Chanda-Sūriya). No. 8 reads: *1104—Shwenan Sakhan Nara-Abhaya-rājā* (i.e., 1104, [sakkarāj], Lord of the Golden Palace, King Nara-Abhaya). They are the same as coins Nos. 13 and 16 in PHAYRE's Plate I.

Coin No. 9 is said to have been found in the possession of a broker at Mergui. Coins of such type are generally known as Tenasserim coins. They are late and are made of lead. The obverse face contains the figure of a stylized form of a *nāga*, *nayā* or Chinese dragon. There is something like a circular object above, close to the head. Below there are three lines of dots, and these may represent islands. The other face contains a legend in a corrupt form of *Pāli* in a few indistinct letters in Burmese characters: *naga[raṃ] [ma]hāsukham—* 'City of Great Peace'.

The last coin No. 10 is a copper coin of Bodawpaya stamped with the figure of a *machchhayugalam*, i.e., a pair of fishes on the obverse; and a legend in Burmese giving the year and date of a king's ascension to the throne on the reverse. The legend means "In the year 1143 [sakkarāj], 14th Tabodwe, waning".¹ This coin was kindly presented to me by Mr W. G. COOPER, late Deputy Conservator of Forests, Burma. The pair of fishes is one of the auspicious marks on the Buddha's feet. It is also a sign of the zodiac, and according to a Burmese way of computation, a fish (*nga*: in Burmese) denotes Monday, a day in the week. King Bodawpaya was born on a Monday, and the day he ascended the throne (11th February 1782) was also a Monday.²

During the year 1933-34 the discovery of three old silver coins at Halin and fifteen others at Pegu was brought to my notice. They are legendless and are of the same type as those belonging to U BA already noticed in this article *supra*. The discovery of the Halin coins was reported to me by U CHEIK, Headman of Halin. The latter differ in many respects from the ones usually found there, although they may all belong to the same family group of symbolical coins. One of them is slightly larger in size than a rupee. It is of the same specimen as some of the symbolical coins found at Hmawza (Old Prome) and shown as figs. *e* and *f* in Plate XLII of the *A. S. R.* for 1926-27. The other two form a class by themselves and are the first of the kind discovered in Burma. One face shows a wheel with a dot in the centre probably representing one end of the axle, a hub, 12 spokes and a tyre within a beaded border and a slightly raised edge. On the reverse is a conch surmounted by three small segments of circles placed in a row from left to right and flanked by a crescent moon and a star and marks generally known as *chaityas* to numismatists. The shell is standing with the mouth downward on a curved horizontal line. Below in a compartment bounded by curved and straight lines are seven wavy lines, probably representing rivers (Plate CLIV, *d*). Each of these two coins is about the size of a rupee.

¹ The date is equivalent to Monday, the 11th February, 1782.

² For a better specimen of the same coin see *Indian Antiquary*, Vol. LVII, July 1928, Plate V, figs. 48 and 49. See also PHAYRE's Plate V, fig. 8.—The author's explanation is of great interest. Evidently, many of the auspicious symbols have an astronomical origin, and they are auspicious on account of certain constellations being believed to bring luck and fortune.—Editor.

In this connexion it may be of interest to note that in a legendary history of Mogaung in the Myitkyina District in the upper basin of the Irrawaddy mention is made of a seal in the possession of the Shan *Sawbwas* ruling over that part of the country, many years ago. That seal is said to bear the following words on it: "*Seven ranges of mountains; seven seas; the sun; the moon; and the stars*". It was supposed to possess magical powers and was very strictly guarded. As long as it remained in the possession of the reigning *Sawbwa*, the country was immune from foreign attacks, but during the time of Khum Lai *Sawbwa* it was stolen from him by the Chinese Emperor who was then at war with him, and the territory was afterwards captured by the Chinese.¹ This is no doubt mixed up with a tale, but there might be a glimmer of truth in the story of the seal. In view of the widespread nature of old symbolical coins in Burma, the seal referred to might be one of those symbolical coins, and there might be marks on it denoting "mountains, seas or rivers, the sun, the moon and the stars". These marks are distinctly noticeable in the last two coins from Halin. The wheel on one face may be also a symbol for the sun. The star and the moon are noticeable on the reverse, and there are in addition mountains represented by what are generally known as "chaityas" and rivers.

To the list of place names in Burma where old symbolical coins are known to have been found may be added Sawlon in Karenni in the southern part of the Southern Shan States. From an account given in pages 515-517 of a book on Burma in Italian entitled *Quattro anni fra i birmani e le tribù limitrofe* by Leonardo FEA published in Milano in 1896 it appears that there were some old symbolical coins to be found at Sawlon in Karenni closely resembling the typical ones of Old Prome and Halin (see figs. 173, 174 and 175, *op. cit.*). They were being used as pendants and necklaces by Padaung youths and women there. According to an information collected on the spot by the author of that book, they were picked up by chance and found in excavations, and were preserved by those Padaungs as the most ancient works of their fathers.² I have been trying to procure a few specimens of those coins from that part of the country, but have not been successful so far.

¹ *Burma Gazetteer, Myitkyina District*, Vol. A, 1912, pp. 142-145.

² I am indebted for a reference to those coins to Mons. Ch. DUROISSELLE, my predecessors, and for a translation of the portion of the account relating to them to Prof. A. L. A. GORDON MACKAY of the University College through the kindness of Mr G. H. LUCE of the same College.

SECTION IX.—DEPARTMENTAL ROUTINE NOTES.

ANCIENT MONUMENTS PRESERVATION ACT AND LISTING OF MONUMENTS.

Report for the year 1930-31.

United Provinces. Four monuments which are not of sufficient archaeological interest have been recommended to be removed from the List of Central Government Protected Monuments. The ancient mound and pillar dating from about the first century B.C. at Lalabhat, and the fragment of a pillar at Duma-pur, Tahsil Derapur, have been declared protected monuments. Agreements were executed in respect of twenty-four monuments.

Delhi Province. The removal from the List of Central Protected Monuments was suggested to the Director General of Archaeology in India of seventeen buildings which are of little antiquarian interest.

Panjab. Agreement has been reached in respect of one monument.

Bombay Presidency and Sind. A monolithic stone pillar in the Bijapur District has been declared a protected monument. Two agreements were entered into during the year, viz., in respect of the Mahadeo Temple at Sangamner, Taluka Pachora, East Khandesh District, and the Bhuleshwar Mahadeo Temple at Malsiras, Taluka Purandhar.

Bihar and Orissa. During the year 1930-31 the ruined tomb believed to be that of Mahmud Shah, the last Sayyid king of Bengal, at Colgong, Bhagalpur District, has been declared a protected monument.

Bengal and Assam. Three ancient monuments, in the Khasi and Jaintia Hills Districts of Assam, consisting of megalithic bridges, have been added to the List of Ancient Protected Monuments, and notification of protection has been issued in respect of the colossal image and its fragments together with the surrounding land at Silua, P. S. Chhagalnaya, District of Noakhali. Agreements were executed in regard to eight privately owned monuments.

Madras Presidency and Coorg. The dolmens in the Palni Hills, Madura District, have been added to the List of Ancient Protected Monuments.

Burma. The police at Mandalay succeeded in arresting a gang of treasure-hunters on the night of August 12th, 1930, while they were digging into the tomb of King Shwebo-min, a protected monument within the old city walls of Amara-pura. The culprits were convicted.

Report for the year 1931-32.

United Provinces. Nine monuments, as of little antiquarian interest, have been removed from the List of Central Protected Monuments. Agreements have been made in respect of seven privately owned monuments, including a rock-cut hall bearing an inscription of the Indo-Scythian period, in the Ginja Hills, S.W. of Allahabad, and a group of Hindu temples in the District of Almora.

Delhi Province. Sixteen monuments have been removed from the List of Central Protected Monuments. The Tomb of Najaf Khan, as well as the adjoining

enclosure, measuring about 42 *bīghās*, has been declared a protected monument. Agreements have been reached with the private owners of two monuments.

Panjab and North-West Frontier Provinces. Aurangzeb's Ba'oli at Kharian, District Gujarat, which collapsed in 1930, has been removed from the list of Central Government Protected Monuments.

Bombay Presidency and Sind. The old temple of the River Krishna facing the Wai Valley has been declared a protected ancient monument. The Pani Gateway at Dhohad, Panch Mahals District, was removed from the List.

Bihar and Orissa. The Garh at Kurkihar, Pargana Narhat, District Gaya, has been declared a protected monument.

Central Provinces. The Fort at Paunar, District Wardha, has been declared a protected monument.

Assam. Four monuments have been removed from the Central List.

Burma. Five monuments have been removed from the List of Protected Monuments in the Burma Circle.

Report for the year 1932-33.

Delhi Province. Thirty-four ancient monuments situated in the Civil Station have been declared protected, and afterwards removed from the control of the Archaeological Department and transferred to the charge of the Chief Commissioner, Delhi.

Panjab. The Ther Mound at Sirsa, District Hissar, was declared protected during the year 1932-33. Three monuments were removed from the Central List. Two agreements were executed; unfortunately, no agreement could be reached with the Gurudwara Prabandhak Committee in respect of Maharaja Ranjit Singh's Samadh. The Government of India, in consultation with the Director General of Archaeology, consider that this building should remain a protected monument in order that (i) under Section 9 of the Ancient Monuments Preservation Act the Trustees of the Samadh could be compelled to use for repairs such endowment or part thereof as may have been created for this purpose, and (ii) the Government could prevent any person other than the owner from destroying, removing or injuring the monument, under Section 16 of the said Act.

Bihar and Orissa. The ruined tomb believed to be that of Mahmud Shah and which has been declared a protected monument in 1930-31, was the property of a private owner, who entered into an agreement during the year under report according to Section 5 of the Ancient Monuments Preservation Act. Four boys of the Bhabua English High School have been fined each Re. 1 for disfiguring Bakhtiyar Khan's Tomb at Chainpur, District Shahabad, a protected monument.

Central Provinces and Berar. The megalithic dolmen at Pipalgaon, Bhandara District, has been declared a protected monument, and the owner entered into an agreement. Four other monuments have been included in the List of Central Protected Monuments, and two Christian tombs, of little antiquarian interest, have been removed from the List.

Bengal. Two monuments have been added to the List of Protected Monuments, and private owners of two monuments entered into agreement with the Department.

Assam. Eight old cannons in the District of Sibsagar, and five rock-cut caves at Jogighopa, District Goalpara, have been added to the List of Central Protected Monuments.

Madras Presidency and Coorg. The Ther Mahal has been removed from the List of Central Protected Monuments. The ancient mound at Chettipalayam has been declared a protected monument during the year 1932-33.

Report for the year 1933-34.

United Provinces. Eight monuments at Kanauj, District Farrukhabad, have been brought under the Ancient Monuments Preservation Act. The owners of the Great Idgāh at Agra have entered into an agreement according to Section 5 of the Act.

North-West Frontier Province. The Frontier Government, in order to prevent the unauthorized traffic in Gandhāra sculptures, have notified in their Notification No. 16289-H.A., dated October 4th 1933, that no ancient sculpture, carving, image, bas-relief, inscription or other like object in the North-West Frontier Province shall be removed from the place where it is, unless with the written permission of the Deputy Commissioner concerned.

Bihar and Orissa. The owners of the Fort ruins at Sagardih, District Champaran, entered into an agreement under the Ancient Monuments Preservation Act, by constituting the Commissioner, Tirhut Division, as guardian of that Monument.

Bengal. During the year 1933-34 the Sivamandap mound at Baigram and the granite monolithic pillar at Sapahar, both in the District of Dinajpur, have been added to the List of Central Protected Monuments. The former apparently marks the site of an ancient temple built in the Gupta period by Śivanandin, as recorded in two copper-plates discovered during the excavation of a tank at the foot of the mound. The latter is a remarkable monument standing in the midst of a tank, and, judging from the style of the capital, must go back to the times of the Imperial Guptas, if not earlier; although some historians are inclined to associate the construction of the tank and the pillar with Divya, a rebel leader of the middle Pāla period (10th century A.D.).

PUBLICATIONS.

Books published during 1930-31.

1. *Memoir No. 44.—Explorations in Orissa*, by Rai Bahadur Ramaprasad CHANDA.
2. *Memoir No. 37.—Archæological Tour in Waziristān and Northern Balūchistān*, by Sir Aurel STEIN.
3. *Memoir No. 38.—Kushāno-Sāssānian Coins*, by Dr Ernest HERZFELD.
4. *Epigraphia Indica*, Vol. XVIII, Pt. viii (Oct. 1926), edited by Dr Hirananda SASTRI.
5. *Handbook to the Sculptures in the Peshawar Museum*, by H. HARGREAVES. (Revised edition of 1930.)
6. *A Short Guide to the Buddhist Remains excavated at Nālandā*, by M. H. KURAISHI.

7. *Annual Report on South-Indian Epigraphy for the year 1927-28*, edited by S. V. VISWANATHA.
8. *Annual Report of the Archæological Survey of India for 1926-27*, edited by Sir John MARSHALL.
9. *Memoir No. 42.—An Archæological Tour in Upper Swāt and Adjacent Hill Tracts*, by Sir Aurel STEIN.
10. *List of Archæological Photo-negatives of the North-West Frontier Province, Baluchistan, Kashmir and the Punjab (Mohammadan and British Monuments)* stored in the Office of the Superintendent, Archæological Survey, Frontier Circle, Lahore, corrected up to 31st March 1930.

Books published during 1931-32.

1. *Memoir No. 41.—An Archæological Tour in Gedrosia*, by Sir Aurel STEIN.
2. *Annual Report of the Archæological Survey of India for the year 1927-28*, edited by H. HARGREAVES.
3. *Annual Report on South Indian Epigraphy for the year ending 31st March 1929*, edited by K. V. Subrahmanya AIYER.
4. *Epigraphia Indica*, Vol. XX, Pts. 1-4, edited by Dr Hirananda SASTRI.
5. *Archæological Notes on Pagan*, by Taw Sein Ko.
6. *Archæological Notes on Mandalay*, by Taw Sein Ko.
7. *Epigraphia Indo-Moslemica for 1927-28*, edited by G. YAZDANI.
8. *Guide to Mandalay Palace*, by Chas. DUROISELLE.

Books published during 1932-33.

1. *Mohenjo-daro and the Indus Civilization: An Official Account of Archæological Excavations at Mohenjo-daro carried out by the Government of India between the years 1922 and 1927*, edited by Sir John MARSHALL. 3 Vols.
2. *Memoir No. 24.—Rock-paintings and other Antiquities of Pre-historic and Later times*, by Rai Sahib Monoranjan GHOSH.
3. *Memoir No. 23.—The Haihayas of Tripuri and their Monuments*, by R. D. BANERJI.
4. *Memoir No. 45.—Bibliography of Indo-Moslem History, excluding Provincial Monarchies*, by Khan Bahadur Maulvi ZAFAR HASAN.
5. *Epigraphia Indica*, Vol. XIX, pt. 8, and Vol. XX, pts. 5-7, edited by Dr Hirananda SASTRI.
6. *Epigraphia Indo-Moslemica for the year 1929-30*, edited by G. YAZDANI.
7. *Annual Report on South-Indian Epigraphy for the year ending 31st March 1930*, by C. R. KRISHNAMACHARLU.
8. *Guide to the Buildings and Gardens of Delhi Fort.* (4th edition.)
9. *New Imperial Series, Vol. LI.—List of Ancient Monuments Protected under Act VII of 1904 in the Province of Bihar and Orissa*, by Maulvi Mohd. Hamid KURAISHI.
10. *New Imperial Series, Vol. XLV.—Somnath and other Mediæval Temples in Kathiawar*, by Henry COUSENS.
11. *New Imperial Series, Vol. XLVIII.—Mediæval Temples of the Dakhan*, by Henry COUSENS.

Books published during 1933-34.

1. *Annual Report of the Archæological Survey of India for the year 1928-29*, edited by H. HARGREAVES.
2. *New Imperial Series, Vol. XLVII.—Eastern School of Mediæval Sculpture*, by R. D. BANERJI.
3. *New Imperial Series, Vol. LIII.—South-Indian Inscriptions, Texts, Vol. VII: Miscellaneous Inscriptions from the Tamîl, Malayalam, Telugu and Kannada Countries*, by K. V. Subrahmanya AIYER.
4. *Guide to the Buddhist Ruins of Sârnâth*, by Rai Bahadur Daya Ram SAHNI. (5th edition.)
5. *Hampi Ruins*, by A. H. LONGHURST. (3rd revised edition.)
6. *Catalogue of Wall-paintings from Ancient Shrines in Central Asia and Sîstân recovered by Sir Aurel Stein*, and described by Fred. H. ANDREWS.
7. *Epigraphia Indica*, Vol. XX, pts. 6-8 and Vol. XXI, pts. 1-2, edited by Dr Hirananda SASTRI.
8. *List of Archæological Photo-negatives of the late Office of the Northern Circle, Hindu and Buddhist Monuments, Baluchistan, Punjab and the United Provinces*, stored in the Office of the Superintendent, Archæological Survey, Frontier Circle, Lahore, (Punjab, etc.) and Office of the Superintendent, Archæological Survey, Northern Circle, Agra (United Provinces), corrected up to 31st March 1932.
9. *List of Archæological Photo-negatives of the Bombay Presidency including Sind and Indian States*, stored in the Office of the Superintendent, Archæological Survey, Western Circle, Poona, corrected up to 31st March 1932.

PHOTOGRAPHS.

Circles or Offices	1930-31		1931-32		1932-33		1933-34	
	Fresh negatives	Prints sold	Fresh negatives	Prints sold	Fresh negatives	Prints sold	Fresh negatives	Prints sold
Director General's Office.	641	141	470	146	749	343	638	325
Northern Circle .	187	113	219	75	131	42	104	56
Frontier Circle .	62	103	98	66	86	50	62	350
Western Circle .	305	140	107	8	89	3	165	38
Central Circle .	187	32	131	20	244	68	169	20
Eastern Circle .	340	72	193	93	121	..	99	26
Southern Circle .	171	55	119	70	114	42	101	104
Burma Circle .	150	..	97	..	102	..	103	..
Indian Museum, Archl. Section.	71	..	76	..	79	..	83	..

Note.—No data available where there are two dots in a square.

DRAWINGS.

Circles or Offices	1930-31	1931-32	1932-33	1933-34
Director General's Office . . .	13	213*	451*	349*
Northern Circle	47	15	22	58
Frontier Circle	19	12	16	12
Western Circle	10	<i>Nil.</i>	2	36
Central Circle	5	9	13	19
Eastern Circle	13	12	2	4
Southern Circle	4	4	1	1
Burma Circle	76	15	40	11
Mohenjo-daro	6	<i>Nil.</i>	<i>Nil.</i>	<i>Nil.</i>

* Most of these drawings were sketches of selected antiquities from Mohenjo-daro and Taxila.

PERSONNEL.

General Remarks.

During the four years under review the Archæological Survey of India suffered heavily in the matter of personnel. Some of the best officers of the Department, with many years of ripe experience and a thorough knowledge of their branch of work, retired. (See sub-heading *Officers Retired.*) Moreover, after the financial crisis of 1931 the Government have abolished not less than fifteen posts (See sub-heading *Retrenchment*),—a loss which not only meant increased work and responsibility for the remaining officers, but also a serious handicap in carrying out the important scientific work for which this Department stands.

In the pages that follow, abbreviations have been used for the sake of economy, all of which will be easily understood by Readers. D. G. A. means Director General of Archæology; E. C. means Eastern Circle; B. C. means Burma Circle, and similarly with other Circles; O. S. D. means an Officer on Special Duty; the other abbreviations do not require explanation.

Appointments and Promotions.

(1) Sir John MARSHALL on retirement was re-employed as O. S. D. from 19th March 1931. (See Section V of this volume.)

(2) Mr B. L. DHAMA, Asst. Supdt. was confirmed as a Supdt. with effect from 29th May 1931.

(3) Maung MYA, Asst. Supdt. was appointed Supdt., B. C., from 26th June 1931.

(4) Mr G. M. BHUTA, A.R.I.B.A., was appointed an Asst. Supdt., C. C., Patna, on 4th July 1931.

(5) Mr C. R. KRISHNAMACHARLU was confirmed as Supdt. for Epigr. on 21st January 1933.

(6) Mr M. S. VATS was confirmed as Supdt. on 21st January 1933.

(7) Dr N. P. CHAKRAVARTI was confirmed as Asst. Supdt. for Epigr. on 21st January 1933.

(8) Mr Q. M. MONEER was promoted to Asst. Supdt., W. C., Poona, from 4th August 1933.

(9) Dr M. A. HAMID (retrenched Asst. Archl. Chemist) was re-employed as Curator, Central Asian Antiquities Museum, from 4th August 1933.

(10) Mr H. H. KHAN was confirmed as Supdt. from 26th August 1933.

(11) In connexion with the exploration scheme the following four Archæological Apprentices were appointed for training in excavation at different sites: (a) Mr Lakshmi NARASIMHACHAR, M.A., Taxila, 15th August 1930; (b) Mr Kungjagobinda GOSWAMI, M.A., Harappa, 1st September 1930; (c) Mr Sasanka Sekhar SARKAR, B.Sc., Calcutta, 15th August 1930 (under Col. SEWELL and Dr GUHA for training in the treatment of excavated human and animal bodily remains); (d) Mr Ataur RAHIM, M.A., LL.B., Mohenjo-daro, 1st February 1931.

Officers Retired.

The retirement of the following officers from the Department is recorded here with an expression of gratitude for the fine and devoted work carried out by them during many years of employment.

(1) Sir John MARSHALL (cp., however, Section V), on 19th March 1931.

(2) Mr A. H. LONGHURST, on 2nd November 1931.

(3) Mons. Ch. DUROISELLE, on 26th June 1931.

(4) Rai Bahadur Ramaprasad CHANDA, on 30th September 1931.

(5) Mr K. V. Subrahmanya AIYER, on 15th December 1931.

(6) Mr H. HARGREAVES, on 29th May 1931.

(7) Mr T. A. OTTO, on 27th August 1931.

Retrenchment.

Owing to the financial stringency, Government have abolished the following posts: 1 Deputy D. G. A. for Exploration; 1 Special Officer for Exploration; 1 Asst. Supdt. for Exploration; 1 Asst. Archl. Chemist; 2 Asst. Supdts. for Sanskrit Epigraphy; 1 Asst. Supdt. for Muslim Epigraphy; 1 Asst. Supdt. in the Agra Circle, converted into the post of an Asst. Engineer, which was also abolished; 1 Supdt. Hindu and Buddhist Monuments, N. C., Lahore; 1 Supdt., E. C., abolished and replaced by an Asst. Supdt.; 1 Asst. Supdt. leave reserve; 4 Archæological Apprentices. (Total: fifteen posts.)

In accordance with the above, the following officers had to be retrenched:

(1) Mr J. A. PAGE, Deputy D. G. A. (voluntarily retired).

(2) Dr E. J. H. MACKAY, Special Officer for Exploration (appointed in 1926).

(3) Dr M. A. HAMID, Asst. Archl. Chemist (since 1927).

(4) The four apprentices enumerated under Appointments (11).

Resignation and Dismissal.

Mr G. M. BHUTA, Asst. Supdt., C. C., resigned with effect from 6th July 1932.

Mr B. L. DHAMA, Supdt., W. C., was suspended with effect from the 5th January 1933, and ultimately dismissed from Government Service with effect from 1st July 1933, as a result of the disciplinary action taken against him; he was found guilty of serious neglect of duty and of fraud for his own benefit.

Personnel in Various Offices and Circles.

D. G. A.'s Office: Mr HARGREAVES continued as offg. D. G. A. till 7th February 1931, when he proceeded on leave preparatory to retirement. Mr PAGE was appointed offg. D. G. A. from 7th February 1931, and continued in that office till 29th July 1931, when he reverted to the office of Deputy D. G. A. Rai Bahadur Daya Ram SAHNI was appointed D. G. A. from 29th July 1931. Khan Bahadur M. ZAFAR HASAN was appointed offg. Deputy D. G. A. from 9th February to 29th July 1931. Mr PAGE proceeded on long leave preparatory to retirement from 26th April 1932, and K. B. M. ZAFAR HASAN was appointed Deputy D. G. A. from that date. The latter held charge of the office of D. G. A. during R. B. D. R. SAHNI's leave from 9th January 1933 to 19th January 1933, when Mr J. F. BLAKISTON was appointed offg. D. G. A. who continued as such till 31st March 1933. Mr BLAKISTON proceeded on 8 months' leave from 7th April 1933.

Exploration Branch: Rai Bahadur Daya Ram SAHNI continued as Deputy Director General of Archæology for Exploration till the 11th May, 1930. Mr K. N. DIKSHIT was appointed to succeed him from 15th May, 1930, and continued till the 28th December, 1931, when the post was abolished. Mr E. J. H. MACKAY continued to be the Special Officer for Exploration till 1st December, 1932, when on the abolition of the post he proceeded on long leave. Mr N. G. MAJUMDAR was Assistant Superintendent for Exploration till 13th September, 1931, when he was transferred to Calcutta.

Frontier Circle: Mr J. F. BLAKISTON continued as Supdt. of this Circle; during his absence in 1933 Mr M. S. VATS was appointed to officiate. Dr K. A. ANSARI was Asst. Engineer till 15th October 1932.

Northern Circle, Hindu and Buddhist Monuments: This Circle was abolished on 1st August 1931, and the offg. Supdt., Mr VATS, was attached to the Frontier Circle as Asst. Supdt.

Northern Circle, Muhammadan and British Monuments: K. B. M. ZAFAR HASAN continued to hold charge of this Circle; on his appointment as offg. Deputy D. G. A. in 1931, and as Deputy D. G. A. in 1932, Mr H. L. SRIVASTAVA was in charge of the Superintendency. Mr M. HAMID KURAISHI relieved the latter officer on 23rd September 1932. The post of Asst. Supdt. was converted into one of Asst. Engineer on the retirement of Mr OTTO; but was eventually abolished as a measure of retrenchment. The Asst. Engineer, Dr K. A. ANSARI was transferred from 15th October 1931 to the Northern Circle, Agra.

Central Circle: The following officers held charge of the Circle: Mr B. L. DHAMA from 2nd January 1930 to 30th April 1930 and again from 1st September 1930 to 2nd February 1931; Mr M. HAMID KURAISHI from 1st May 1930 to 31st August 1930 and again from 3rd February 1931 to 18th September 1932; and Mr G. C. CHANDRA from 19th September 1932 onwards.

Eastern Circle: Mr K. N. DIKSHIT continued as Supdt. till 8th May 1930, when Mr G. C. CHANDRA took over from him. The post of Supdt. in the E. C. was abolished and replaced by an Asst. Supdt. from April 1932. (Cp. *Indian Museum*.)

Indian Museum, Calcutta: R. B. R. CHANDA continued as Supdt., Indian Museum, till the 30th September 1931; on his retirement Mr N. G. MAJUMDAR took over charge. With the abolition of the post of Supdt. of E. C., the Supdt. of the Indian Museum is now in charge of that Circle with the help of an Asst. Supdt. Mr G. C. CHANDRA took over both these united Superintendencies and held charge from 26th April to 31st August 1932; Mr DIKSHIT was appointed Supdt. from 31st August 1932, and Mr CHANDRA transferred to the C. C.

Western Circle: The following officers were in charge: Mr CHANDRA up to the 1st May 1930; Dr M. NAZIM from 1st to 25th May 1930, from 16th January 1931 to 9th February 1931, from 7th June 1931 to 6th July 1931, from 10th June 1932 to 27th December 1933; R. B. D. R. SAHNI from 26th May 1930 to 15th January 1931; Mr DHAMA from 10th February 1931 to 6th June 1931 and from 7th July 1931 to 9th June 1932; and Mr M. S. VATS from 27th December 1933 onwards.

Southern Circle: Mr LONGHURST was in charge until he proceeded on leave preparatory to retirement, and Mr KHAN was in charge since 8th March 1931.

Burma Circle: MONS. DUROISSELLE was Supdt. up to his retirement, and Maung MYA succeeded him with effect from 15th December 1930.

Government Epigraphist: During Dr Hirananda SASTRI's leave from 16th January 1930 to 12th May 1930 Mr K. V. Subrahmanya AIYER officiated for him. Mr DIKSHIT held the appointment of G. E. from 24th April till 22nd August 1932 during Dr SASTRI's leave. From the 10th October 1933 Dr N. P. CHAKRAVARTI was in charge.

Supdt. for Epigraphy: Mr K. V. Subrahmanya AIYER proceeded on leave preparatory to retirement from 15th August 1931, and Mr C. R. KRISHNAMA-CHARLU was appointed to officiate for him from 15th August 1931; he was eventually confirmed on 21st January 1933. The services of Mr S. V. VISHWANATHAN, Asst. Supdt. for Epigr. on probation, were dispensed with from 5th December 1930, as he was found unsuitable.

Archæological Chemist: During K. B. M. SANA ULLAH's absence on leave, Dr M. A. HAMID, Asst. Archl. Chemist, was appointed to officiate with effect from 26th August 1931.

Central Asian Antiquities Museum, New Delhi: When Mr Q. M. MONEER was appointed Asst. Supdt. on the 26th August 1933, Dr M. A. HAMID, formerly Asst. Archl. Chemist (retrenched) has been employed as Curator of the Museum.

Leave.

The following officers proceeded on leave for the periods noted against their names during the four years under review:—

- (1) Sir John MARSHALL: 8 months and 4 days from 20th March, 1930.
- (2) Mr A. H. LONGHURST: 7 months and 25 days from 8th March, 1931, preparatory to retirement.
- (3) Mr H. HARGREAVES: 3 months and 22 days from 7th February, 1931, preparatory to retirement.
- (4) Mr J. F. BLAKISTON: 8 months from 7th April, 1933.
- (5) Rai Bahadur Daya Ram SAHNI: 6 months and 8 days from 16th January, 1931, and 2 months and 23 days from 9th January, 1933.
- (6) Mons. Chas. DUROISELLE: 3 months and 2 days from 15th December, 1930.
- (7) Khan Bahadur Mohd. SANA ULLAH: 4 months from 26th August, 1931.
- (8) Mr J. A. PAGE: 2 years and 4 months from the 26th April, 1932, preparatory to retirement.
- (9) Khan Bahadur Maulvi ZAFAR HASAN: 2 months from 29th July, 1931.
- (10) Dr Hirananda SASTRI: 4 months and 1 day from 21st April, 1932, and 2 months and 21 days from 10th October, 1933.
- (11) Mr K. N. DIKSHIT: 3 months and 12 days from 2nd January, 1932.
- (12) Mr B. L. DHAMA: 4 months from 1st May, 1930. Again 1 month from 7th June, 1931, and 8 months from 10th June, 1932.
- (13) Mr C. R. KRISHNAMACHARLU: 4 months from the 26th September, 1930.
- (14) Mr Mohd. Hamid KURAISHI: 21 days from the 18th November, 1930.
- (15) Mr H. H. KHAN: 9 days from 3rd January, 1933.
- (16) Mr N. G. MAJUMDAR: 10 days from 2nd June, 1930, and 24 days from 3rd January, 1933.
- (17) Dr M. A. HAMID: 15 days from 19th March, 1931.
- (18) Dr N. P. CHAKRAVARTI: 1 month and 3 days from 4th January, 1932.
- (19) Dr M. NAZIM: 9 days from 18th September, 1931.
- (20) Mr H. L. SRIVASTAVA: 19 days from 29th January, 1933.
- (21) Dr K. A. A. ANSARI: 8 months from 9th May, 1933.
- (22) Mr J. M. BHUTA: 2 months and 2 days from 3rd May, 1932.
- (23) Mr E. J. H. MACKAY: 9 months and 6 days from 1st December, 1932.

APPENDIX I.

LIST OF ACQUISITIONS BY THE INDIAN MUSEUM, CALCUTTA.

Purchased during 1930-31.

1. (8555).—Spotted red sandstone head of the Buddha, *ūrṇā* mark between the eye-brows, hair arranged in stylized waves. $10'' \times 10''$. From Mathurā.
2. (8556).—Spotted red sandstone head of a Jina(?); hair arranged in curls; no trace of *uṣṇīṣha*. $11'' \times 8''$. From Mathurā.
3. (8557).—Red sandstone head of a Jina(?); the area above the forehead covered by hair is slightly elevated; no trace of *uṣṇīṣha*. $7'' \times 6''$. From Mathurā.
4. (8558).—Spotted sandstone head of a Jina(?); hair arranged in stylized waves; no trace of *uṣṇīṣha*. $5\frac{1}{2}'' \times 4\frac{3}{4}''$. From Mathurā.
5. (8568).—Sandstone architectural fragment showing a balcony wherein a young man is standing by a young woman. $13\frac{1}{2}'' \times 15\frac{1}{2}''$. From Benares.
6. (8531).—Sandstone door-jamb bearing a figure of Yamunā standing upon a tortoise and other attendant figures. $2' 6'' \times 1' 7\frac{1}{2}''$. From Benares.
7. (8532).—Sandstone slab with a figure of the seated Sun-god. $2' 2\frac{1}{4}'' \times 2' 6''$. From Benares.
8. (8533).—Sandstone slab with a figure of Mahishamardini. $2' \frac{1}{2}'' \times 2' 6\frac{1}{4}''$. From Benares.
9. (8559).—Grey sandstone head of the Buddha; hair arranged in spiral curls with a small top-knot. $11\frac{1}{2}'' \times 6\frac{3}{4}''$. From Benares.
10. (8560).—Sandstone head with a third eye on the forehead and peculiar ornaments in the ears; hair divided in the centre of the forehead. $9'' \times 6''$. From Benares.
11. (8561).—Grey sandstone group of Hara-Gaurī seated side by side. $1' 7\frac{1}{2}'' \times 1'$. From Benares.
12. (8562).—Sandstone sculpture in high relief depicting a figure of Vishnu seated on a full blown lotus. $1' 7\frac{1}{2}'' \times 10\frac{1}{4}''$. From Benares.
13. (8563).—Reddish grey sandstone relief showing a standing figure of Bhairava with four arms. $1' 8\frac{1}{4}'' \times 1' 1''$. From Benares.
14. (8564).—Sandstone figure of the Sun-god seated on a chariot with one wheel and seven horses. The figure has four hands and a radiating halo. $1' 9'' \times 1' 9'' \times 7\frac{3}{4}''$. From Benares.
15. (8565).—Fragment of a pillar with a figure of Agni with four arms and a long beard; a ram stands at his feet. $2' 4'' \times 1' 1' \frac{1}{4}''$. From Benares.
16. (8566).—Group of Hara and Gaurī of the later mediæval period. $2' 2'' \times 1' 3''$. From the U. P.
- 17-20. (8535-38).—Stone beads of different shape and colour. From Benusagar, Bihar and Orissa.
21. (8567).—A flat oval gem mounted on gold bearing a Roman bust in intaglio (Carnelian). Locality not known.

Objects presented during 1930-31.

22. (8539).—Marble image of two-armed seated Durgā. From a place near Agra, U. P. $10'' \times 6''$. Presented by H. G. Thomas, Esq., of Messrs. Jessop & Co. of Calcutta.
23. (8534).—Sandstone door-jamb with figures of Indra and Śachi. From Benusagar, Bihar and Orissa. $1' 5\frac{3}{4}'' \times 1' 1\frac{1}{2}''$. Presented by Pandit T. Ganguli.
- 24-38. (8540-54).—Glazed tiles and fragments painted with plants and flowers. From Mian Mir's Tomb, Lahore. Sizes varying from $5\frac{3}{4}'' \times 6\frac{1}{4}''$ to $8\frac{3}{4}'' \times 4\frac{3}{4}''$. On loan from the Panjab Government.

Purchased during 1931-32.

1. (8569).—Chlorite figure of the Buddha seated touching the earth. $11\frac{3}{4}'' \times 6''$. From Virat Cuttack, District Cuttack.
2. (8570).—Tārā, of chlorite. $15\frac{1}{2}'' \times 7''$. From Virat Cuttack.
3. (8571).—Chlorite figure of the Buddha seated touching the earth. $9\frac{1}{2}'' \times 8''$. From Virat Cuttack.
4. (8572).—Chlorite male figure holding sword and shield. $9'' \times 3\frac{3}{4}''$. From Virat Cuttack.

Received on Loan from the Director General of Archaeology in 1931-32.

5. (8573).—Bronze image of Gaṇeśa. From Halud Vihara, District Rajshahi. $2\frac{1}{4}''$.

Purchased during 1932-33.

1. (8575).—Stone figure of Jambhala. From Darjeeling. $9\frac{1}{2}'' \times 5''$.
2. (8591).—Stone image of Hari-Hara attended by Sūrya and Buddha. $10'' \times 7''$.
3. (8593).—Eighty-one stone beads from Rājgir.

Objects presented during 1932-33.

4. (8594).—Copper-plate inscription of King Dharmapāla of Assam. (3 plates, 1 ring, 1 seal). Presented by Sarat Chandra Goswami, Esq., Ujanbazar, Gauhati.
5. (8595).—Copper-plate inscription of King Dharmapāla of Assam. (3 plates, 1 ring, 1 seal). *Idem.*
6. (8596).—Copper-plate inscription of King Indrapāla of Assam. (3 plates, 1 ring, 1 seal). *Idem.*
7. (8576).—Spotted red sandstone image of Maitreya in relief. $9\frac{1}{4}"$. From Mathurā. Presented by Ajit Ghosh, Esq., Calcutta.
8. (8577).—Grey sandstone bas-relief showing figures of Kuvera and Hārītī. $6\frac{3}{4}" \times 4\frac{3}{4}"$. From Mathurā. *Idem.*
9. (8578).—Spotted red sandstone head. $2\frac{1}{2}"$. From Mathurā. *Idem.*
10. (8579).—Upper half of a figure of the Buddha in relief; scalloped halo. $3\frac{3}{4}"$. From Mathurā. *Idem.*
11. (8580).—Grey sandstone head; hair in ringlets; *ūṛṇā*; halo in the shape of a lotus. $4"$. From Mathurā. *Idem.*
12. (8581).—Terra-cotta plaque with a male and a female figure in relief. $4" \times 3\frac{3}{4}"$. From Mathurā. *Idem.*
13. (8582).—Terra-cotta plaque: bust of a female figure in relief. $2" \times 1\frac{1}{4}"$. From Mathurā. *Idem.*
14. (8583).—Upper part of a terra-cotta male figure with high turban. $2\frac{1}{2}"$. From Mathurā. *Idem.*
15. (8584).—Terra-cotta female bust. $4\frac{1}{4}"$. From Mathurā. *Idem.*
16. (8585).—Crystal seated figure of Jina Pārśvanātha in the round; head lost. $2" \times 1\frac{1}{4}"$. From Mathurā. *Idem.*
17. (8587).—Pottery vessel with certain symbols incised. $7\frac{3}{4}"$. From Rājgir. Presented by P. C. Nahar, Esq.
18. (8588).—Pottery lid. Diam. $5\frac{1}{2}"$. *Idem.*
19. (8589).—Pottery lid. Diam. $6"$. *Idem.*
20. (8590).—Pottery lid. Diam. $6"$. *Idem.*
21. (8601).—Inscribed stone figure of Sūrya in relief, seated cross-legged, flames issuing from halo. From Bairhatta, Dinajpur District. $2' \frac{1}{2}" \times 10\frac{1}{4}"$. Presented by H. E. Stapleton, Esq.
22. (8602).—Lower half of a stone figure seated on a camel(?). From Kak-dighi, Bairhatta, Dinajpur District. *Idem.*
23. (8603).—Figure of Viṣṇu attended by Lakṣmī and Sarasvatī. From Itahar, P. S. Raiganj, Dinajpur District. $6' 8" \times 3' 10"$. Presented by J. C. Majumdar, Esq., Dinajpur.

Received on Loan from the Director General of Archaeology in India during 1932-33.

24. (8574).—Stone slab with Brāhmī inscription. From Mahāsthān, Bogra District.
25. (8586).—Inscribed stone image of Jambhala excavated at Paharpur, Rājshāhi District. $2\frac{1}{2}" \times 2\frac{1}{2}"$.
26. (8599).—Stone celt from Assam. $3" \times 2\frac{1}{4}"$.
27. (8600).—Terra-cotta plaque with a figure of Viṣṇu in relief. Inscription on both sides of the figure. From Sābhār, Dacca District.
28. (8597).—Four-armed seated female figure of bronze, probably Vaiṣṇavi. $1\frac{1}{8}"$.
29. (8598).—Bronze male figure (? Lokeśvara) standing, with a lotus stalk in the left hand. $2\frac{1}{8}"$.
- Nos. 28 and 29 are from Mahāsthān, Bogra District.

Received in Exchange.

30. (8592).—Stone figure of Prajñāpāramitā seated cross-legged in meditation. Inscribed. From neighbourhood of Nālandā. $1' 6" \times 10"$.

Purchased during 1933-34.

- 1-17. (8684-99, 8953).—Palaeolithic stone implements from Allur, Hyderabad.
- 18-27. (8700-09).—*Idem.* from Jangaon, Hyderabad.
- 28-32. (8710, 8743-46).—Neolithic stone implements from Yellagiris, District Salem.
- 33-37. (8711, 8767-70).—*Idem.* from Lingsugur, Hyderabad.
38. (8712).—*Idem.* from Rampa Agency.
- 39-74. (8713-14, 8716-17, 8794-8825).—*Idem.* from Salem District.
- 75-91. (8726-42).—*Idem.* from Jāvadis, Arcot District.
- 92-109. (8747-64).—*Idem.* from Anegundi, opposite Hampi, Hyderabad State.
- 110-111. (8765-66).—*Idem.* from Bussapur, near Hampi.
- 112-114. (8771-73).—*Idem.* from Sindnur, Hyderabad State.
- 115-116. (8774-75).—*Idem.* from Kondapur, Jantakallu, north-east of Anegundi.
- 117-130. (8780-93).—*Idem.* from Rayadrug, 3-4 miles south-west of Bellary.
- 131-138. (8826-32, 8956).—*Idem.* from Nandavaram, District Bellary.
- 139-146. (8833-40).—*Idem.* from Halaharvi, north-east of Bellary.

- 147-150. (8841-44).—*Idem*, from Kotall, District Kurnool.
 151-156. (8845-50).—*Idem*, from Collagul, 3 miles north-west from Bellary.
 157-196. (8851-90).—*Idem*, from Bellary District.
 197-240. (8891-8934).—*Idem*, from the Tungabhadra Valley.
 241-244. (8935-38).—*Idem*, from Huttanahalli, 18 miles north of Bangalore.
 245-250. (8939-44).—*Idem*, from Emaumpur, District Anantapur.
 251. (8955).—*Idem*, from Nandavaram, District Kurnool.
 252-253. (8957-58).—*Idem*, from Jangaon, Hyderabad.
 254-275. (8715, 8718-25, 8776-79, 8945-52, 8954).—*Idem*, from Madras Presidency.
 276. (8959).—*Idem*, from Ellora.
 277. (8960).—*Idem*, from France.
 278-280. (8671, 8682-83).—Prehistoric iron implements from a grave at Huttanahalli, 18 miles north of Bangalore.
 281-289. (8672-80).—*Idem*, from Yercaud, District Salem.
 290. (8681).—*Idem*, from Brāhmanapalli, 39 miles north of Bangalore.
 291-304. (8961-74).—Iron age pottery from the graves at Huttanahalli, 18 miles north of Bangalore.
 305-307. (8975-77).—Pieces of bone from the graves at Huttanahalli.
 308-309. (8978-79).—*Idem*, from Allur, Hyderabad.
 310. (8618).—Red sandstone seated male figure holding a staff in left hand. 9"×6".
 311. (8621).—Red sandstone Nāga figure standing under the seven hoods of a snake. 7½"×4".
 312. (8622).—Stone figure of six-armed Mahishamardini. 7½"×4½".
 313. (8623).—Circular piece of stone with a round hole in the centre carved with 5 bands of decoration on one flat face and an Ujjain symbol and a star on the other, and with honey-suckles and female figures along the rims of the hole. Cir. 2½"; thick 1⅞"; diam. of hole ¾".
 314. (8624).—Fragments of a circular stone similar to 8623.
 315-318. (8619-20, 8625, 8635).—Miscellaneous stone sculptures.
 319-320. (8626-27).—Clay human figurines.
 321. (8628).—Lower half of a terra-cotta standing figurine with harp. 3".
 322. (8630).—Upper half of a terra-cotta female figurine holding flowing hair with left hand. 2½".
 323. (8631).—Terra-cotta male figurine holding a necklace with both hands. 4½".
 324. (8632).—Terra-cotta female figurine holding a bunch of flowers. 5½".
 325. (8637).—Terra-cotta dabber with Brāhmī inscription *Kachhipasa*. 2½".
 326. (8644).—Terra-cotta plaque showing a human figurine standing with harp. 3½".
 327-336. (8629, 8633, 8636, 8638-43, 8645).—Miscellaneous terra-cotta objects.
 Nos. 310 to 336 are from Mathurā.
 337. (8980).—Bronze elephant carrying on its back two males and two females. 3½". From Mahāsthān.
 338. (8981).—Bronze image of Mañjuśrī. 2½". From Mahāsthān.
 339. (9008).—Stone image of Viṣṇu from Gaṅgpur. 4' 9".
 340. (9009).—Stone image of Viṣṇu from Nimdighi. 3' 1".
 341. (9010).—Stone image of Sūrya from Ganpur. 3' 4".
 342. (9011).—Stone relief representing Mother-and-Child from Chowra Kasba. 1' 11"×1' 10".
 343. (9012).—Stone image of Garuḍa from Chowra Kasba. 2' 1½".
 344-345. (9013-14).—Two stone images of Śiva from Chowra Kasba. 2' 3", 2½".
 346. (9015).—Stone image of Avalokiteśvara from Chowra Para. 3' 5".

Objects presented during 1933-34.

347. (8634).—Stone slab; obverse—Viṣṇu with Gaṅgā and Yamunā; reverse—Ten Avatāras. 4"×4". From Jora, District Bogra. On loan from the Director General of Archaeology.
 348. (8646).—Stone image, pot-bellied. 2½". From Jewat Kund at Mahanad, District Hooghly. From R. N. Ghose, Esq., Manager, Estate of the Mohunt of Mahanad.
 349-388. (8647-68, 9016-9033).—Flakes and cores of agate, chalcedony and carnelian. From Mahur-jhiri, District Nagpur. From K. N. Dikshit, Esq., M.A., Archaeological Survey of India.
 389. (8669).—Beads of different stones. *Idem*.
 390. (9034).—Piece of glass. *Idem*.
 391. (9035).—Small lump of mica. *Idem*.
 392. (9036).—Lower part of a thick terra-cotta vessel. From Paonar, District Wardha, C. P. *Idem*.
 393. (9037).—Two stone flakes and a fragment of a shell bangle. *Idem*.
 394-400. (9038-44).—Fragments of black and red pottery; one with traces of gilt. From Kundinpur, District Amaravati, C. P. *Idem*.
 401. (9045).—Mother of pearl. *Idem*.
 402. (9046).—Piece of shell. *Idem*.
 403. (9047).—Piece of shell bangle. *Idem*.
 404-405. (9082-83).—Beads of different colour and stone. From Chunsar, District Murshidabad. *Idem*.

- 406-407. (8982-83).—One porcelain bowl and two fragments. From Kameng in the west of Manipur Valley. From W. Y. Singh, Esq.
 408. (8984).—Terra-cotta smoking pipes. *Idem.*
 409-420. (8985-92, 8995-96, 8998-99).—Fragments of terra-cotta vessels. *Idem.*
 421-422. (8993-94).—Narrow-mouthed terra-cotta vessels. *Idem.*
 423. (8997).—Mouth of terra-cotta pot with mat impressions. *Idem.*
 424-426. (9000-02).—Metal rings. *Idem.*
 427-430. (9003-06).—Miscellaneous objects. *Idem.*
 431. (9084).—Copper-plate of Sam. 128 (447-48 A.D.) published in *Ep. Ind.*, Vol. XXI, p. 78. From Baigram, District Bogra. From the Gauda Research Society, Howrah.
 432. (9085).—Fragment of a copper-plate. *Idem.*
 433-36. (8604-07).—Sandstone cannon balls. From Gauhati, Assam. From the Archaeological Survey, Eastern Circle.
 437. (9007).—Enamelled brick. $4\frac{3}{4}'' \times 3\frac{1}{2}'' \times 1\frac{1}{2}''$. From Malda. *Idem.*
 438-47. (8608-17).—Terra-cotta and clay tablets with figures of the Buddha and seal impressions. From various caves of Siam. From the Director General of Archaeology in India.
 448-480. (9048-80).—Kangra paintings depicting the exploits of Kṛishṇa. *Idem.*

Received in Exchange.

481. (8670).—Stone image of Māyādevī depicting the birth scene of the Buddha. $1' 3'' \times 9\frac{1}{2}''$. From Nālandā, District Patna.

LIST OF ACQUISITIONS BY THE DELHI FORT MUSEUM.

Acquired during 1931-32.

1. *Farmān* of Maryam Zamānī, mother of the Emperor Jahāngīr. On loan from the Director General of Archaeology.
2. Painting representing the Begam Samrū. Presented by Sir John Thompson, K.C.S.I., etc.

Acquired during 1932-33.

1. A *sūznī* ($5' 4'' \times 3'$) with floral decorations in silk embroidery and with a silk fringe.
 2. A manuscript of the *Shāhnāma* by FIRDŪSĪ, probably of the 16th century, with twenty text-illustrations.
 3. *Handbook for Delhi*, by Frederick COOPER.
 4. A painting representing Bāz Bahādūr.
 5. A painting representing the Imām Muḥammad Baqar.
 6. A *farmān* of the Emperor Akbar, dated 970 A.H.
- Nos. 1 to 6 on loan from the Director General of Archaeology.
7. An album of papers relating to the Indian Mutiny of 1857 with a note by Sir Malcolm Hailey.

Acquired during 1933-34.

1. Specimen of calligraphy by Zumurrud Raqam.
 2. Picture of Shaikh Salem Chishtī with three personages.
 3. Painting representing 'Abdu-l-Qādir Gilānī.
 4. Painting showing Sarmad listening to music.
 5. Painting showing 'Abdu-r-Rahīm Khān, and Kṛishṇa.
- Nos. 1 to 5 on loan from the Director General of Archaeology.
6. An old cotton shirt with verses from the Qurān written on it. Presented by the High Commissioner for India, London.



LIST OF COINS ACQUIRED BY THE INDIAN MUSEUM, CALCUTTA, DURING 1930-34.

Non-Muhammadan Coins.

Type of Coin, or Dynasty.	A	R	Æ	Bill.	Elect.	TOTAL.
Punch-marked . . . . .	..	88	3	..	..	91
North Indian cast . . . . .	..	..	14	..	..	14
Greek . . . . .	..	1	..	..	..	1
Roman . . . . .	..	..	2	..	..	2
Indo-Parthian . . . . .	..	2	3	..	..	5
Kushāna	7	1	124	..	..	132
Western Satraps . . . . .	..	26	42	..	..	68
Gupta	1	7	..	..	..	8
Miscellaneous medieval coins of Northern India	2	15	31	..	..	48
South Indian fanams and pagodas	25	..	..	..	..	25
Vijayanagara	5	..	..	..	..	5
Assamese	3	10	..	..	..	13
Kashmiri . . . . .	..	..	3	..	13	16
Mysore . . . . .	..	..	6	..	..	6
Miscellaneous and unidentified	3	3	29	2	..	37

Muhammadan Coins.

Name of Dynasty.	A	R	Æ	Bill.	Elect.	TOTAL.
Ghaznavi . . . . .	..	2	..	..	..	2
Sultans of Delhi	6	9	3	8	..	26
Bijapur	1	..	4	..	..	5
Qutb Shāhi (Golkonda) . . . . .	..	..	18	..	..	18
Sultans of Bengal . . . . .	..	8	1	..	..	9
Mughal	3	126	17	..	..	146
Gwalior State . . . . .	..	7	..	..	..	7
Indore State . . . . .	..	1	..	..	..	1
Chhatarpur . . . . .	..	2	..	..	..	2
Jaunpur . . . . .	..	..	1	..	..	1
Hyderabad . . . . .	..	3	..	..	..	3
Jammu . . . . .	..	1	..	..	..	1
Turkish	2	..	..	..	..	2
Miscellaneous . . . . .	..	..	77	1	..	78

LIST OF COINS ACQUIRED BY THE DELHI FORT MUSEUM DURING 1930-34.

Type of Coin, or Dynasty.	A	R	Æ	Bill.	Elect.	TOTAL.
Ghaznavi	2	3	..	..	5
Sultans of Delhi	2	2	22	1	..	27
Kings of Oudh	5	..	..	..	5
Qutb Shāhi (Golkonda)	2	..	..	2
Bijapur	2	..	..	2
Sultans of Bengal	3	..	..	..	3
Mughal	247	37	..	..	284
Bhopal State	1	..	..	1
Gwalior State	11	..	..	..	11
Hyderabad State	2	..	..	..	2
Hindu Coins	1	2	17	..	..	20
Miscellaneous and unidentified	6	72	..	..	78

ADDITIONS TO DEPARTMENTAL LIBRARIES.

[illegible]

GLOSSARY OF TECHNICAL TERMS

employed in this publication.

NOTE.—The present list is far from being exhaustive or authoritative. It is a first attempt to fixing the meaning of certain current terms for the benefit of foreign readers. Sanskrit classical terms, like *stūpa*, have not usually been included. It is the intention of this Department to augment and improve this Glossary in further issues of the *Reports*.

ABBREVIATIONS :—s: Sanskrit origin; i: Iranian origin; A: Arabic origin.

- s **bajri**: gravel.
- s **bā'oli**: large masonry well, generally with steps leading down to the water, and chambers in the surrounding wall.
- s **bārādari, bārah-dari, bārah-dvari**: 'having twelve doors', a pavilion, an open summer-house.
- s **bargā**: a piece of squared timber, beam, joist.
- s **bhitā**: ruins, mound.
- s **bighā**: a land-measure, equal to about 0.33 acre (English), or 13.38 (metric) acre.
- s **burji**: small tower, turret, bastion; breakwater.
- s **chabūtrā**: a platform, a terrace.
- s **chaklā**: a round and broad stone or log of wood for rolling out *chapatis* (i.e., the Indian pancake-shaped unleavened bread): a rolling pin.
- s **chaitya**: any Buddhist or Jaina religious shrine, or sacred monument, including a Sacred Tree, a reliquary, a temple.
- s **chaukhaṭ, chaukhaṭh**: the frame of a door; frame in general.
- ? **chhajjā**: the eaves of a house; verandah; portico.
- s **chhatrī**: a small, ornamental pavilion.
- s **chūlhā**: a fire-place, a hearth; often sunk into the ground or made of clay or brick.
- s **chūnā**: (*vulgo*, *chunam*), lime, slaked lime; plaster.
- i **dālān**: a hall, a compartment; a cloister.
- i **dargāh**: a tomb dedicated to a Muslim saint; a shrine, mosque.
- ? **dāsā**: a wall-plate: a broad and long stone to cover the wall, or bracket to support the thatched roof; a stone slab.
- s **deul**: Bengālī word for Hindī *deval* (s *devālaya*): a shrine, a temple with an image.
- s **gharā**: see p. 74 of this *Report*, foot-note 1.
- s **ghāṭ**: flight of steps leading to a water; bathing-place; embankment.
- i **gul-dasta**: 'a handful of flowers': a small decorative turret projecting above the roof, often crowned by a stone vase with flowers (hence the name).
- i **gumbad, gumbaz**: dome, vault.
- A **hammām**: a bath-house, a hot ('Turkish') bath.
- s **handī, hāndī**: an earthenware pot for cooking or boiling; usually with a large mouth and bulging-out body.
- A **'id-gāh**: an open space used on festivals by Muslims for their prayers.
- i **jāgīr**: a fief, a freehold land; the (written) grant for such.
- s **jālī**: tracery, trelliswork; perforated stone or wood used for windows and doors.
- s **kacchā**: unbaked (bricks or mud); hence, inferior quality, bad. A *kacchā* road: unmetalled country road. Opposite: *pakkā*.
- s **kalāṣa**: a vase with a narrow neck and swelling body: an urn.
- i **kangura**: balustrade, parapet wall; battlement.
- ? **kañjūr**: coarse limestone (calcareous tufa) in the Rawalpindi District.
- s **kañkar**: coarse limestone.
- A **khādim**: a servant, especially one in charge of a mosque or Muslim shrine.
- A **khānā-gāh, vulgo khānaqāh, khānaqah**: a convent, monastery.

- A **khaṭīb**, *vulgo* **khāṭīb**: a public reciter of the **Khuṭba** (the prayers and sermon): a preacher.
- I **kūza**: an earthenware waterbottle with a long, narrow neck: a gugglet.
- S **lakhaurī bricks**: small-sized bricks commonly used in the Muḥam-madan period.
- S **loṭā**: a small, almost globular pot, mostly of brass or metal.
- A **maḥal** (better: **maḥall**): mansion, hall, residence, palace.
- S **mahant**: head of a religious order: an abbot, a prior.
- A **maktab**, or **maktab-khāna**: a writing-school, a school-house.
- A-I **mansab-dār**: official of rank, superior officer.
- A **manẓar**: a look-out tower.
- S **melā**: a fair on a festival day.
- A **mihrāb**: place (of honour): for the priest to pray in a mosque, *i.e.*, the niche showing the direction towards Mecca.
- S **muram**, **moram**, **murum**: gravel, mostly made of crushed stones.
- mutakkā**, wrong; see instead *s. v.* **muttakā**.
- A **mutawallī**: superintendent or treasurer of a mosque, *etc.*
- A **muttakā**: a prop, a post or pillar, especially in a railing.
- I **nashīman**, **nishīman**: seat, residence, mansion.
- S **pakkā**, *vulgo* **pucca**: "baked," *i.e.*, well-prepared, good, fine, finished; a **pakkā** brick: a burnt brick; a **pakkā** house: a house made of burnt bricks; a **pakkā** road: a metalled road. Opposite: **kacchā**.
- S **parnālā**, **praṇāl**: channel for water, drain, gutter.
- I **pushta**: prop, support; buttress.
- I **rauza**: a mausoleum; a pleasure-house.
- S **sajjī**: natron, impure carbonate of soda, used in India instead of soap.
- S **sāl**: the **sāl**-tree and its wood (*shorea robusta*).
- I **sang-i abri**: "cloudy stone", but probably a corruption of **sang-i aburī**; the village of Abur in the Jessalmere State produces a very fine, yellow fossiliferous marble sometimes known as 'Abur stone'.
- S **sīsam**, also **sīso**, **sīson**: the tree *dalbergia sisu* and its wood.
- I **surkhī**: brick-dust, pounded brick, used in mortar mixtures.
- I **sūznī**, **sozanī**: quilting, quilted linen, quilted carpet.
- I **tah-khāna**: a subterranean room, cellar.
- S **vāhana**: a vehicle or mount of a god in Hindu iconography.
- I **zanāna**: women's apartments, harem. As an adjective: anything relating or belonging to women: female, feminine.
- A-I **ẓila'dār**, *vulgo* **ẓiledār**: superintending and/or revenue officer of a **ẓila**, *i.e.*, a small district.

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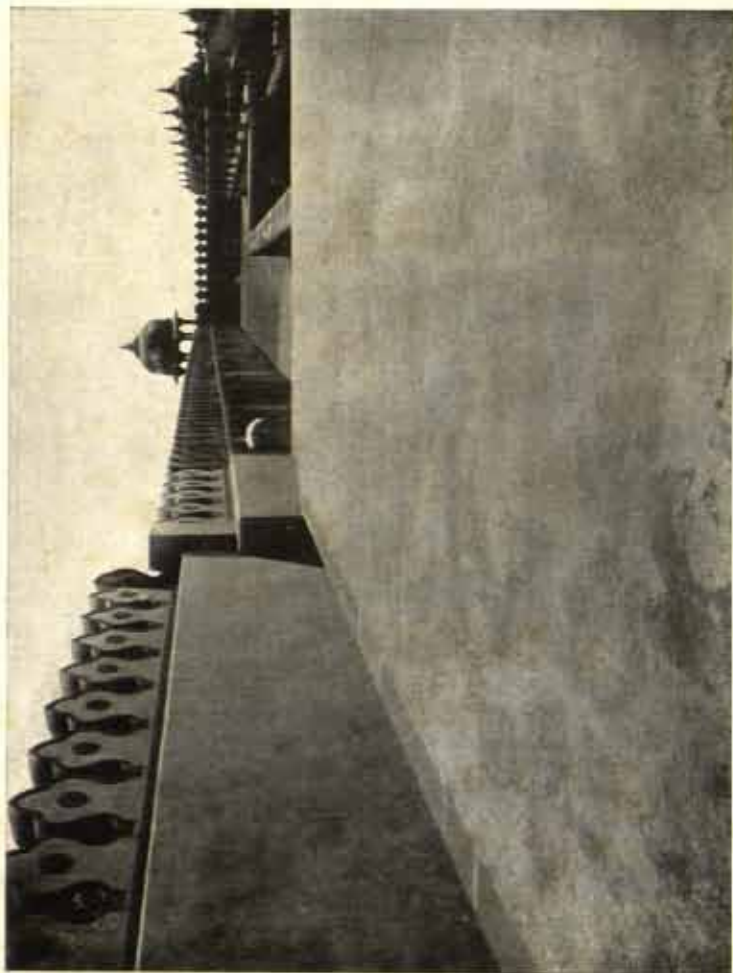
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(a) Fathpur Sikri : The Zanana Rauza, showing collapsed Roof.



(b) Fathpur Sikri : The Zanana Rauza, after Re-roofing.



(c) Jaunpur : Akbar's Bridge, a Kiosk, after Conservation.



(d) Garhwa : Dasavatara Temple, after Conservation.



(a) Urwara : Chandel Temple on the Ratan Sagar Lake after Removal of Modern House on Top.



(b) Sankisa : New Shed constructed over the Elephant Capital.



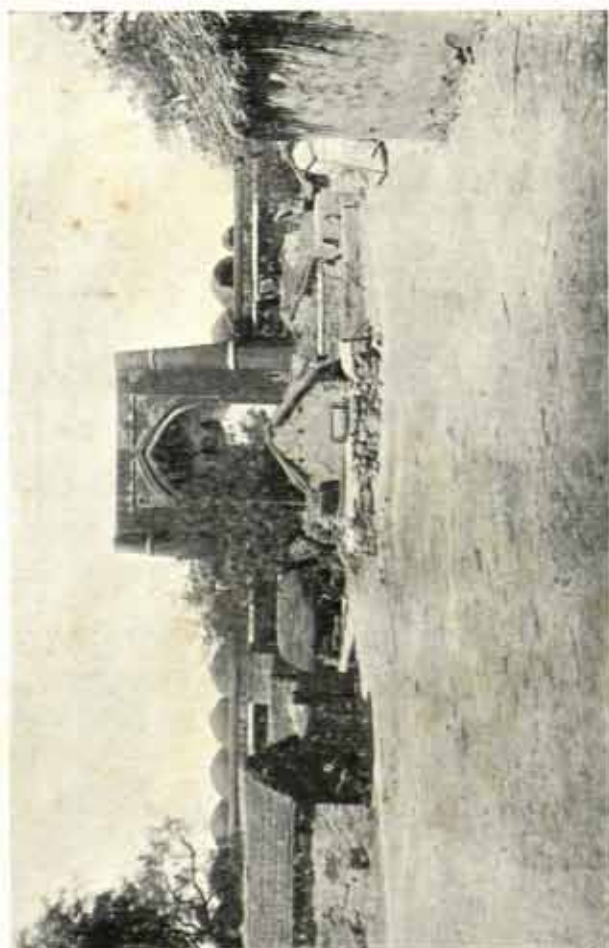
(c) Agra, Rasulpur : Shaikh Ibrahim Chishti's Tomb, after Restoration of missing half of *jali* Screen.



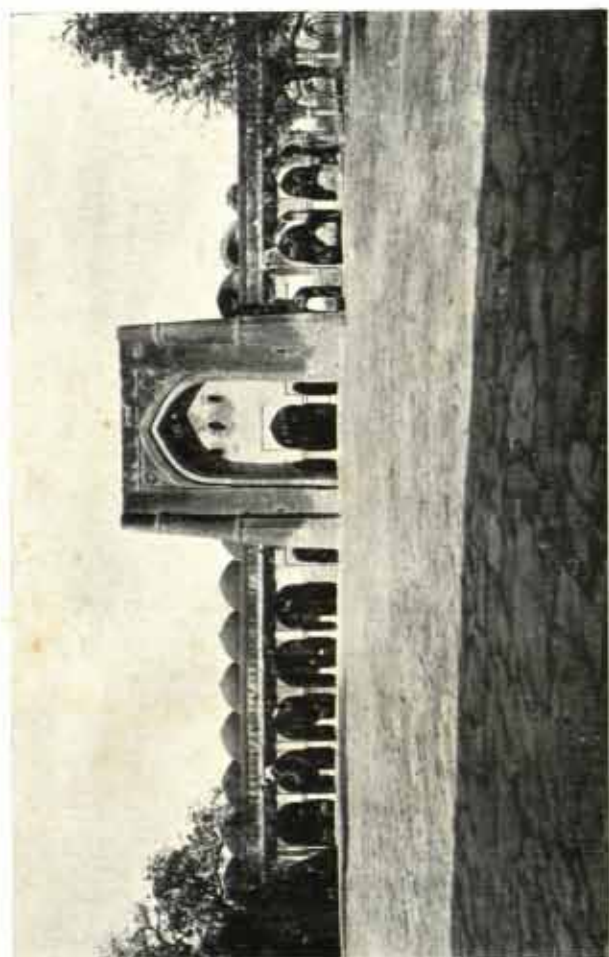
(d) Pattan Munara : after Conservation, from S.W.



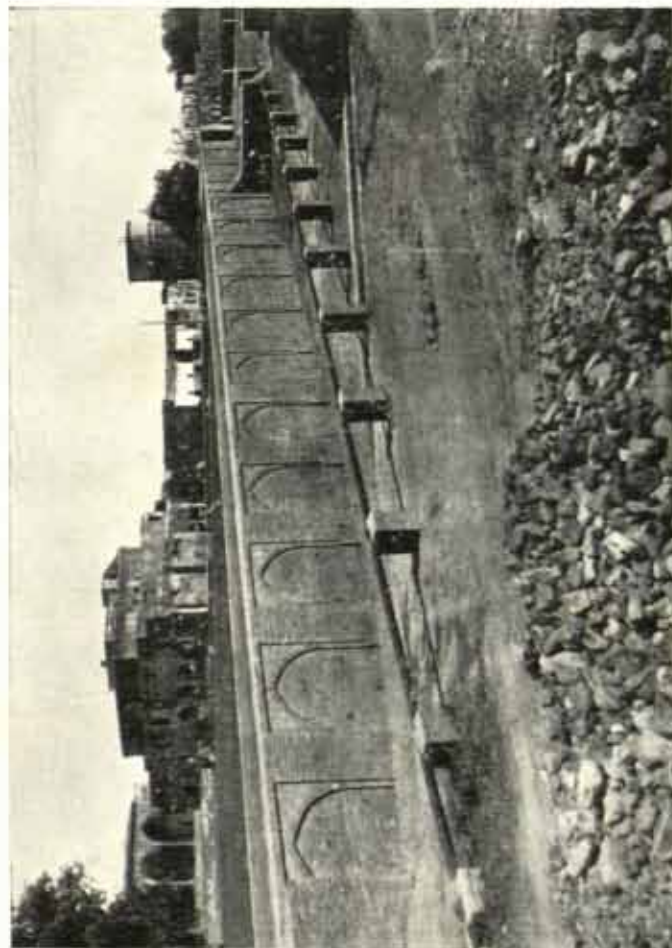
(e) Kharian : Aurangzeb's Baoli from N.E. showing collapsed Portion.



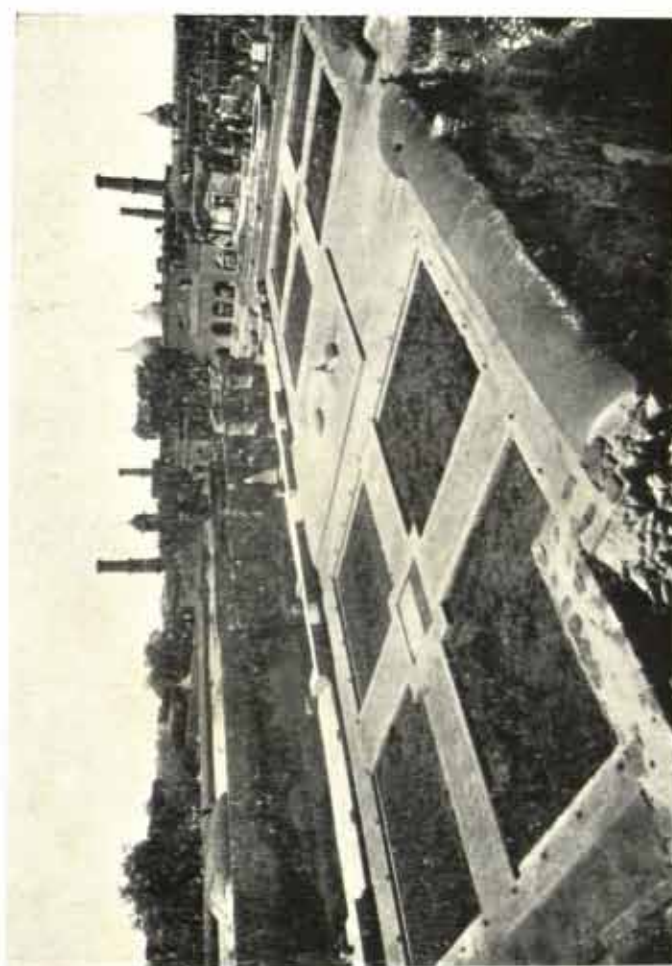
(a) Delhi : Begumpuri Masjid, before Conservation. Front View.



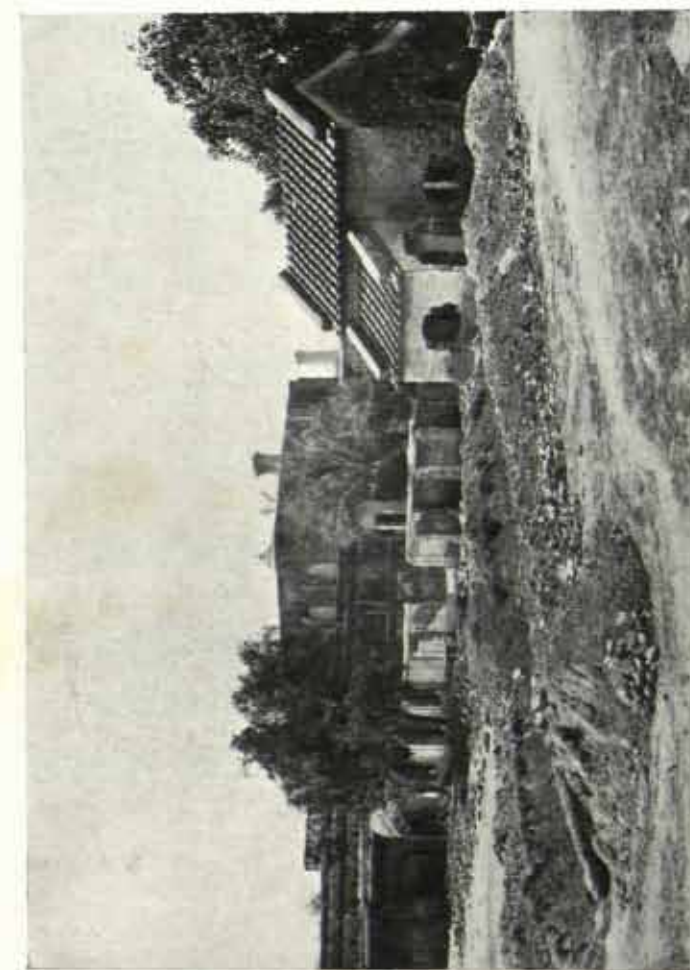
(b) Delhi : Begumpuri Masjid, after Conservation. Front View.



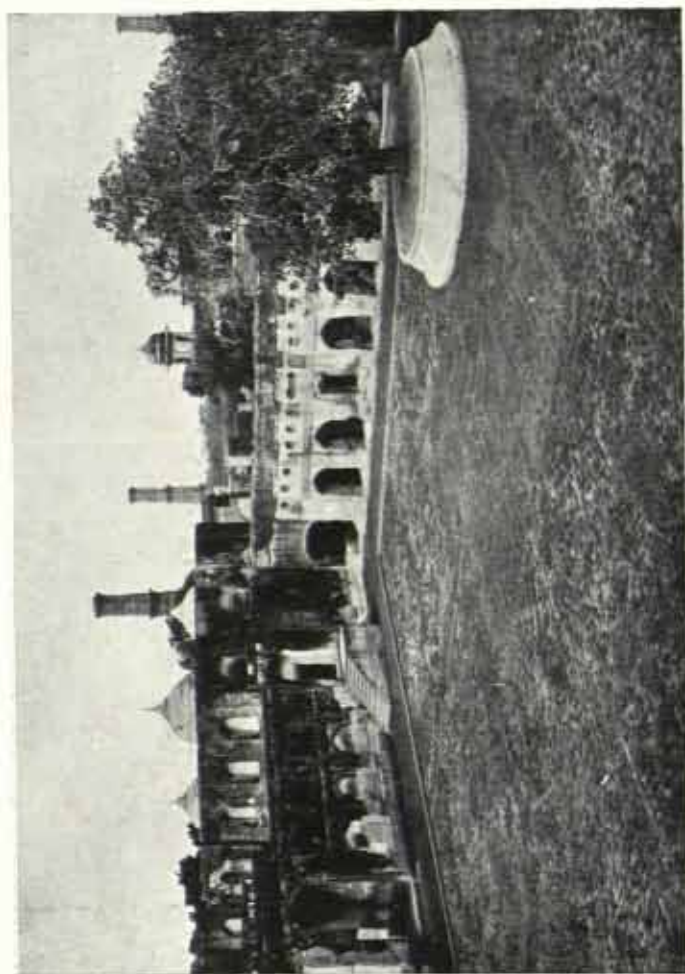
(c) Lahore Fort : Eastern retaining Wall of the Diwan-i Am Forecourt. From S.E.



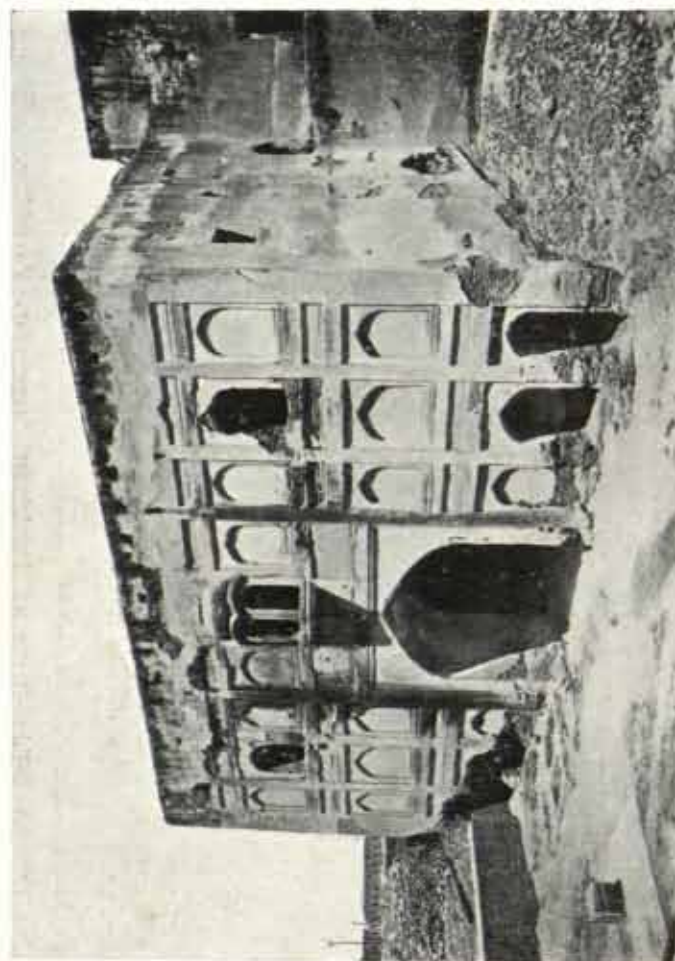
(d) Lahore Fort : Khilat Khana Courtyard after Conservation. From S.E.



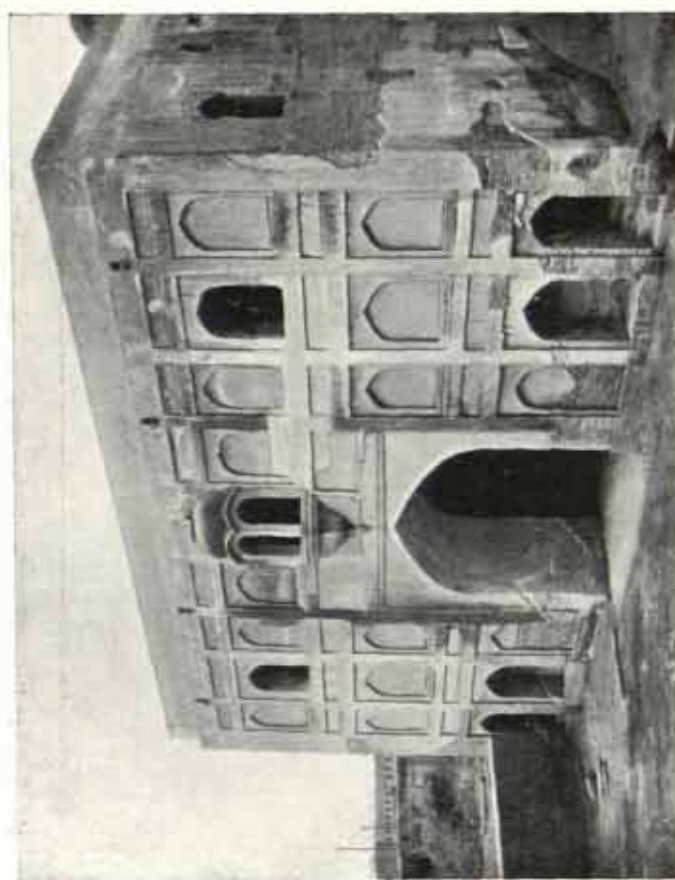
(a) Lahore Fort : Courtyard East of Mosque, before Conservation.



(b) Lahore Fort : Courtyard East of Mosque, after Conservation.



(c) Lahore Fort : Masti Gate, inside Façade, from S.W., before Conservation.

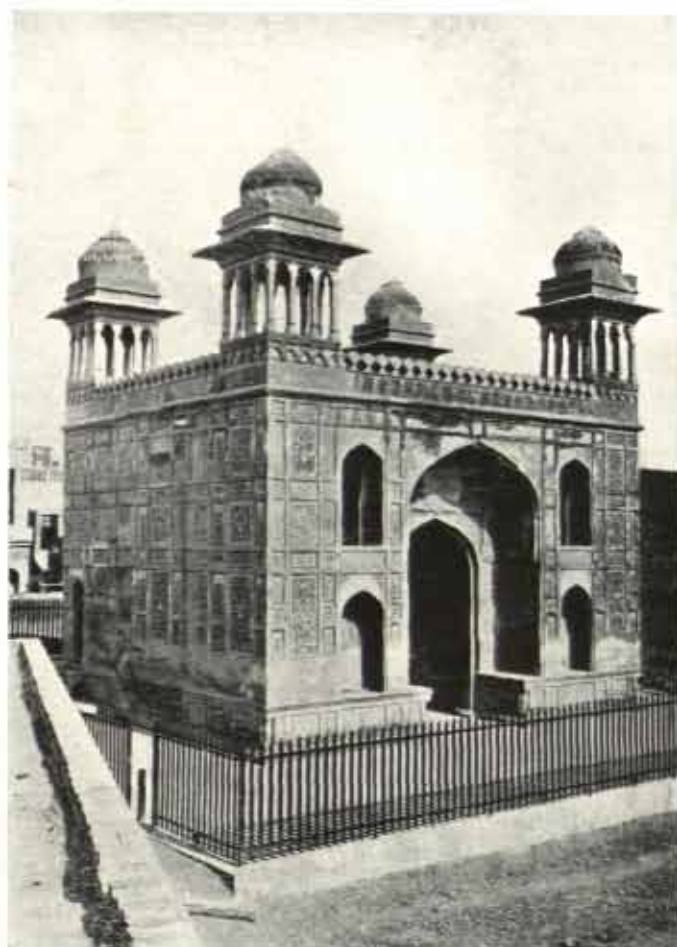


(d) Lahore Fort : Masti Gate, inside Façade, from S.W., after Conservation.

CONSERVATION: FRONTIER AND WESTERN CIRCLES.



(a) Kangra : Baijnath Temple, after Removal of Plaster etc. from Columns.



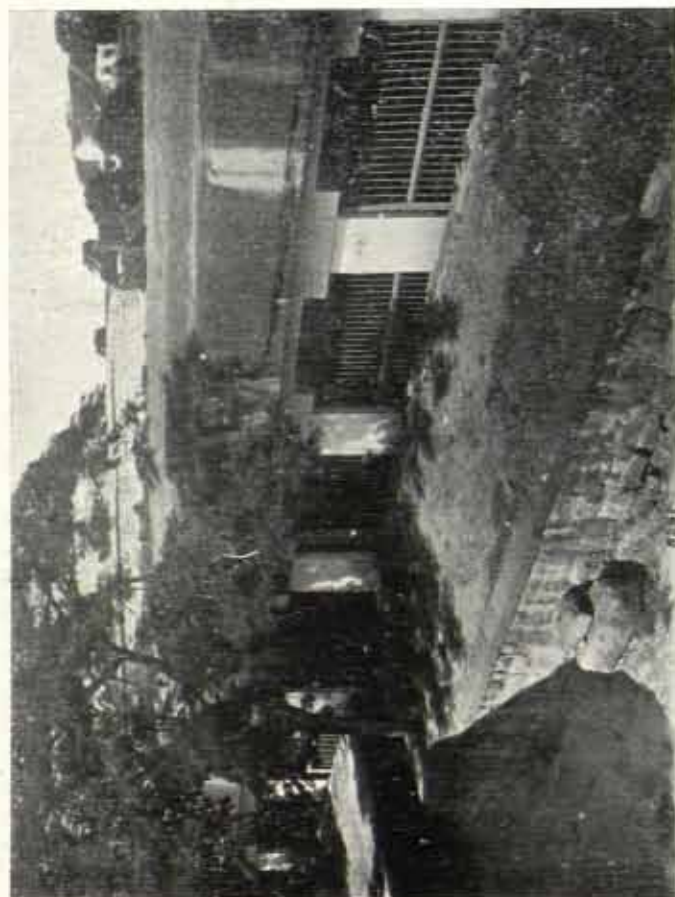
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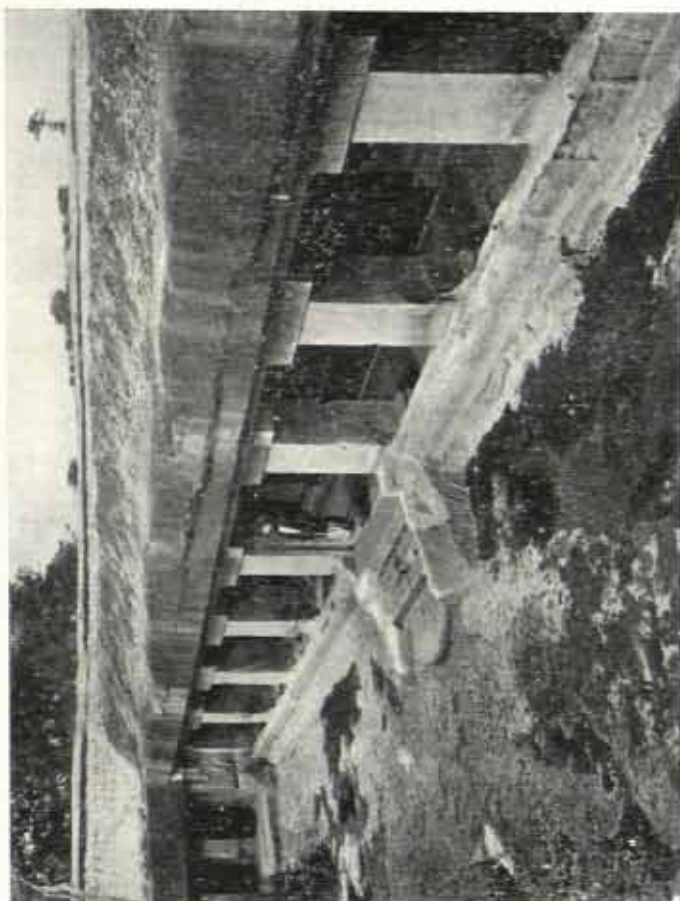
(c) Poona : Shanwar Wada, South Bastion from S.W., before Conservation.



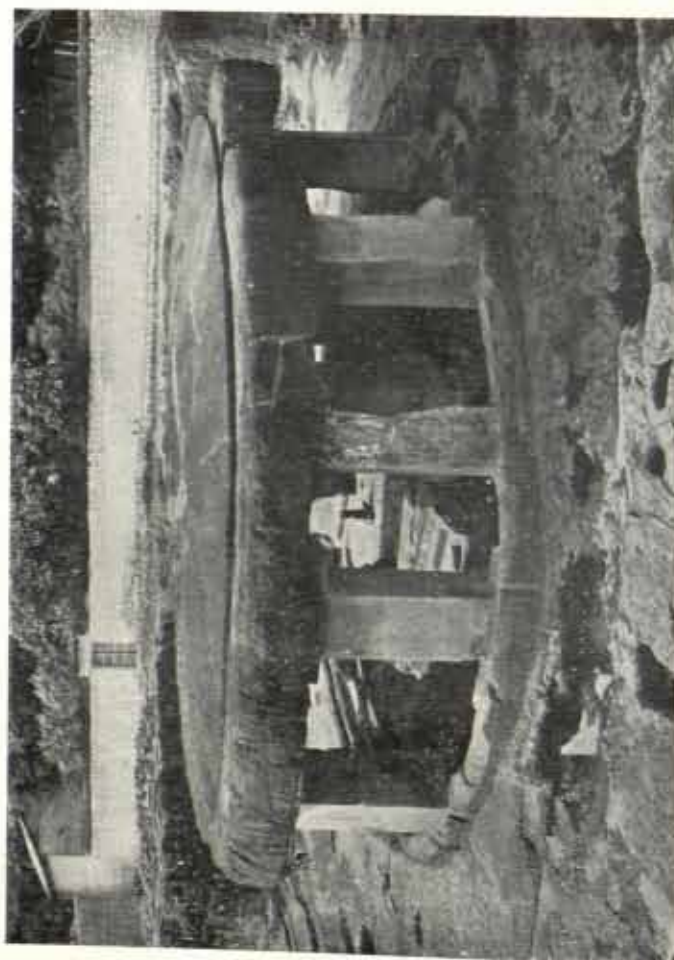
(d) Poona : Shanwar Wada, South Bastion from S.W., after Conservation.



(a) Bhamburda, near Poona : Paṭaśvara Cave, before Conservation, from N.E.



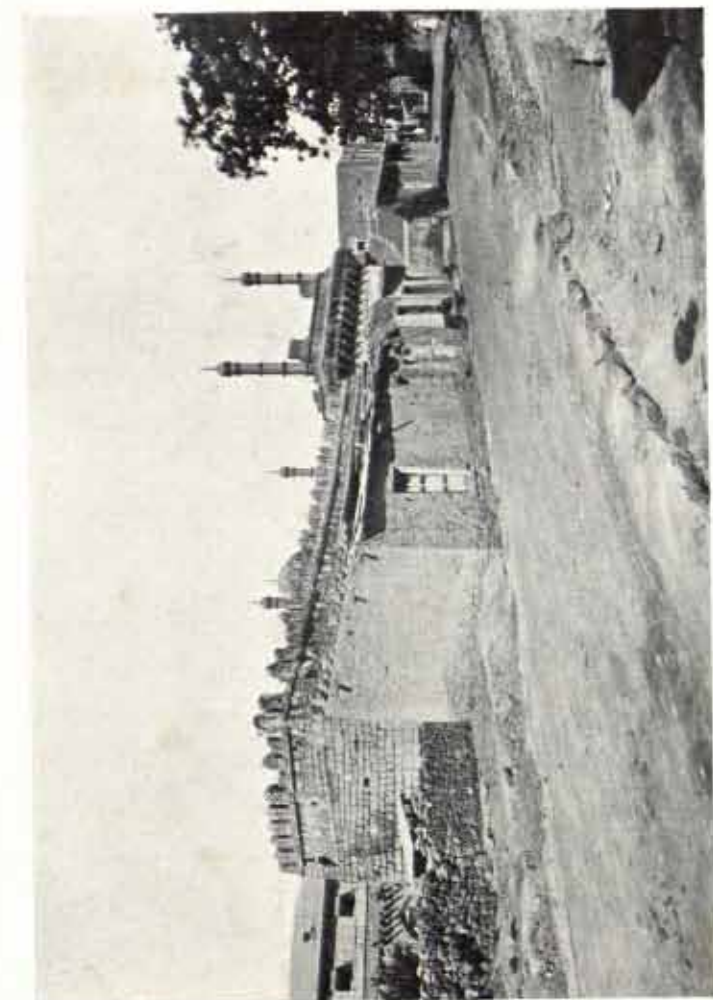
(b) Bhamburda, near Poona : Paṭaśvara Cave, after Conservation, from N.E.



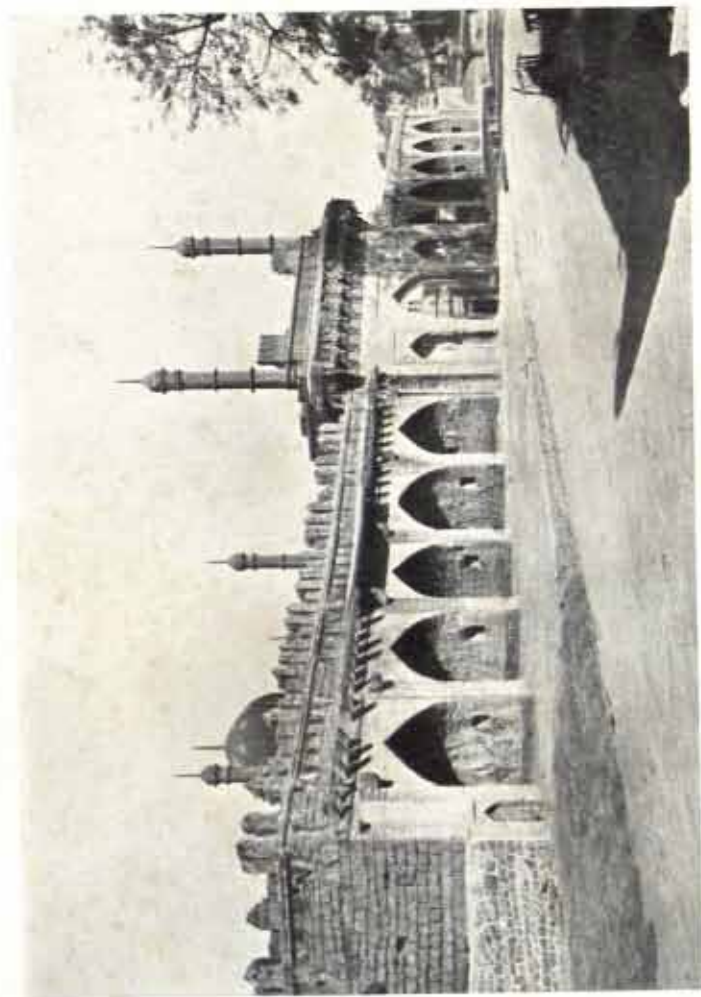
(c) Bhamburda : Paṭaśvara Cave, Rock-cut Pavilion in open Court, after Conservation, from N.W.



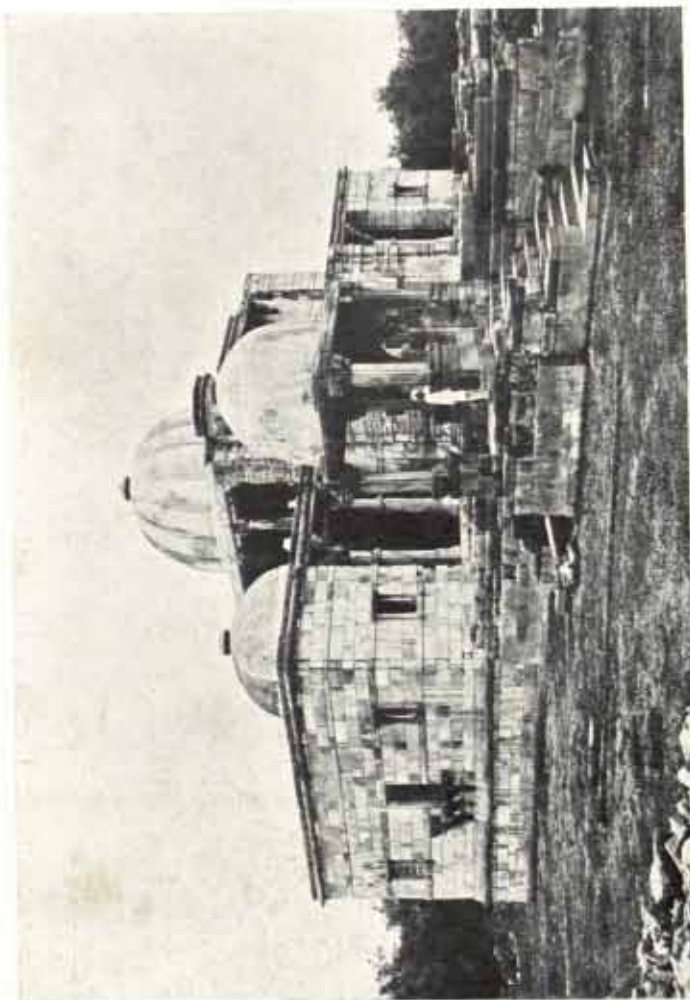
(d) Bijapur : Jami' Masjid, showing Restoration of N.E. Cornice in Progress.



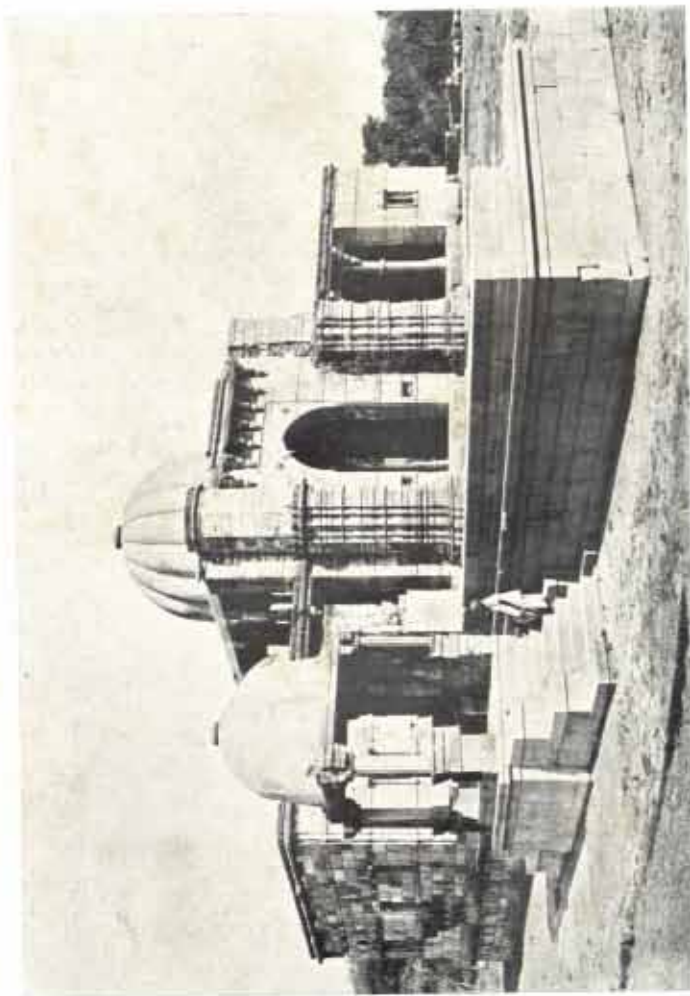
(a) Bijapur: Bukhari Masjid, before Conservation, Front View.



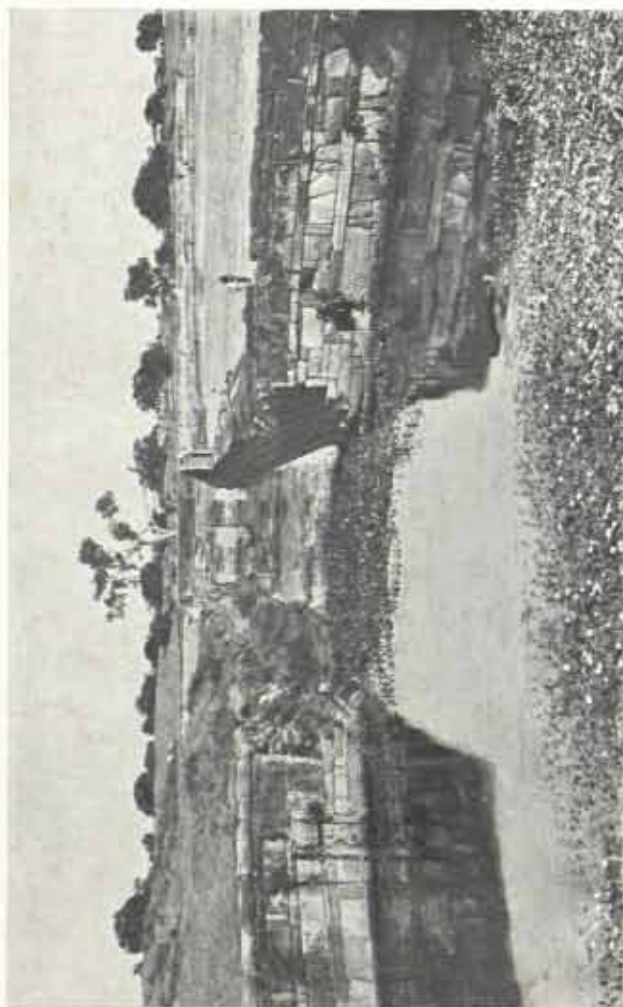
(b) Bijapur: Bukhari Masjid, after Conservation, Front View.



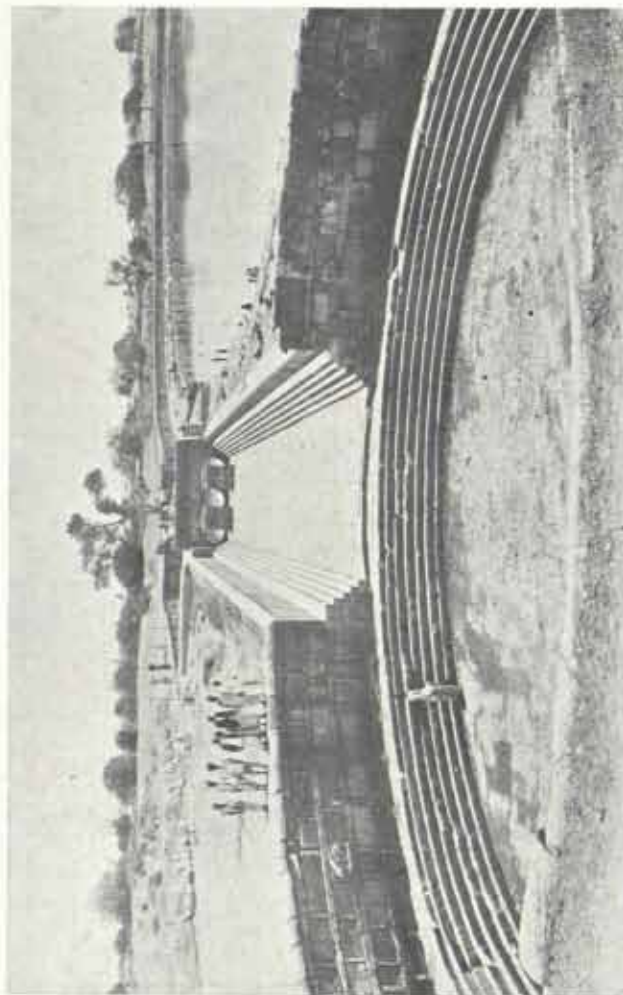
(c) Champaner: Lila Gumbaz, from S. E., showing Steps and Platform, before Conservation.



(d) Champaner: Lila Gumbaz, from S. E., showing Steps and Platform, after Conservation.



(a) Dholka: Malav Tank, showing Inlet and Silting Well, before Conservation, from W.



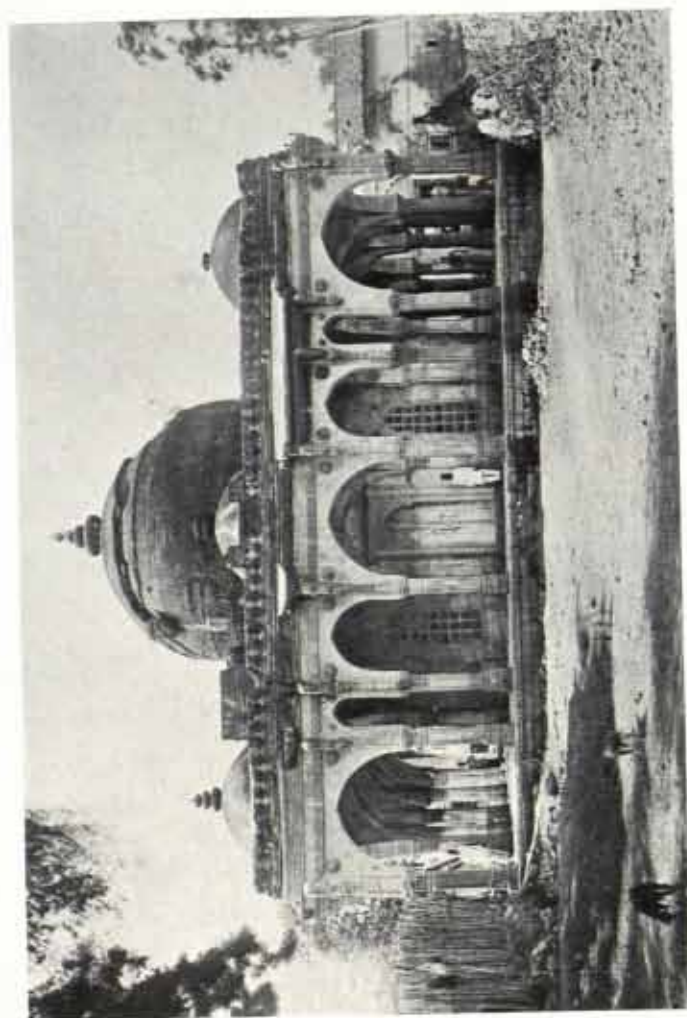
(b) Dholka: Malav Tank, showing Inlet and Silting Well, during Conservation, from W.



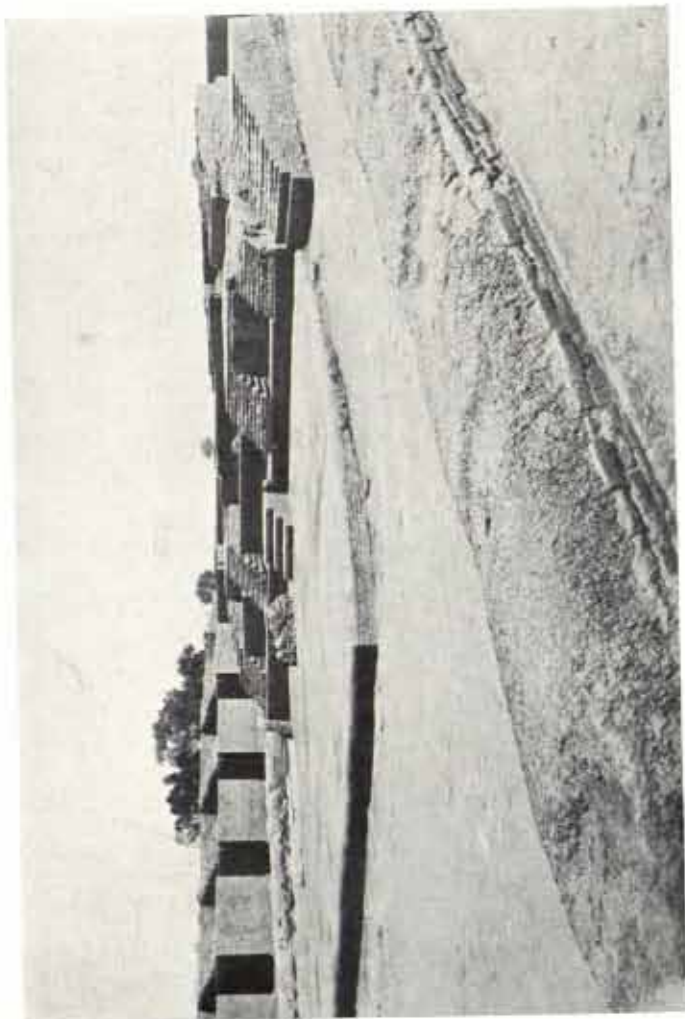
(c) Bombay Suburban District: Jagesvari Caves, showing South Verandah from N.E., before Conservation of Pillars.



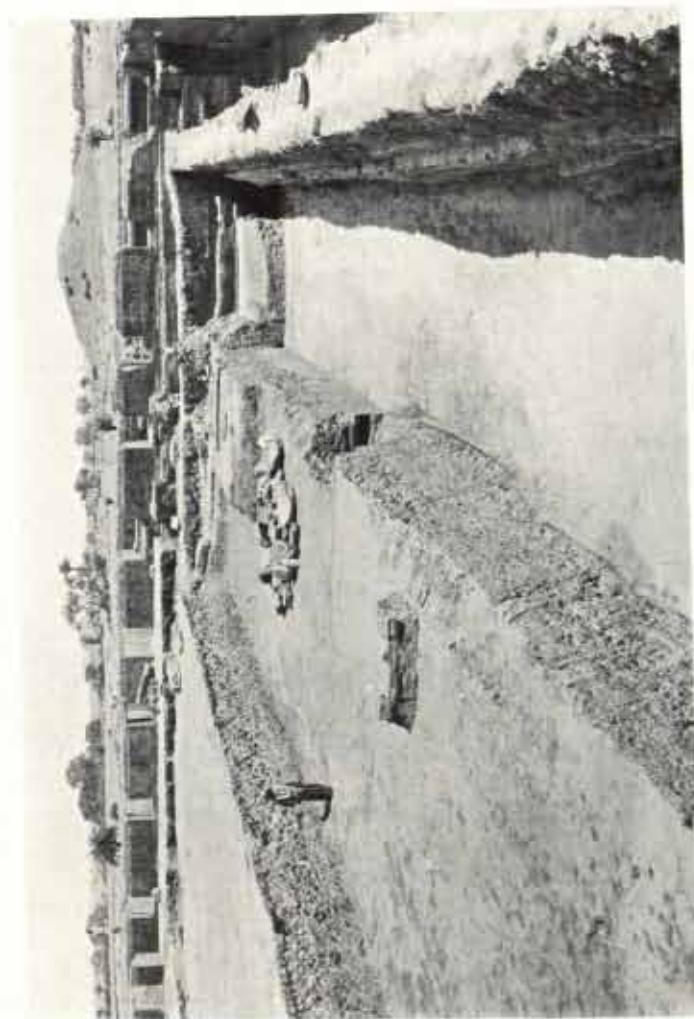
(d) Bombay Suburban District: Jagesvari Caves, showing restored Pillars in South Verandah, from S.W.



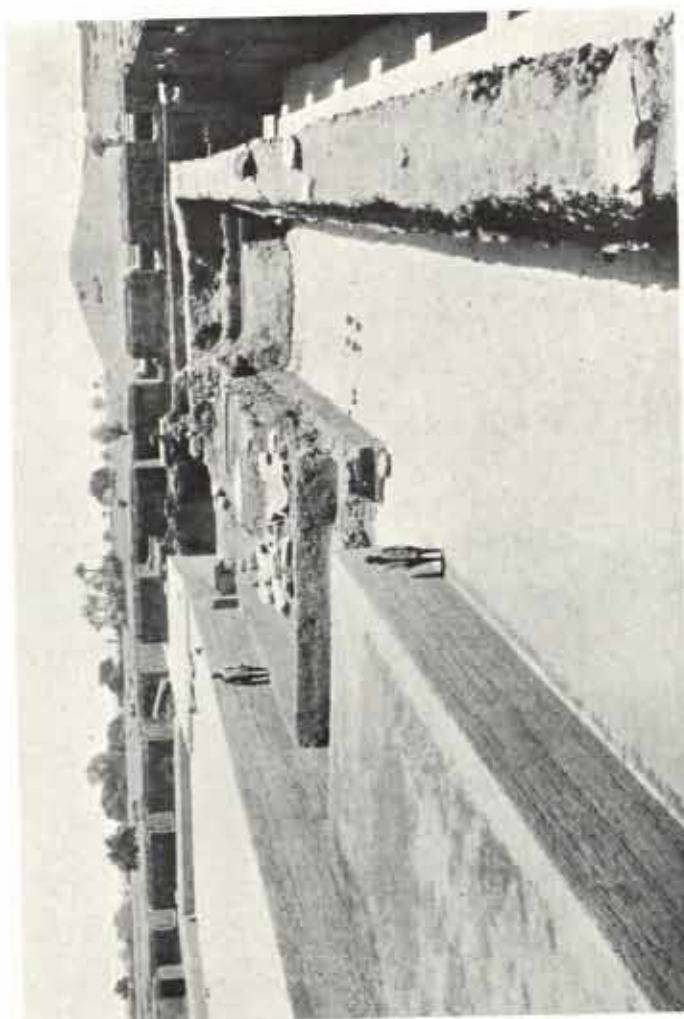
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(b) Nālandā: Monastery No. 8; Shrine in Courtyard and Cells on N., after Conservation. From S.W.



(c) Nālandā: Monastery No. 7; Courtyard from S.W., showing three different Levels before Conservation.

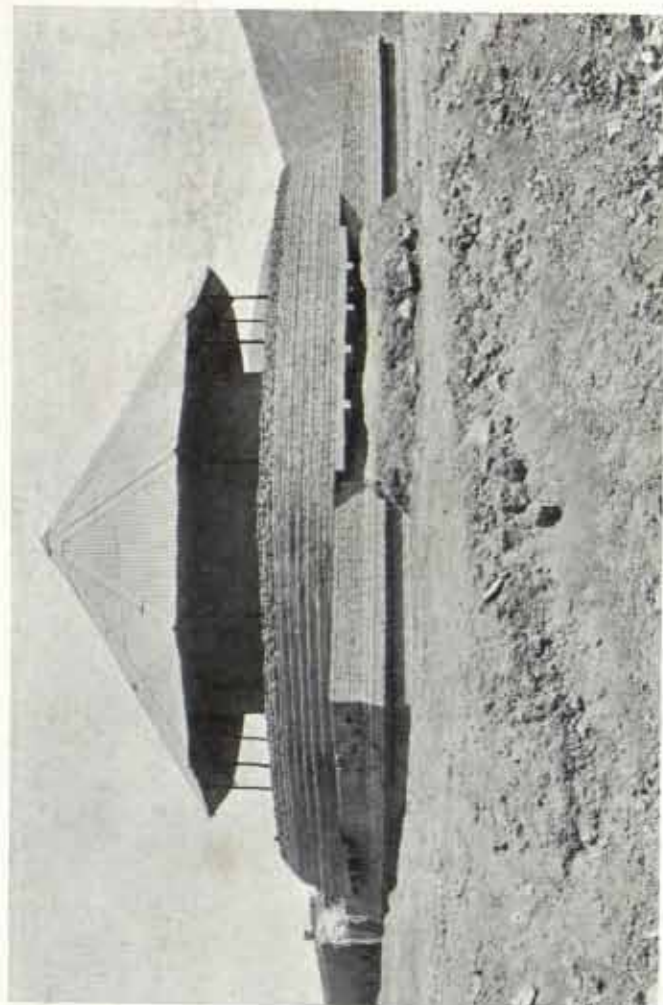


(d) Nālandā: Monastery No. 7; Courtyard from S.W., showing three different Levels after Conservation.

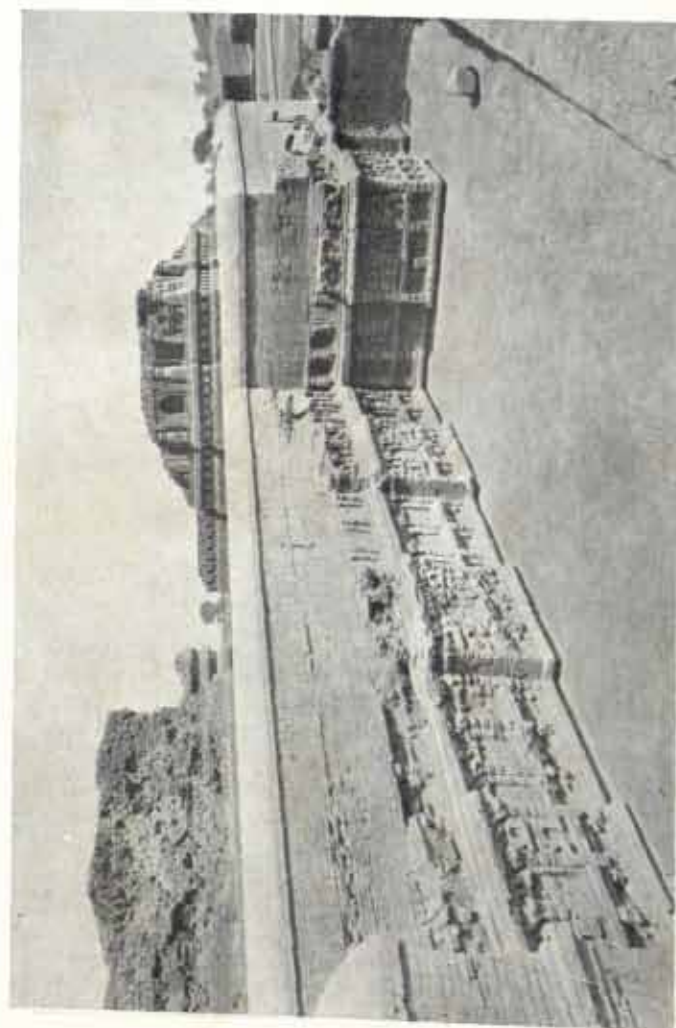
CONSERVATION: CENTRAL CIRCLE.



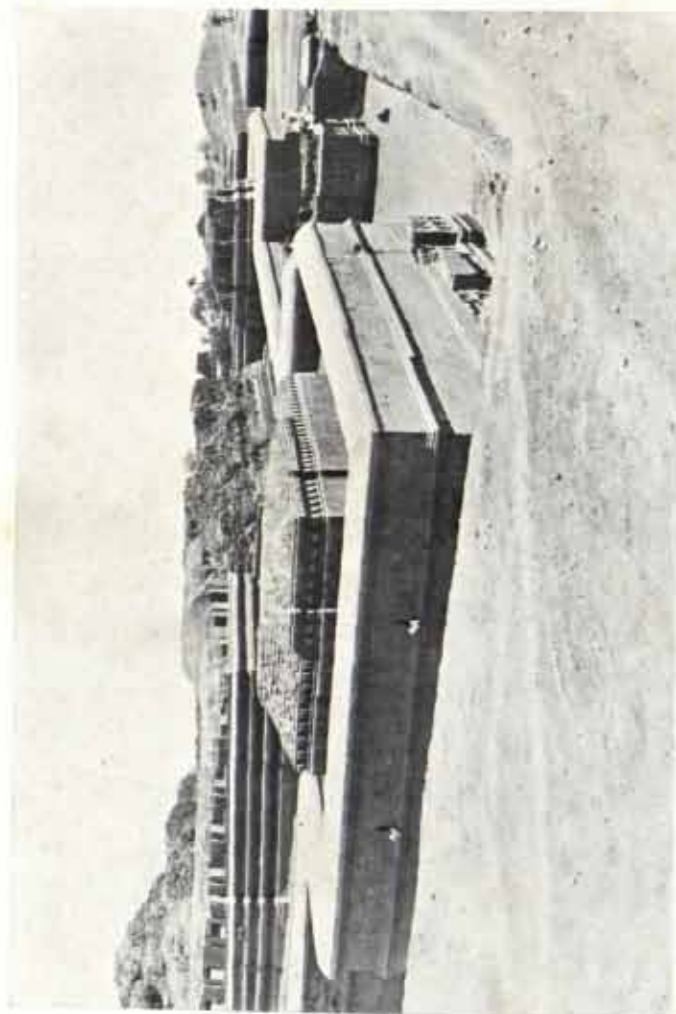
(a) Nālandā: Chaitya Site No. 12; Votive Stūpas and Main Chaitya from S.E., after Conservation.



(b) Rajgir: Maniyar Matha from S.W., after partial Conservation.



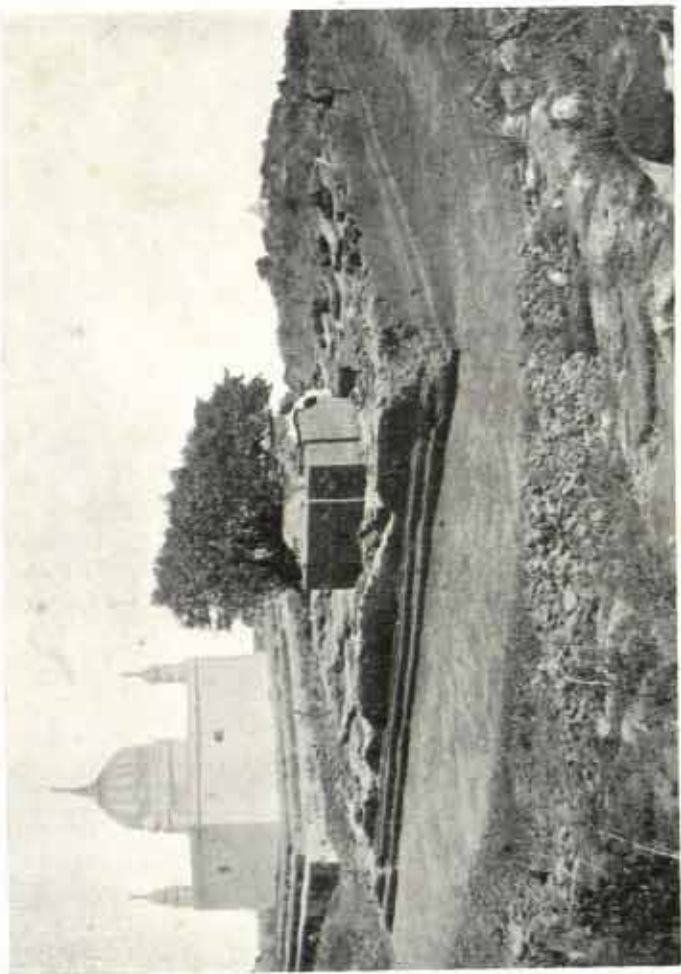
(c) Nālandā: Chaitya Site No. 12; E. Hall of S. Façade, showing Earlier and Later Constructions, after Conservation, From S.W.



(d) Nālandā: Chaitya Site No. 12; S.W. Corner View, after Conservation, From S.W.



(a) Rajgir : Ruined Digambara Jain Temple on Vaibhara Hill, before Excavation and Conservation. From S.W.



(b) Rajgir : Digambara Jain Temple on Vaibhara Hill, after Excavation and partial Conservation. From S.W.



(c) Rajgir : Sonbhandar Cave after Conservation; and adjoining Vaishyapa Cave.



(d) Rajgir : Ruined Vaishyapa Cave showing Inscriptions, and Relievo fallen from above collapsed Verandah



(a) Rajgir : Caves on the N. Side of the *Gṛidhrakṛ̥ṣṇa* Hill, from N.E.



(b) Rajgir : Image of Vishnu on Garuda (6th—7th Century), originally over Entrance of newly discovered Cave (Plate XI, d).



(c) Palamau : New Fort, showing Sanskrit and Persian Inscriptions on ruined Gateway, after Clearance.



(d) Gaya, Barabar Hill: Lomas Rishi Cave, after partial Conservation, from S.E.



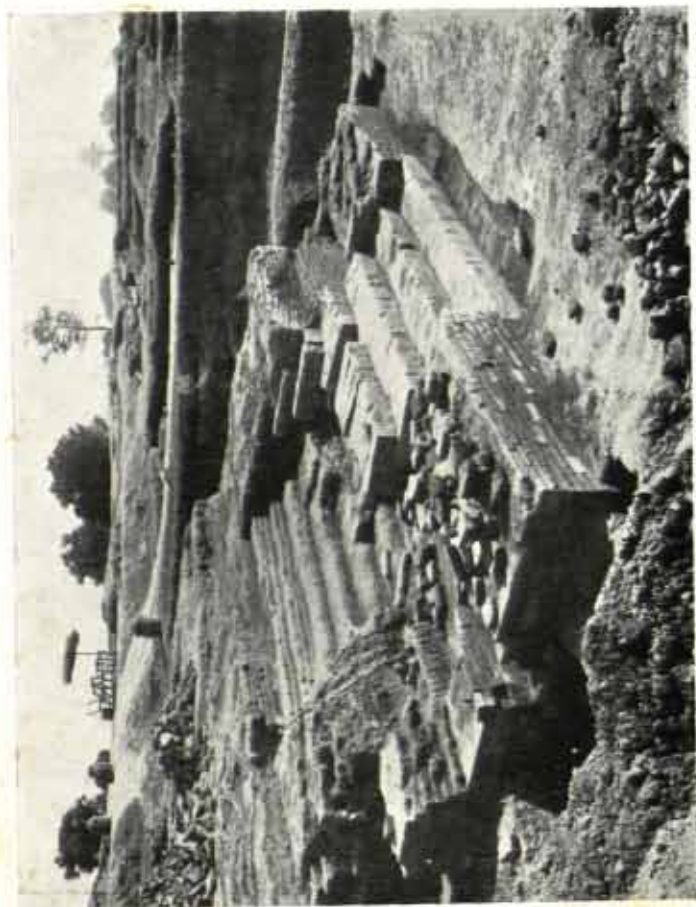
Gaya, Barabar Hill : Lomas Rishi Cave, Front View.



(f) Paharpur : Part of Pillar showing two Periods of Sculpturing.



(g) Paharpur : Defaced Kubera on Reverse of another Sculpture in Main Temple



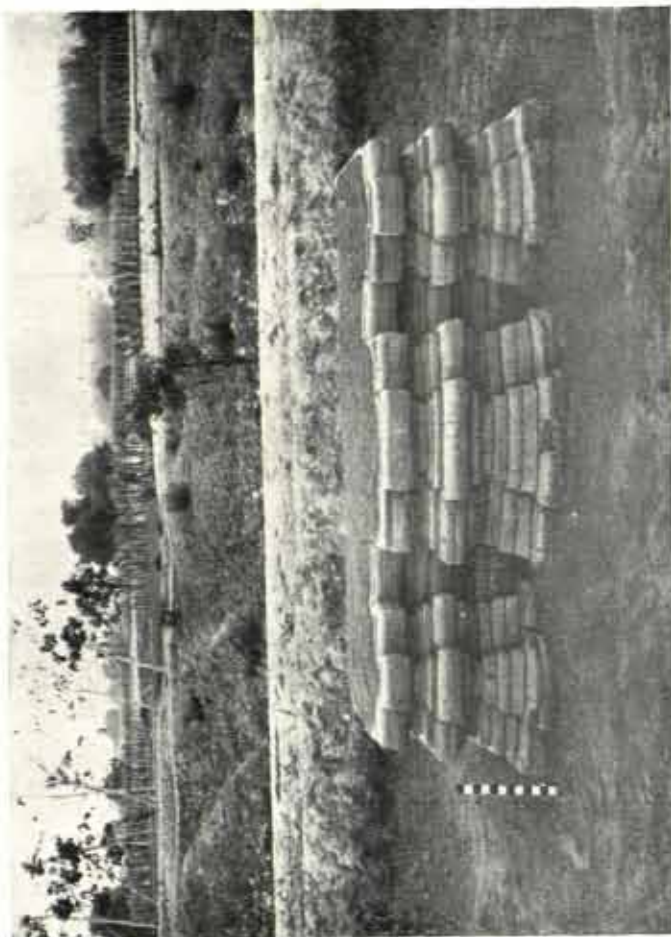
(a) Paharpur : Staircase to Eastern Row of Monastic Cells, before Conservation.



(b) Paharpur : Staircase to Eastern Row of Monastic Cells, after Conservation, Showing two Periods of Construction.



(c) Paharpur : Five Votive Stûpas in S. Courtyard, after Conservation.

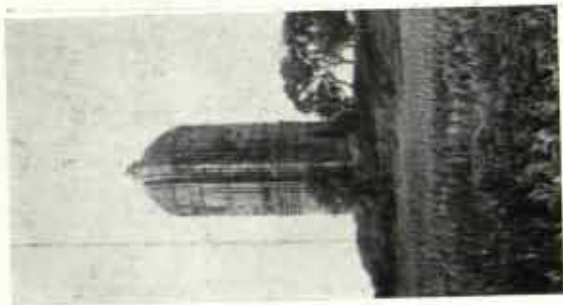


(d) Paharpur : Ornamental Pedestal in Room No. 75, after Conservation.

CONSERVATION: EASTERN CIRCLE.



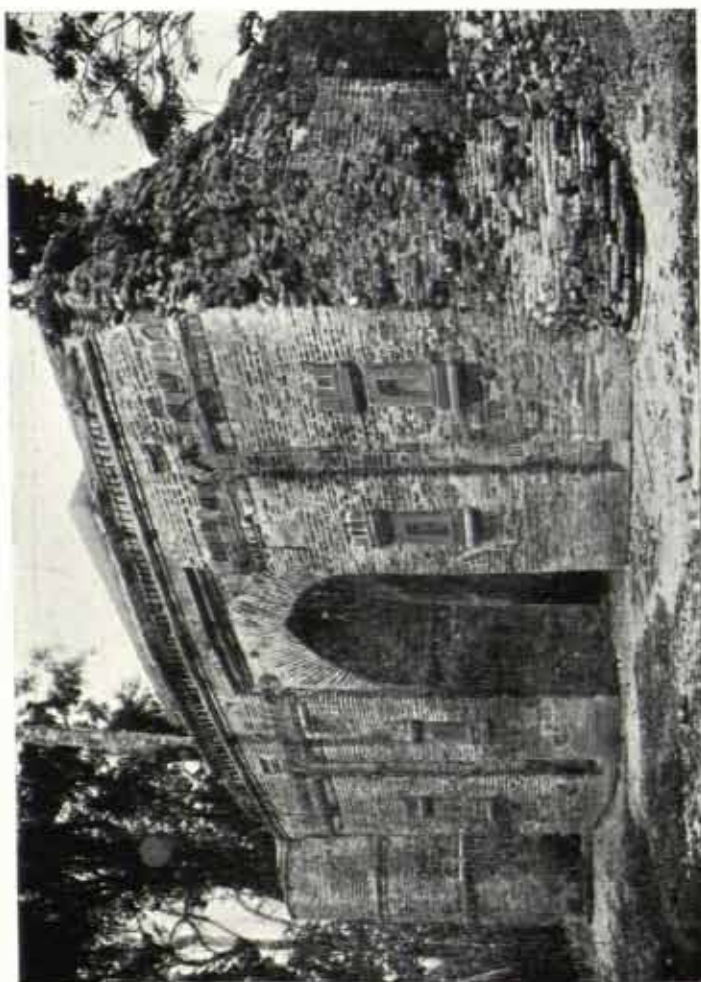
(a) Paharpur : Ornamental Pedestal in Monastery
Room No. 88, after Conservation.



(b) The Sundarbanas : View
of Jatar Deul, after
Conservation.



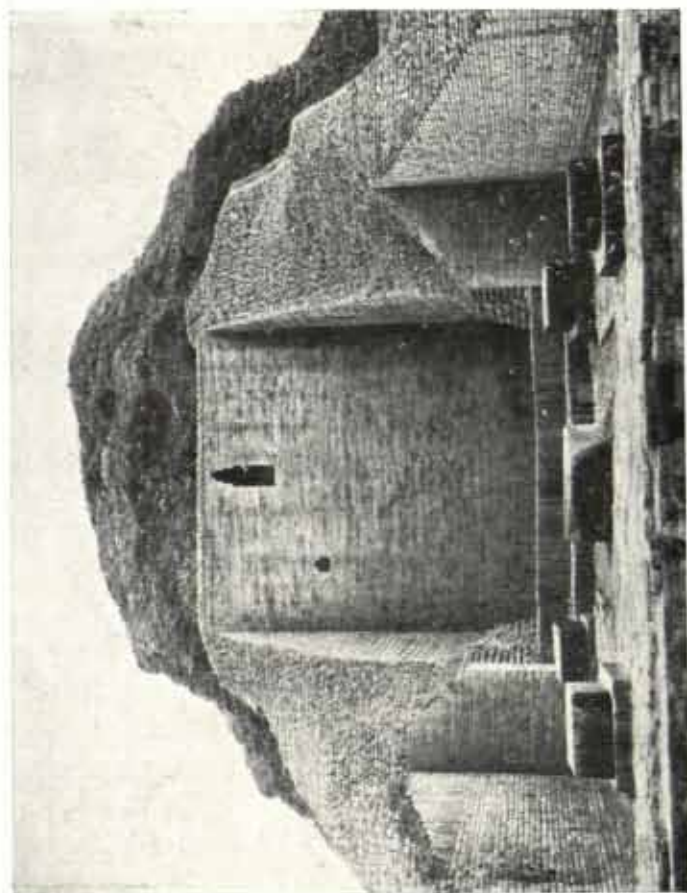
(c) Bagerhat : Sath Gumbaz Masjid, Interior, showing new Flooring.



(d) Dimapur, Assam : Gateway leading to Kachhāri Enclosure,
after Conservation.



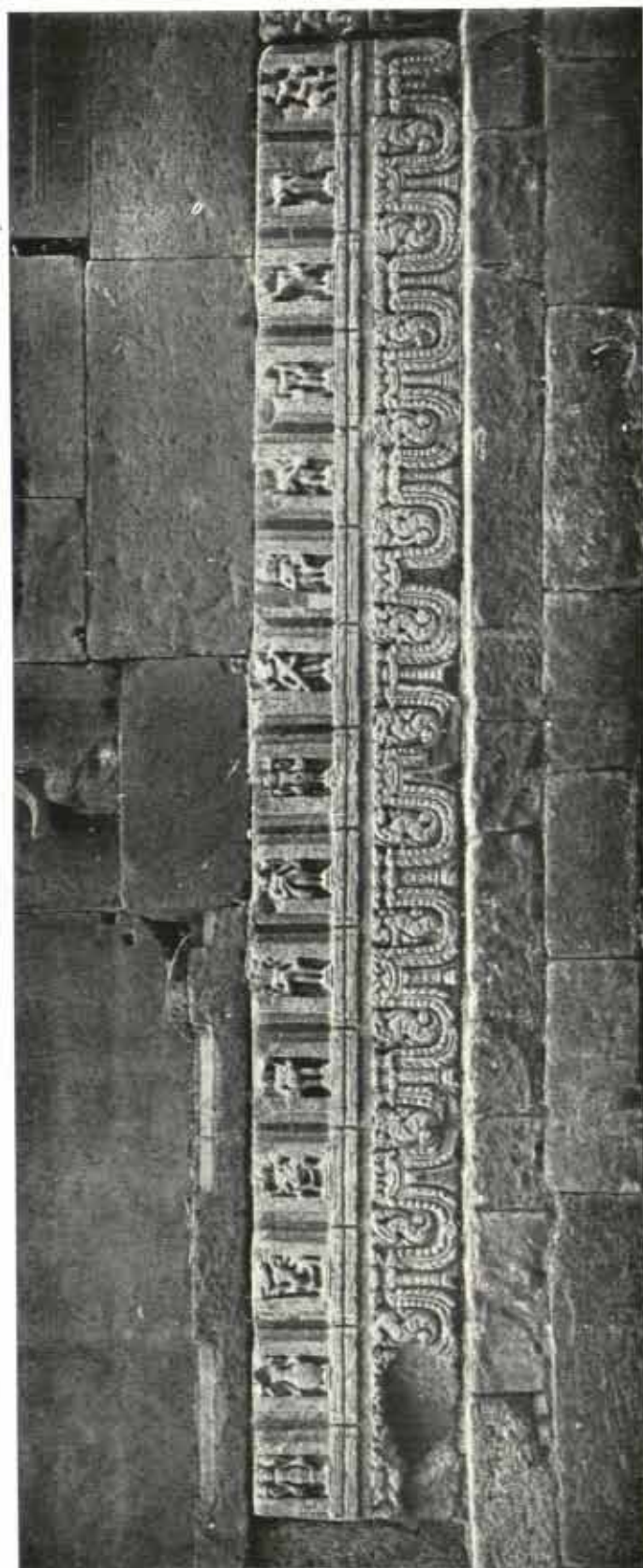
(e) Dimapur : Rows of "Chessmen" inside Kachhāri Compound.



(a) Paharpur : Main Temple, Northern *matigapa* after Conservation.



(b) Tribeni : Carved Plinthstones of Hindu Shrine utilized in Tomb of Zafar Khan Ghazi.



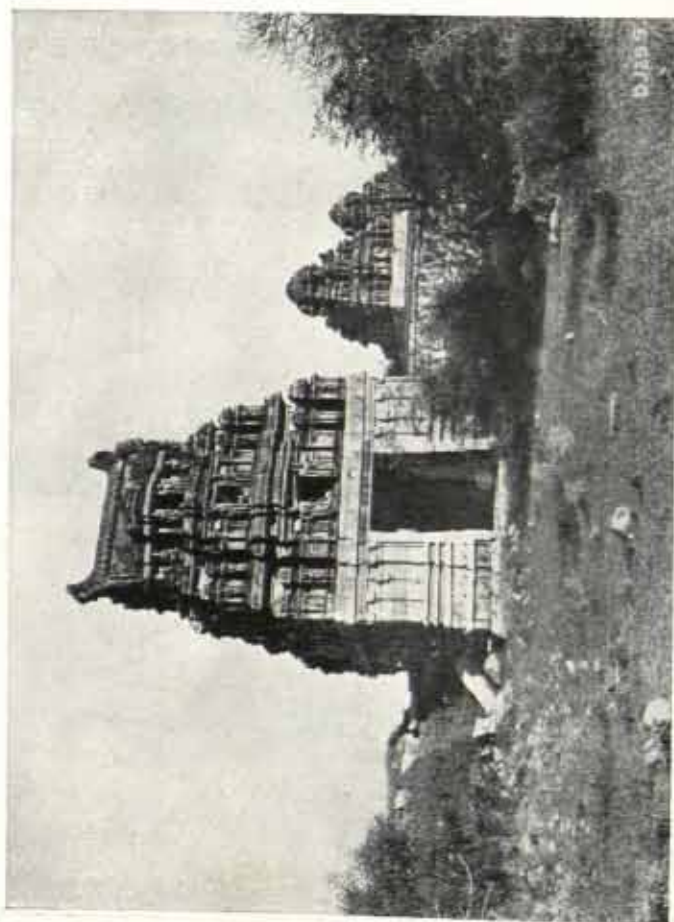
(c) Tribeni : Carved Stone Frieze, representing Ten Avatars of Vishnu, found in Zafar Khan Ghazi's Tomb.



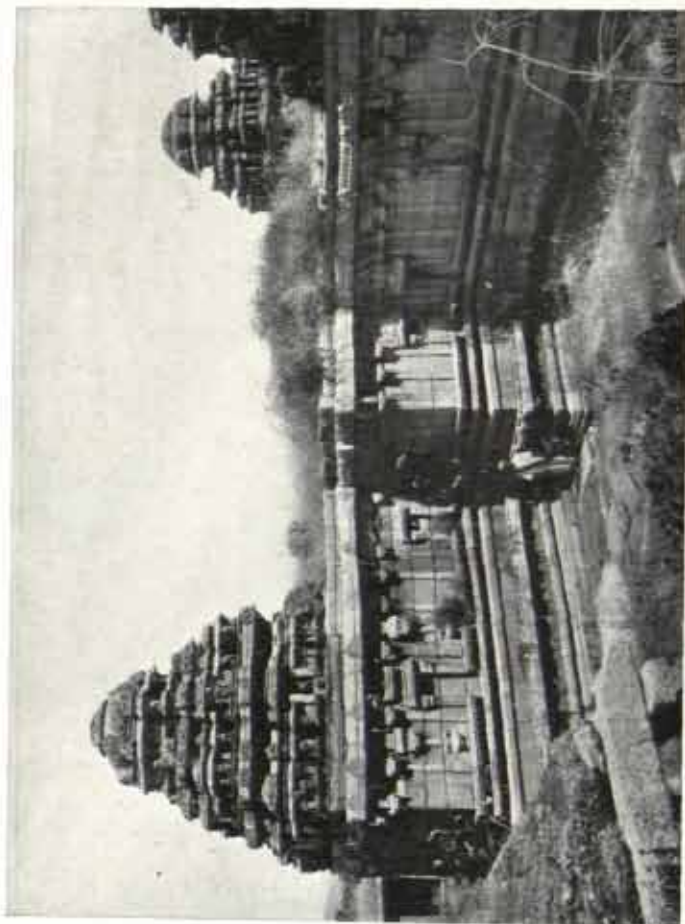
(a) Garui, Burdwan : Stone Temple, before Conservation.



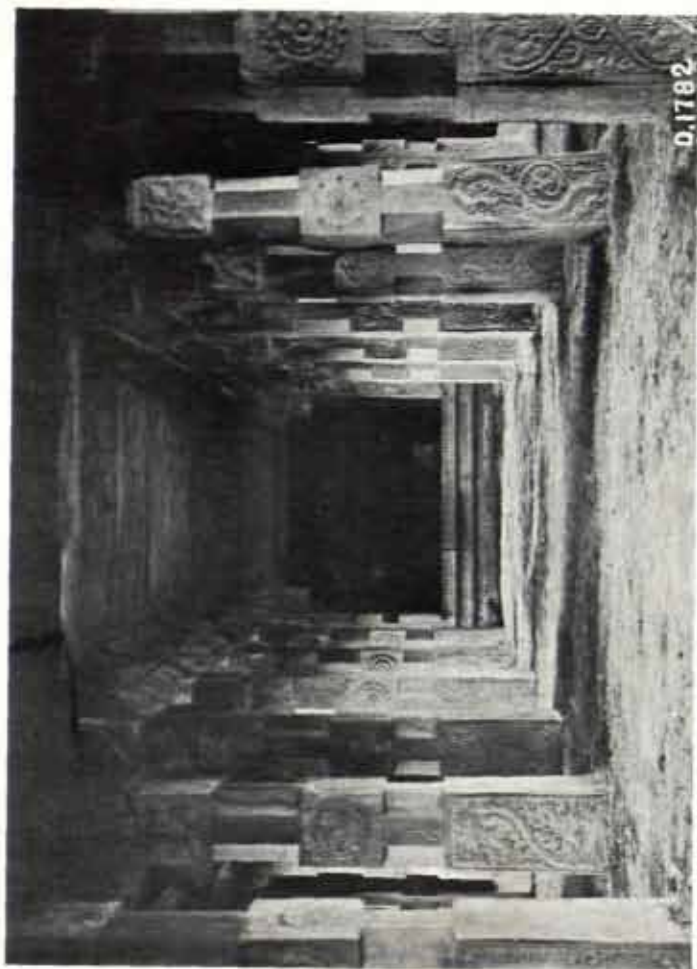
(b) Garui, Burdwan : Stone Temple, after Conservation.



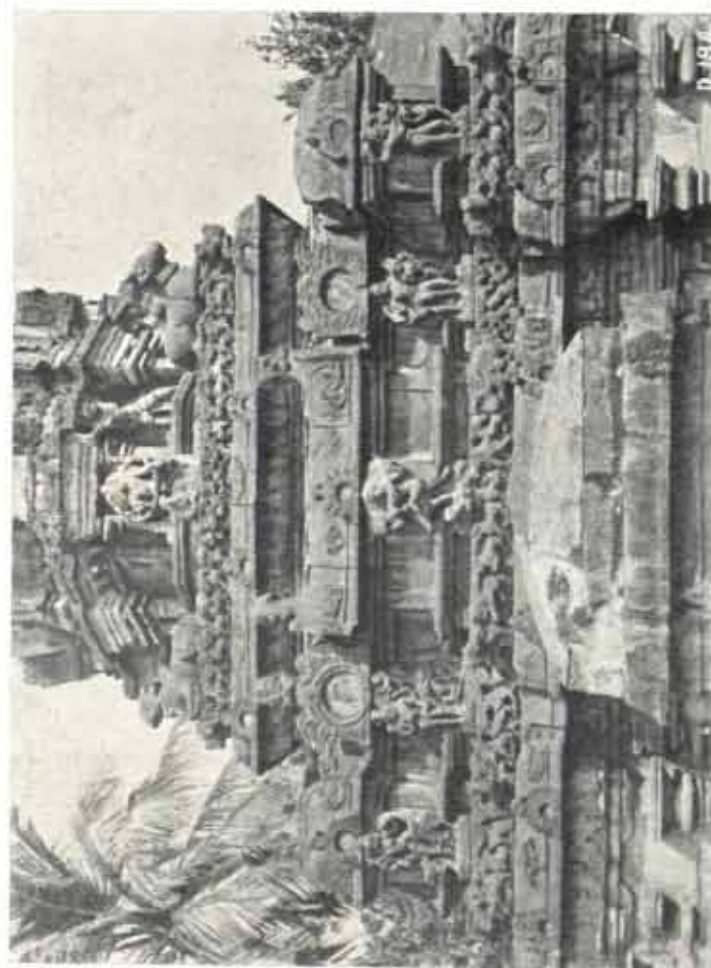
(c) Timmalapuram : Siva Temple, Main Gateway.



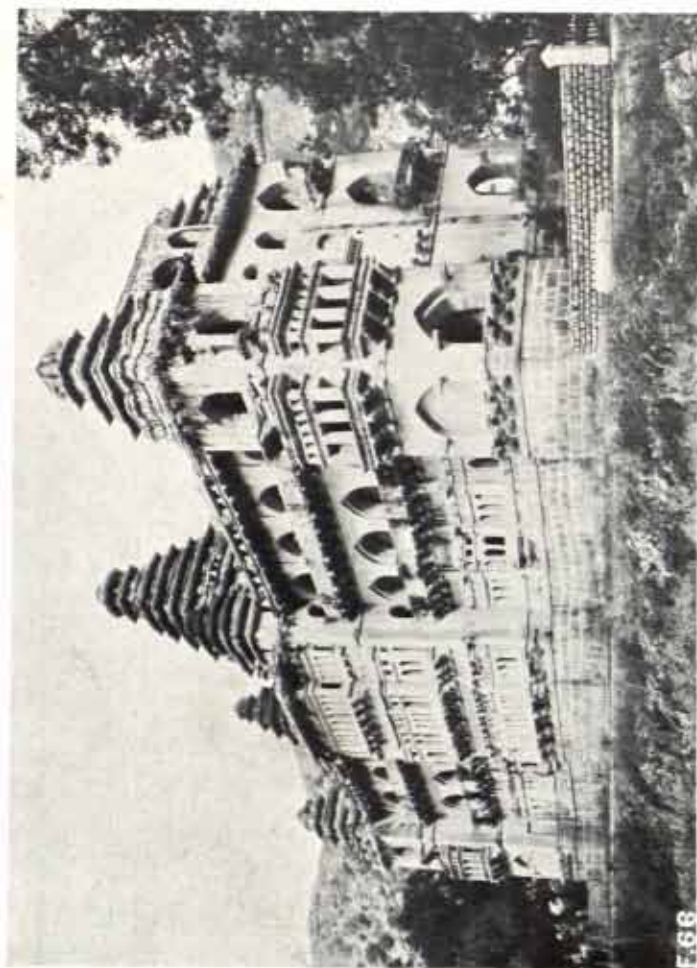
(d) Timmalapuram : Siva Temple, showing three vimanas.



(a) Gingee: Vekataramana Temple, Interior View of *mandapa*.



(c) Tiruvalisvaram: Valisvara Temple, Sculptures on S. Side of *vimana*.



(b) Chandragiri: The Raja Mahal, after Conservation, from N.E.



(d) Hampi: Vitthala Temple, showing S. Entrance-*mandapa*.



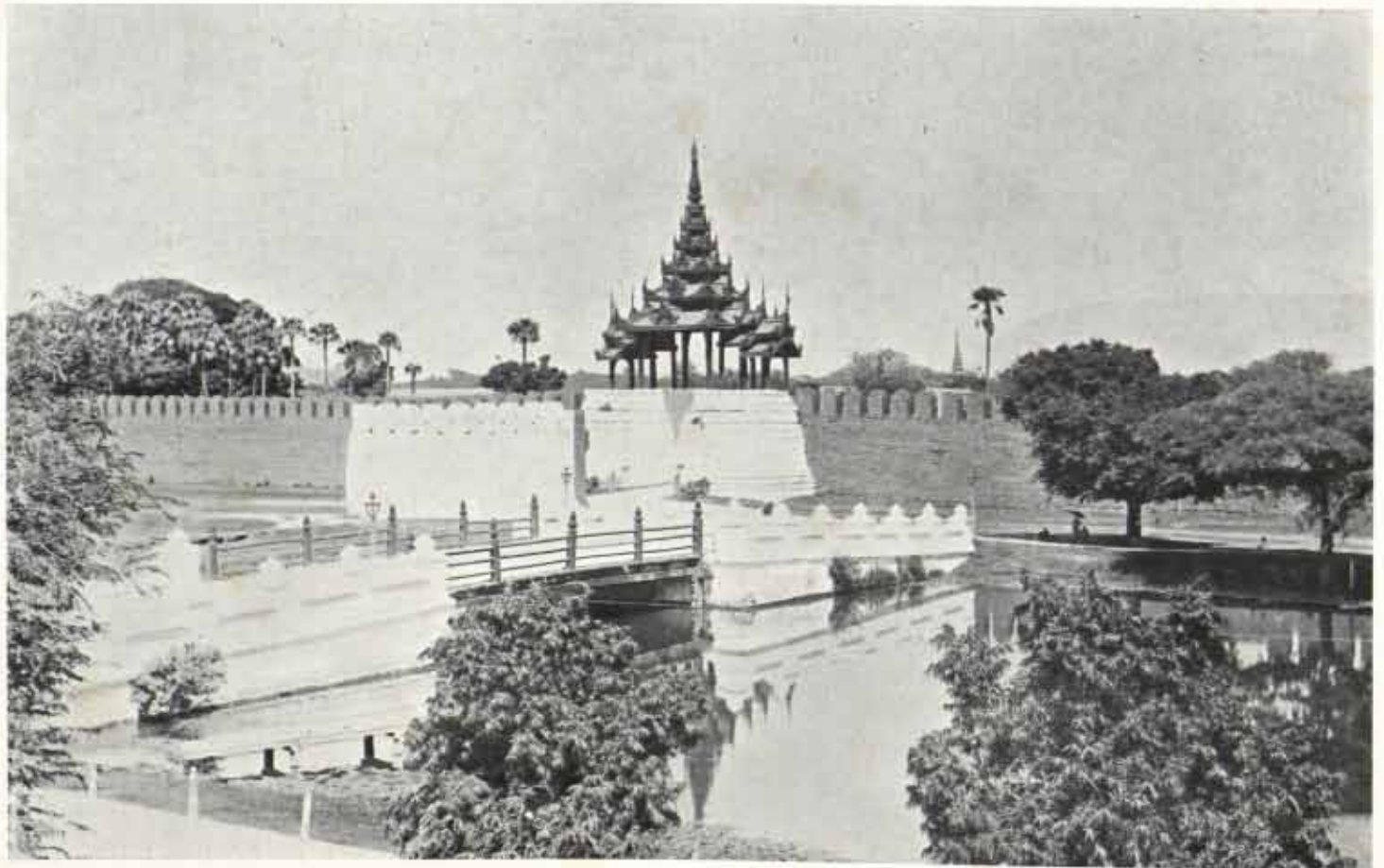
(a) Myinpagan: Abeyadana Temple, after Repairs.



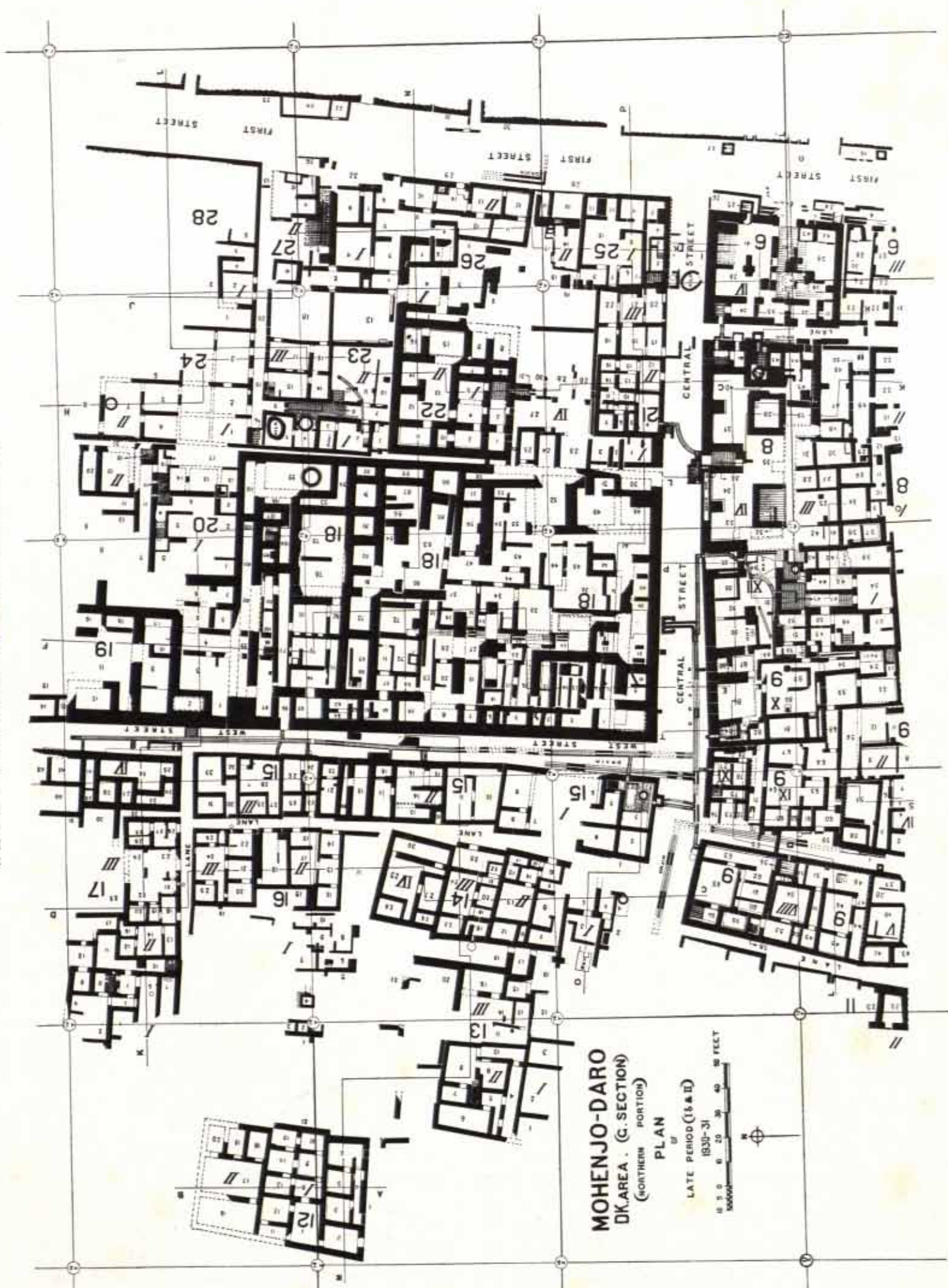
(b) Myinpagan: The Kubyaukkya Temple, General View.



(c) Mandalay: Fort Dufferin, *pyatthat* No. 39, after Repairs.

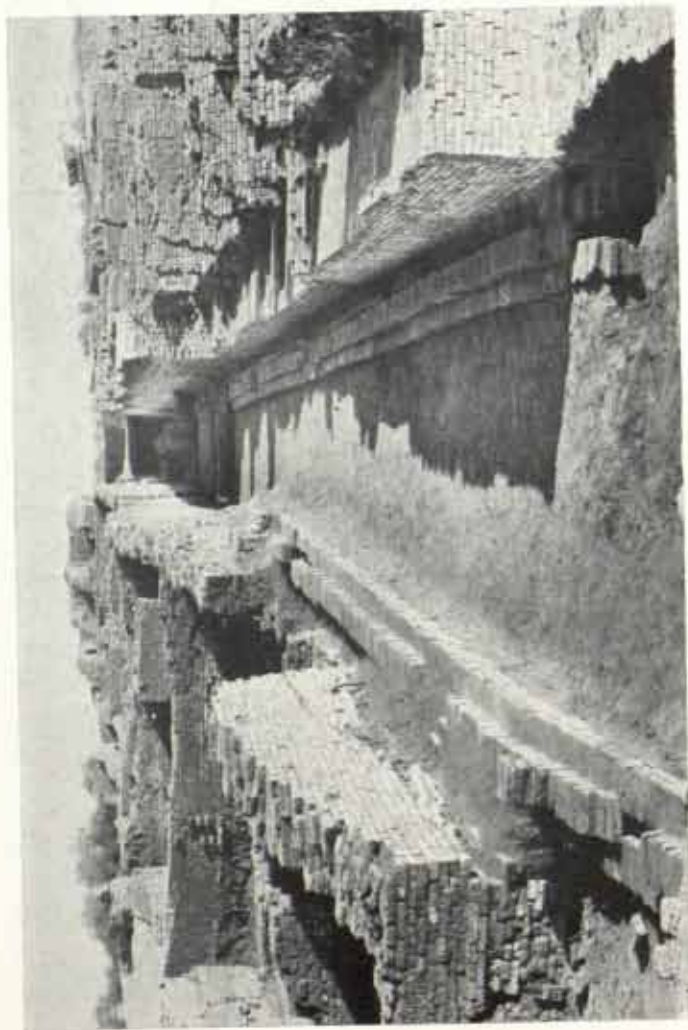


(d) Mandalay: Fort Dufferin, Ālavi Gate, showing position of *pyatthat*.

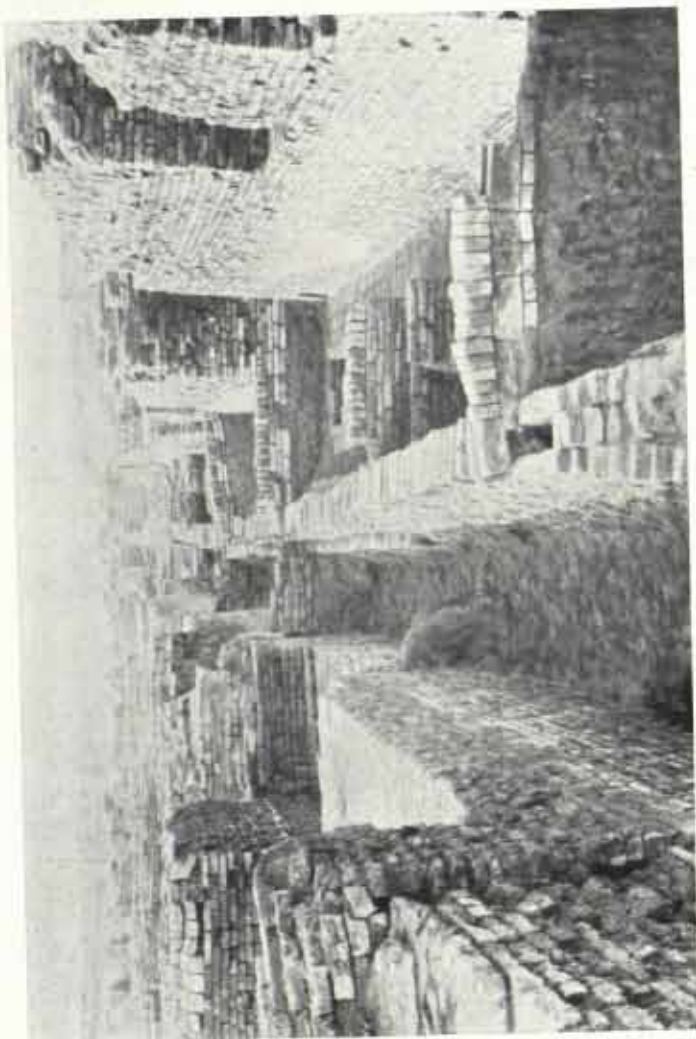


Plan of Dk Area, G. Section, Northern Portion, excavated during 1930-31.

EXCAVATIONS: MOHENJO-DARO.



(a) West Street, showing Late I (b) and Late II Period Drainage System. Looking N.



(b) West Street: Drains and Feeders of Late I (b) Date. Looking E.



(c) Central Street, excavated down to Late I (b) Level. Looking E.



(d) West Street, cleared down to Late II Period. Looking E.

EXCAVATIONS: MOHENJO-DARO.



(a) Temple-like Building in Central Street. N.W. Corner



(b) Dk Area, G. Section, S. Portion: Early Structures at a depth of -33 ft.



(c) Temple (?) in Central Street, showing supposed Shrine.



(d) Dk Area, G. Section, S. Portion: Early Period Structures and Drains.



(e) Dk Area, G. Section, N. Portion: Block 8, Room 42: Skeletal Remains.



(f) Dk Area, G. Section, S. Portion: Remains of Buildings of Early Period.



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EXCAVATIONS: MOHENJO-DARO.



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9



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17



18



(a) Cemetery: Extension of E. Trench; showing Pot-burials of Stratum I; from N.E.



(b) Burial No. H 710.



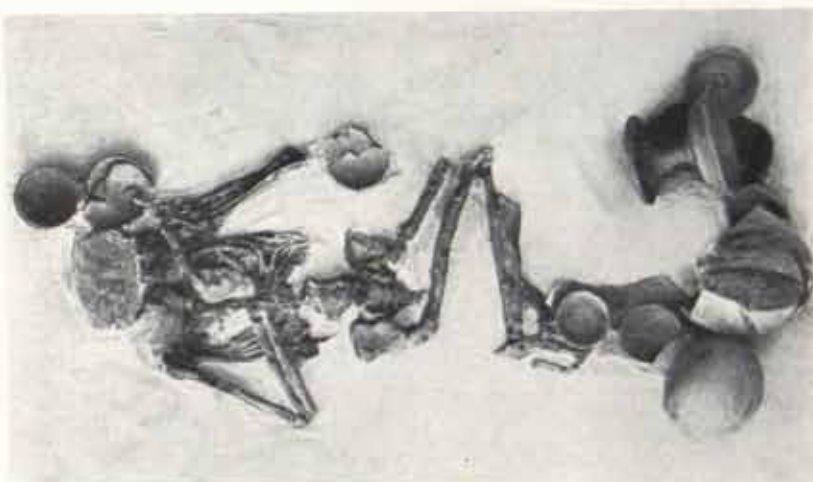
(c) Cemetery: Extension of W. Trench; showing Pot-burials of Stratum I; from E.



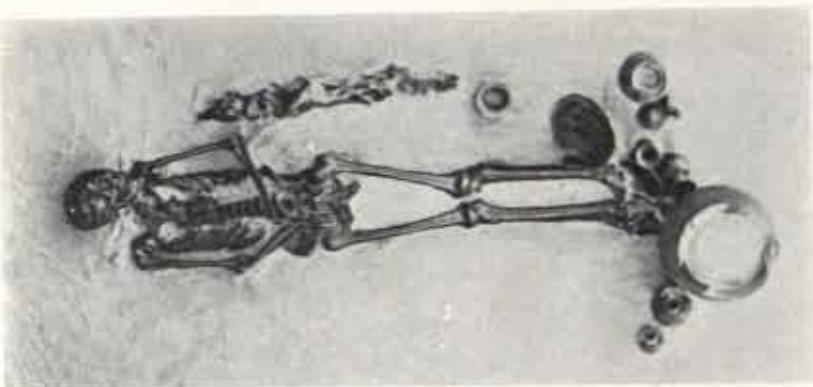
(d) Burial No. H 035.



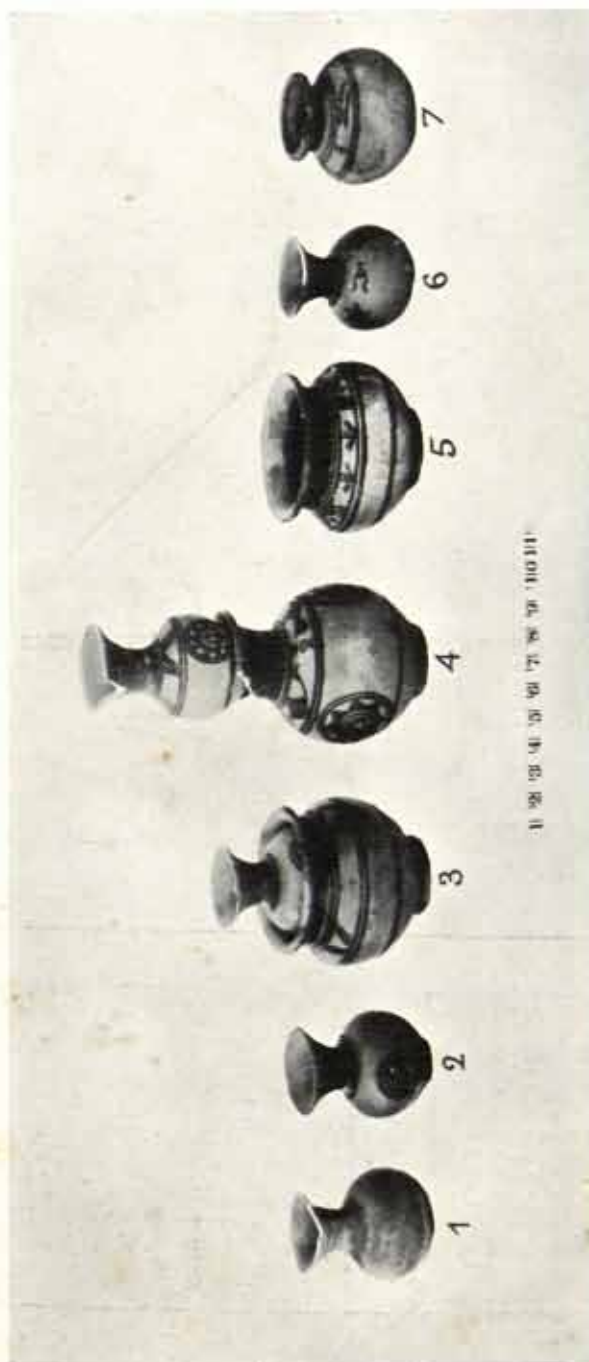
(e) Burial No. H 502, with Funeral Pottery near Head of Skeleton.



(f) Burial No. H 007.



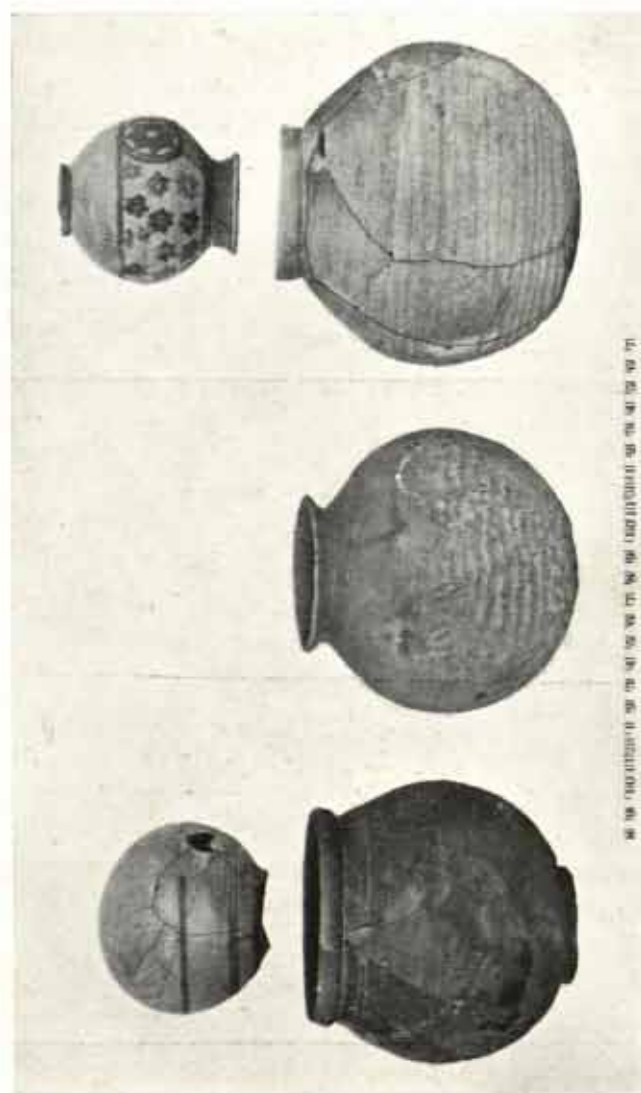
(g) Burial No. H 038 with Skeleton of a Goat or Sheep. Left of Man.



(a) Cemetery: Types of Painted Funeral Pottery of Stratum II.



(b) Burial No. H636.

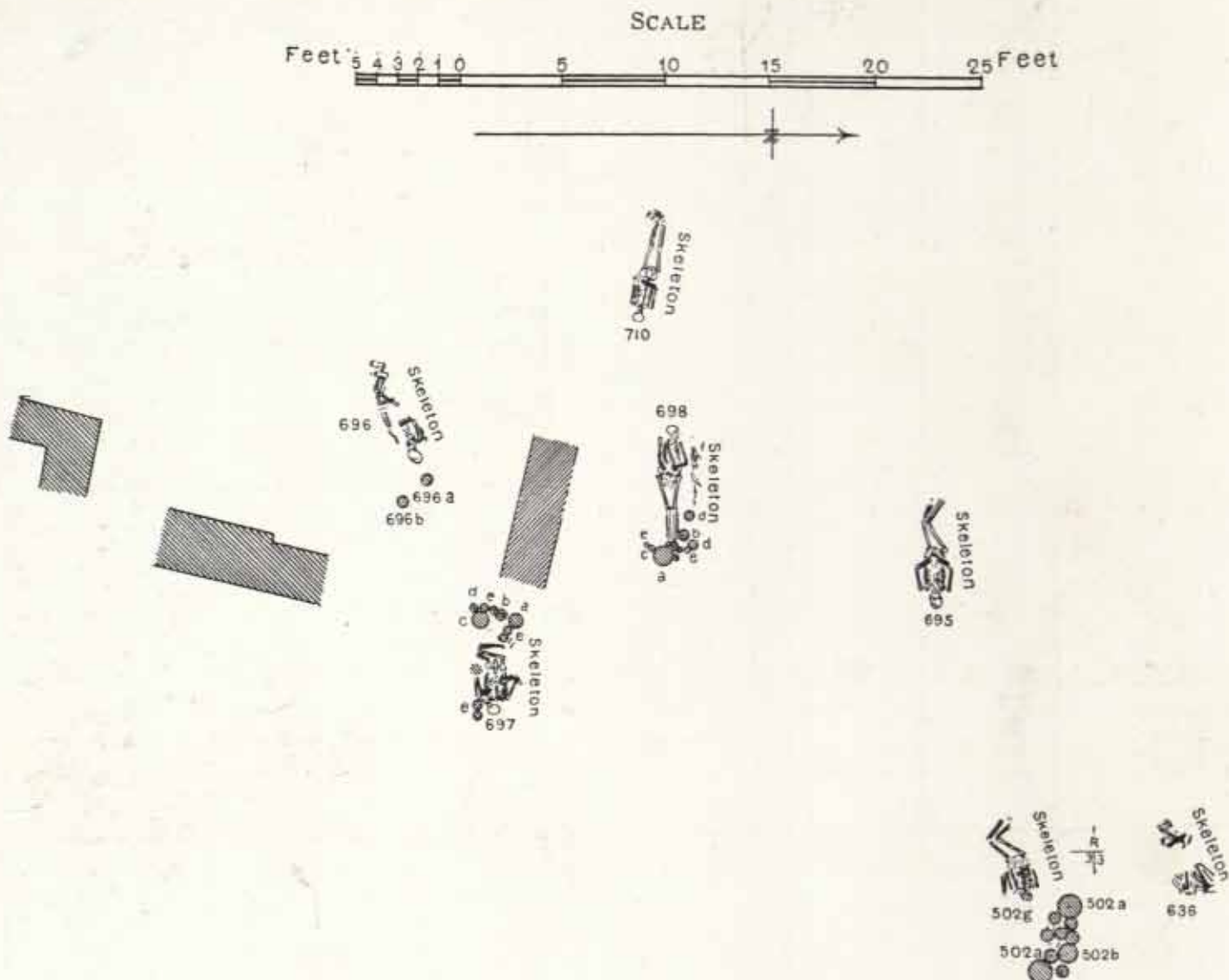


(c) Cemetery: Types of Funeral Pottery which contained Bodies of Babies in Embryonic Position.



(d) Cemetery: Extension of W. Trench; Showing a few Fractional Burials of Stratum II; from S.

HARAPPA SITE H DETAIL PLAN OF CEMETERY EASTERN TRENCH EXCAVATIONS 1930-31



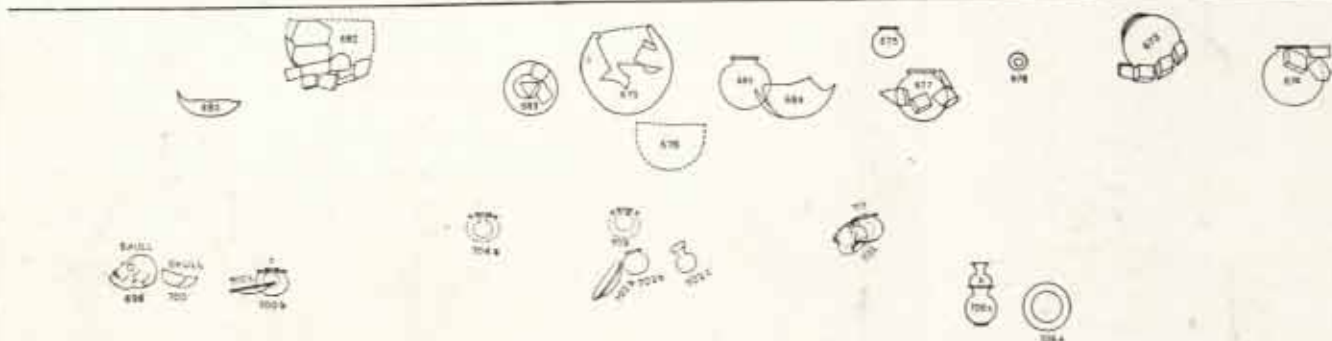
(a)

HARAPPA SITE H NORTHERN EXTENSION OF WESTERN TRENCH PART SECTION ON E F SHOWING TWO STRATA OF BURIALS

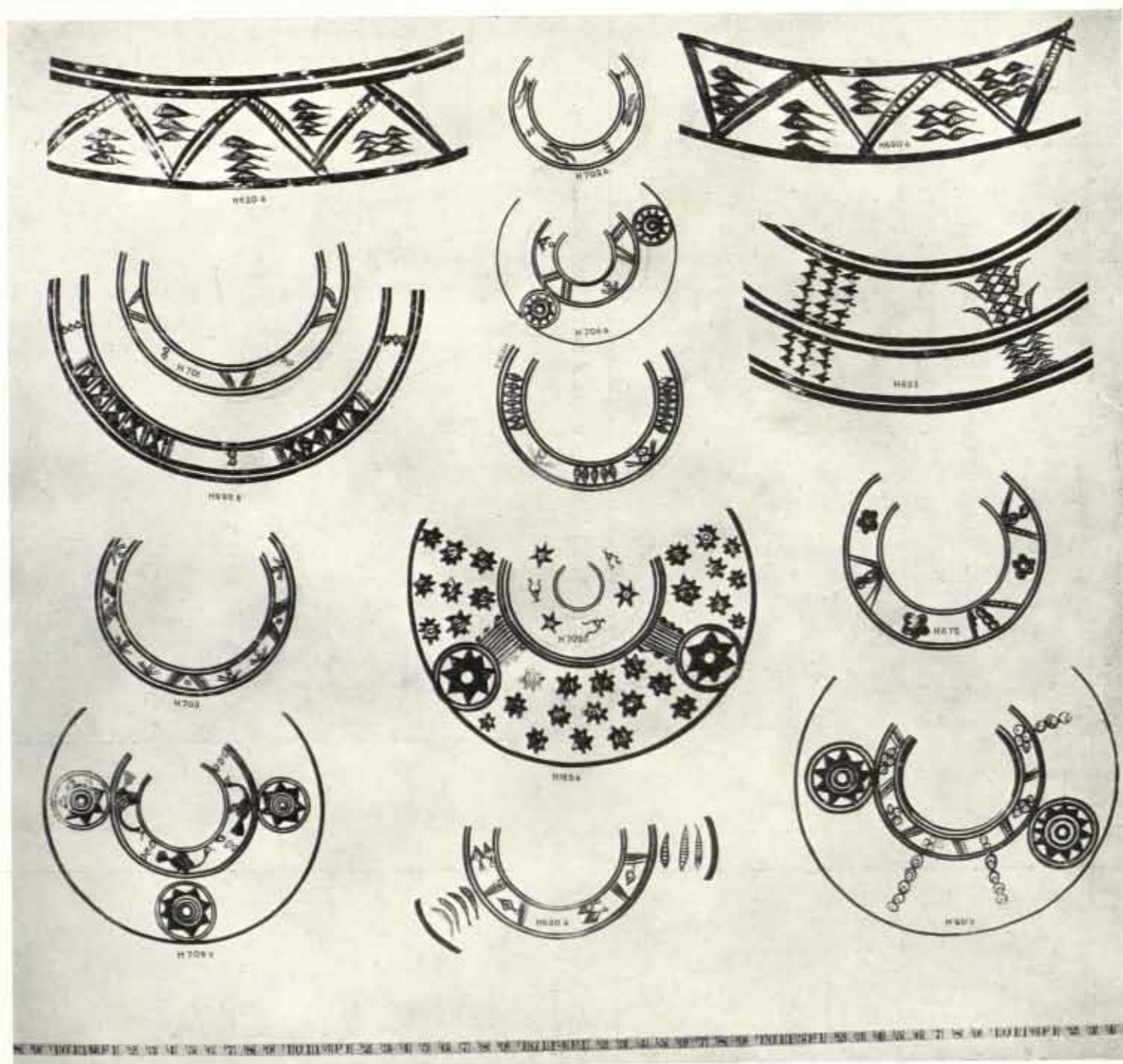
SCALE

Inches 1 2 3 4 5 Feet

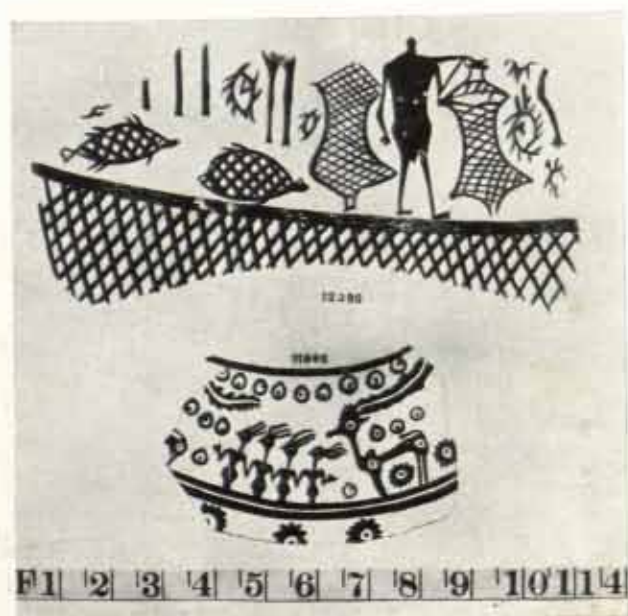
GROUND LEVEL



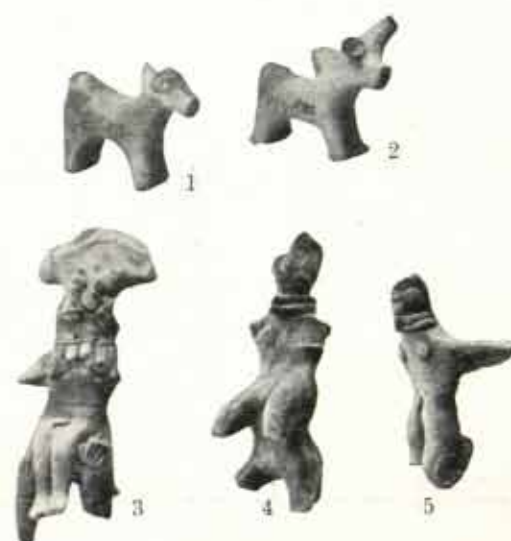
EXCAVATIONS: HARAPPA.



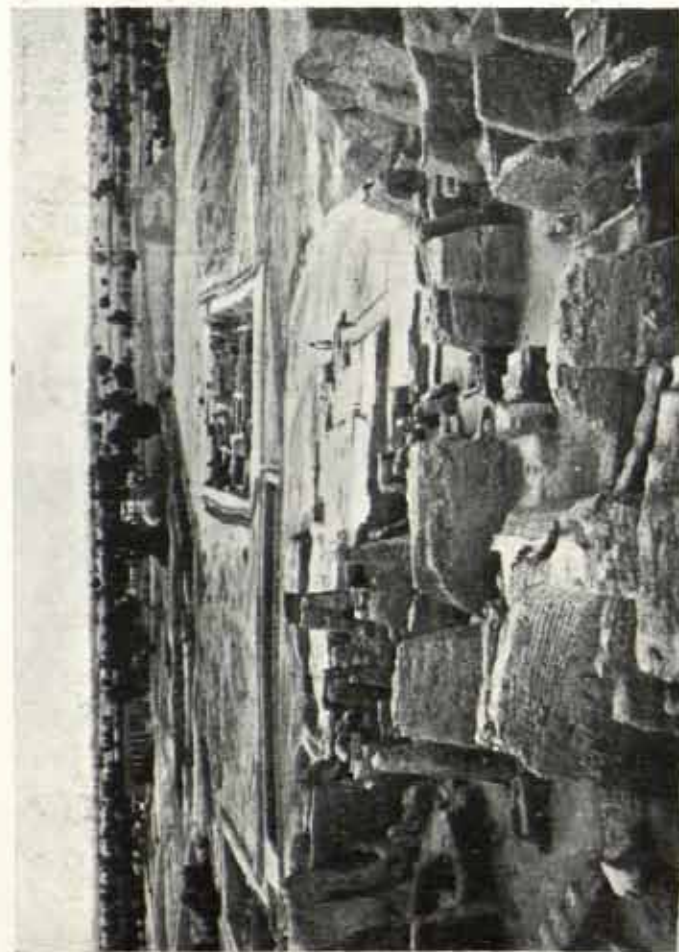
(a) Copies of Painting on Funeral Pottery unearthed during 1930-31.



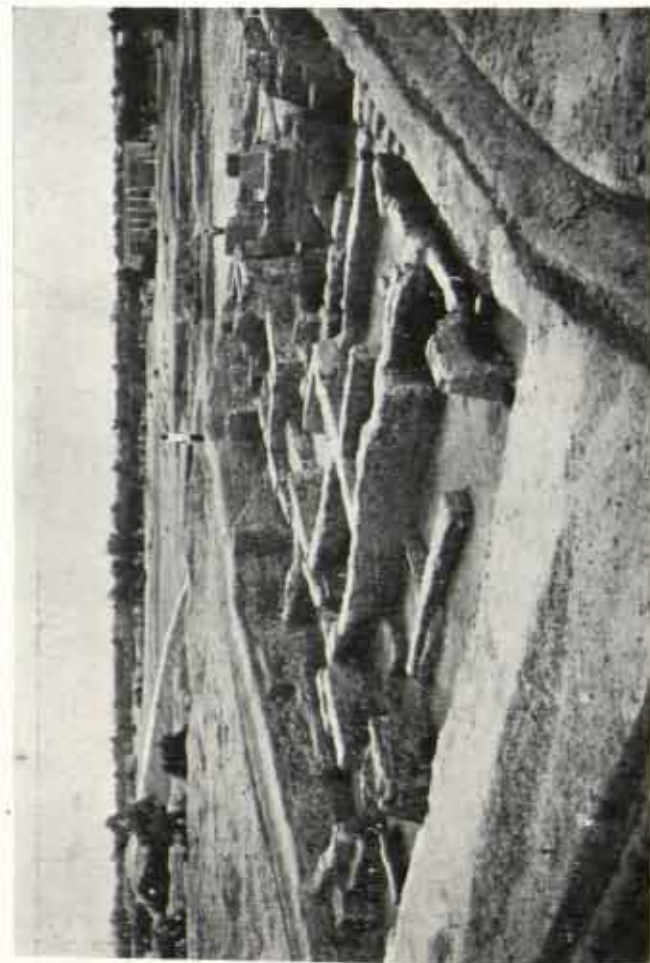
(b) Copies of Painting on two Potsherds (not Funereal).



(c) Burnt Clay Figurines.



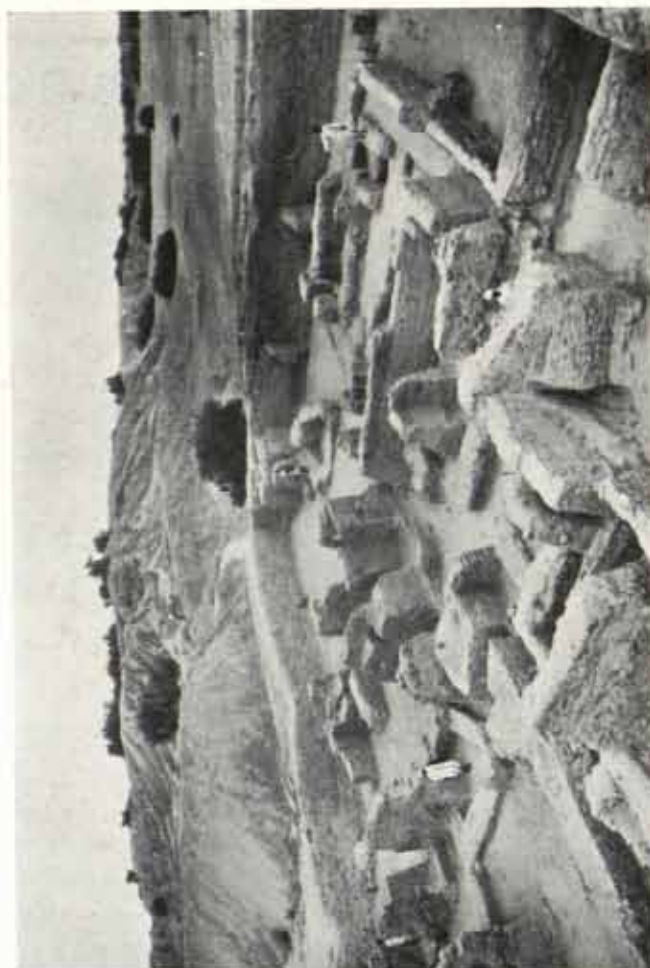
(a) Large Trench Cut during 1930-31 in S. Slope of Mound A—B; showing Mound D and the Cemetery in the Background; from N.



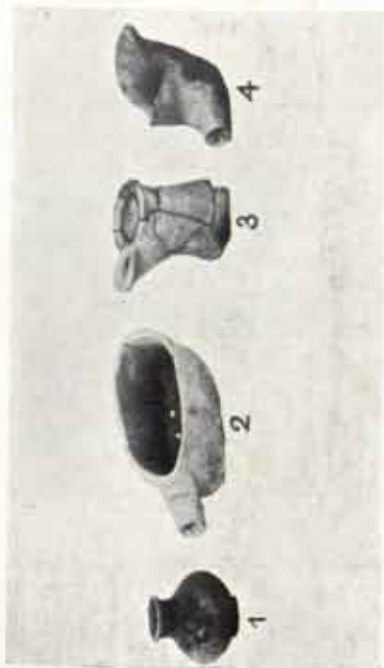
(c) Mound D, Trench I, from N.W.; showing *kaechâ* Structures in the Foreground.



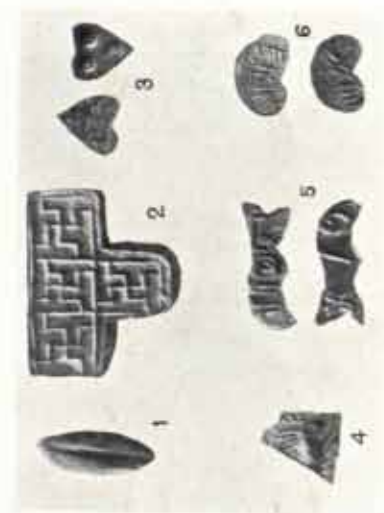
(b) Trench in S. Slope of Mound A—B: Well with double Ring.



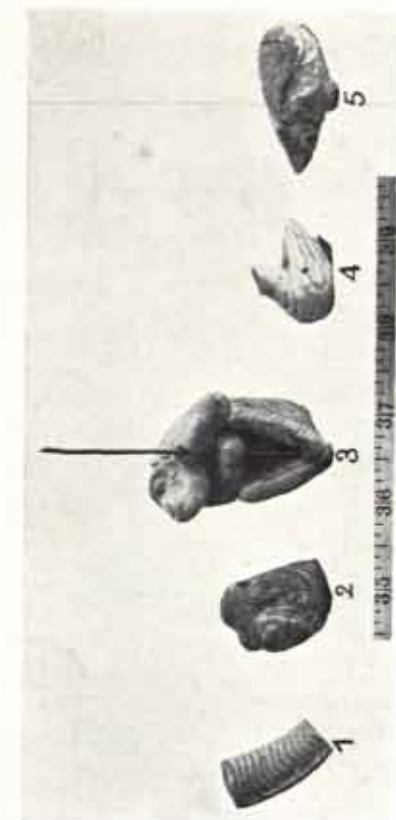
(d) Mound F, Trench IV, from N.W.; showing 'Workmen's Quarters'.



(a) Terracotta Vase and spouted Objects.



(b) Seals and Sealings in Faience and Stone.



(c) Animal Figures in Burnt Clay, Shell, Stone and Faience.



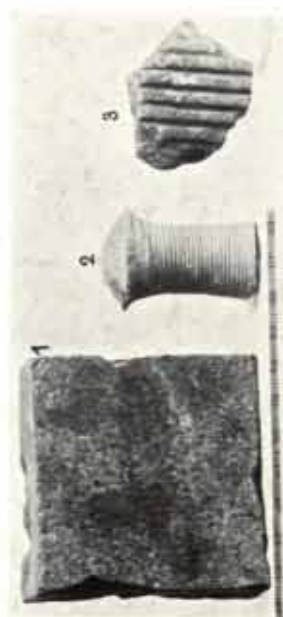
(d) Mound F, Trench VI: showing Wall along its E. Edge; from S.E.



(f) Trench in S. Slope of Mound A-B: Row of Earthen Jars; from E.



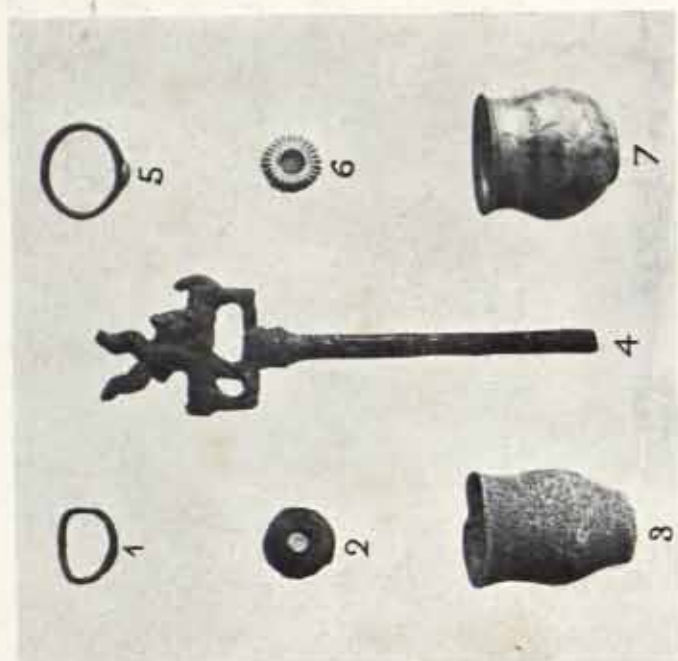
(g) Trench in S. Slope of Mound A-B: Rectangularly divided floor near double-ripped Well; from N.



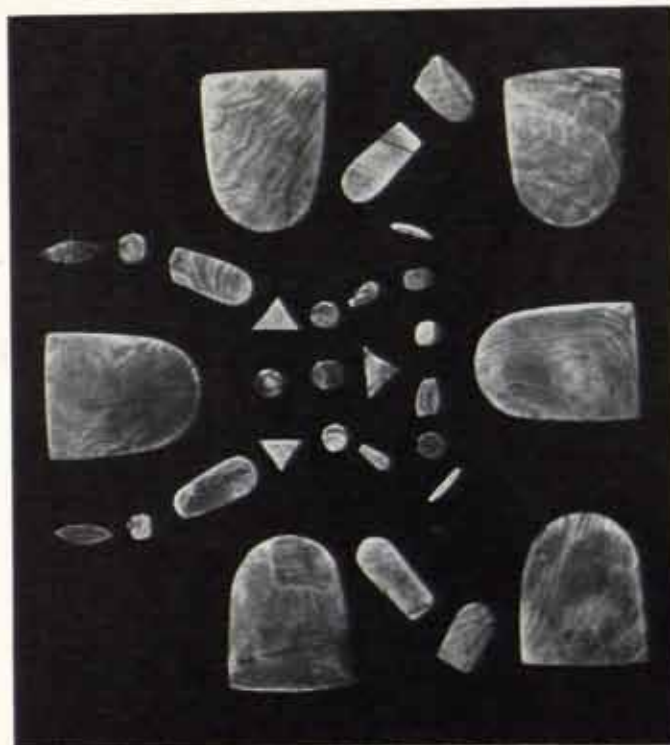
(e) Block of sang-i-abri, Stone tanga and a ribbed Piece.



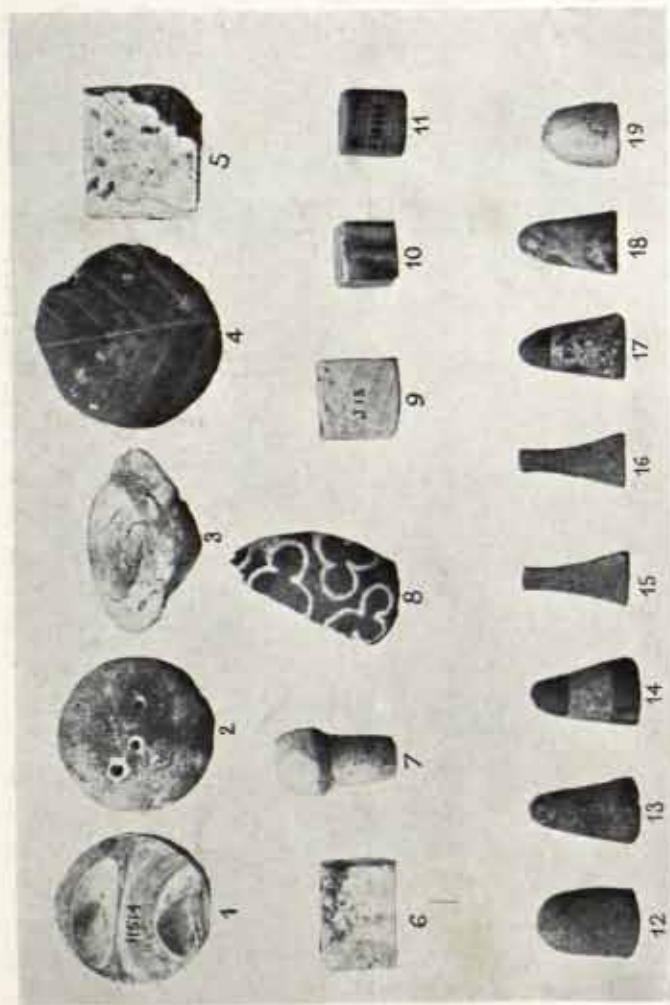
(h) Fragment of 'Frame' with chased Edge, and of Perforated Terracotta Slab.



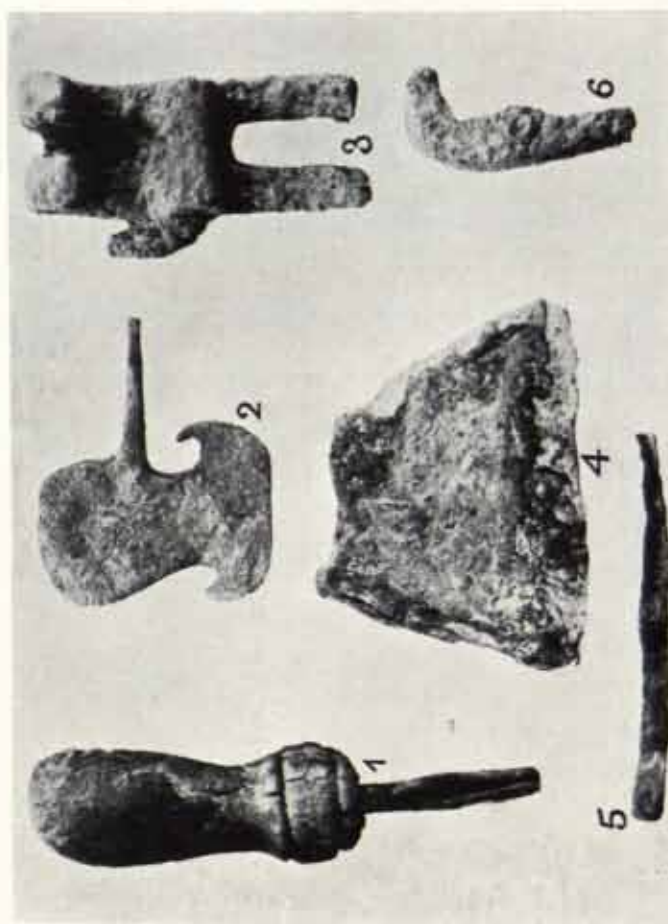
(b) Copper, Gold, Silver and Faience Objects.



(d) Pieces of Shell, probably for Inlay-work, found in Jar No. 12414.



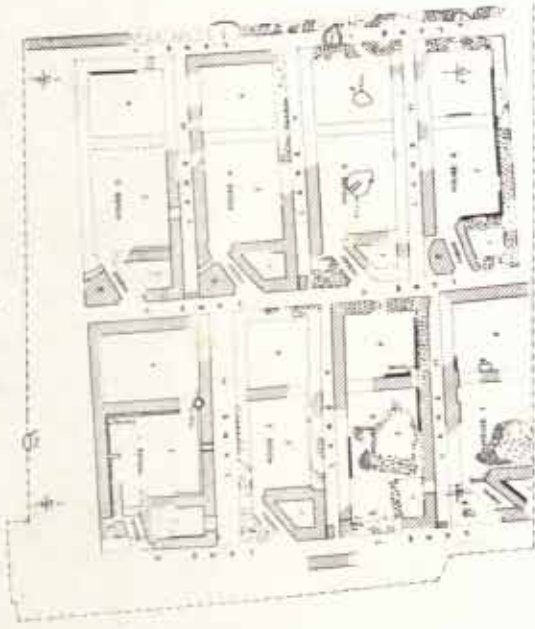
(a) Burnt Clay and Stone Objects.



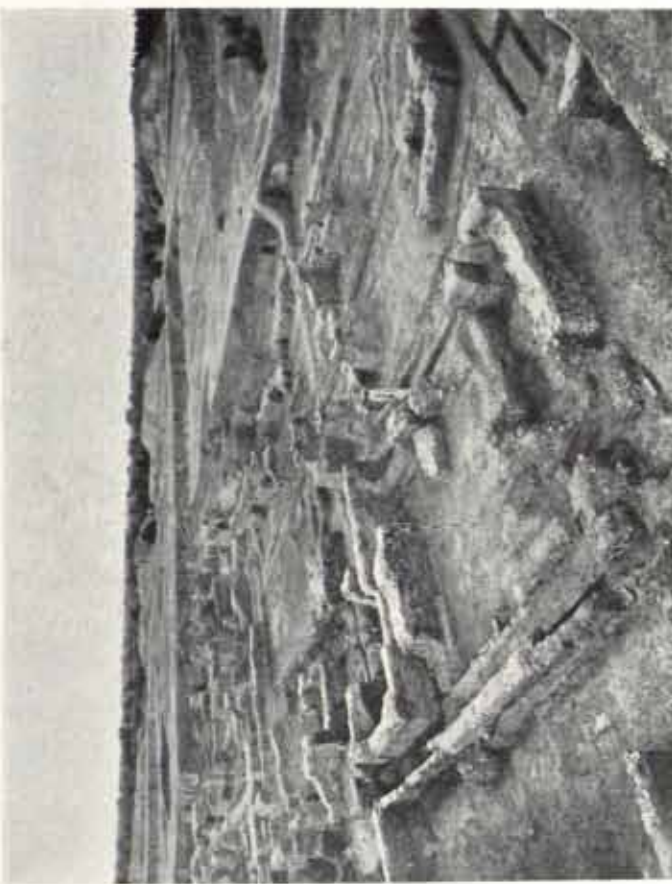
(c) Copper Implements, one with an Alabaster Handle (No. 1).

HARAPPA

MOUND F
WORKMEN'S QUARTERS
IN TRENCH IV



(a) Plan of 'Workmen's Quarters' in Trench IV as excavated in 1931-32.



(b) Mound F, Trench IV: 'Workmen's Quarters', from N.W.



(c) 'Workmen's Quarters': showing solid Corner Structures, Entrances, Rectangular Rooms and narrow Lanes.



(d) Mound F: Broken Jar with Burnt clay 'Cakes'.



(e) Mound F, Trench I: Two Hearths and Two Trough-like Structures, Stratum V.



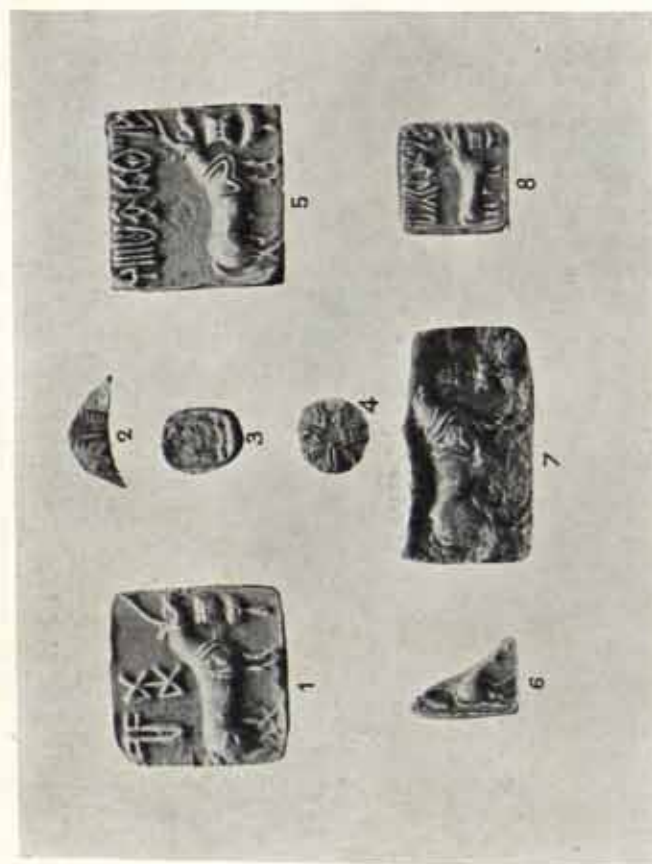
(a) Mound F, Trench IV: Furnace F (d).



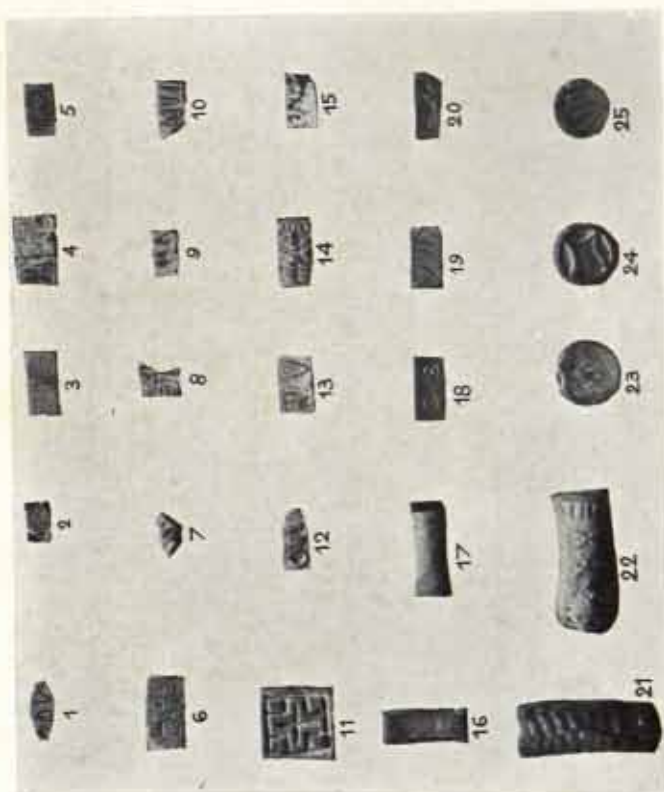
(b) Mound F, Trench IV: Furnace F (j).



(c) Mound F, Trench IV: Furnace F (e).



(d) Seals and Sealings found during 1931-32.



(e) Seals and Sealings found during 1931-32.



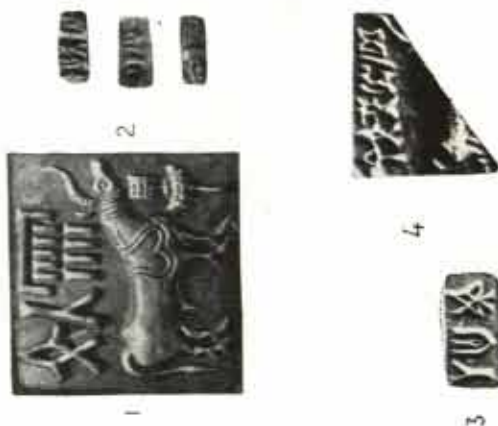
(a) Panoramic View of 'Workmen's Quarters', Mound F, from E., after Excavations of 1932-33; showing further Houses and Furnaces.



(b) Seals, Sealings and Beads; and a Horn-shaped stone: found during 1932-33.



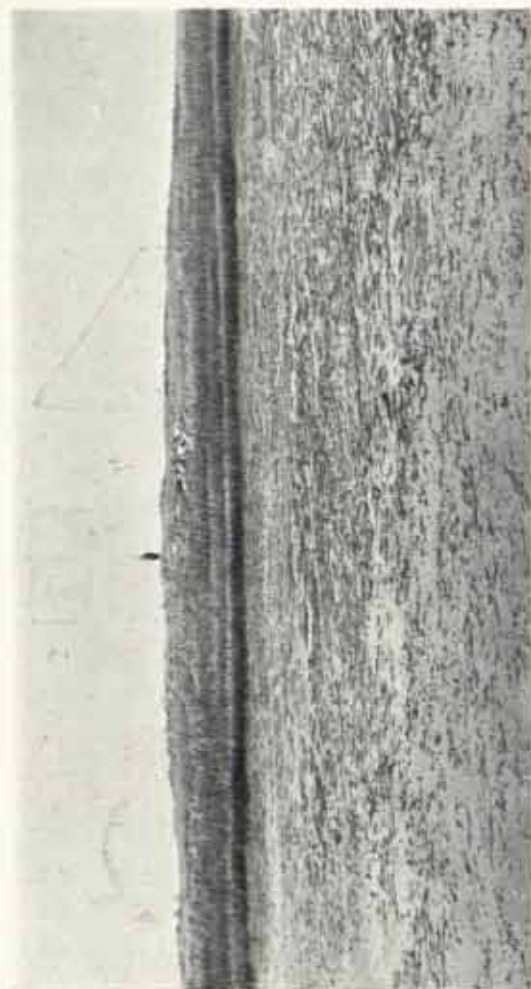
(c) Copper Mirror, unearthed during 1933-34.



(d) Seals and Sealings found during 1933-1934.



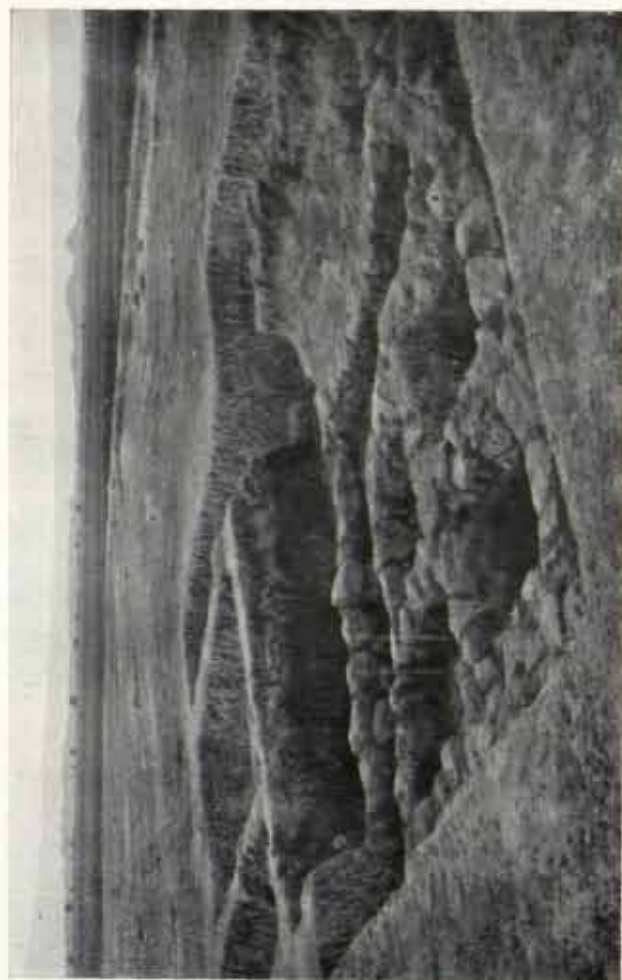
(a) Trial Trench at Lohunjo-daro, Larkana District; from N.



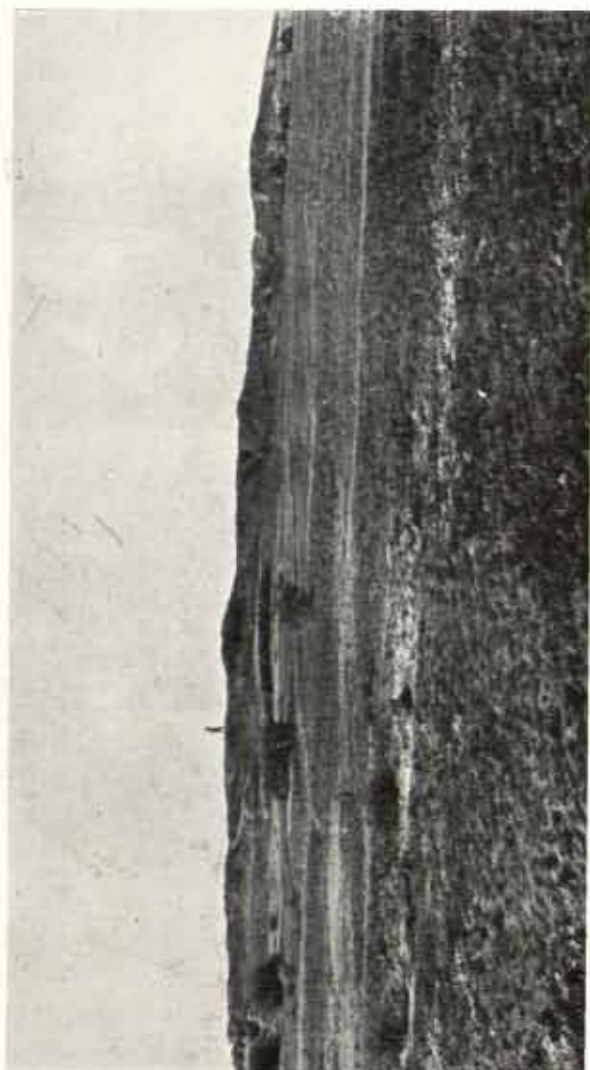
(b) The Pir Mashūk Mound in Lake Manchhar, near Shāh Hasan, Larkana District; from the E.



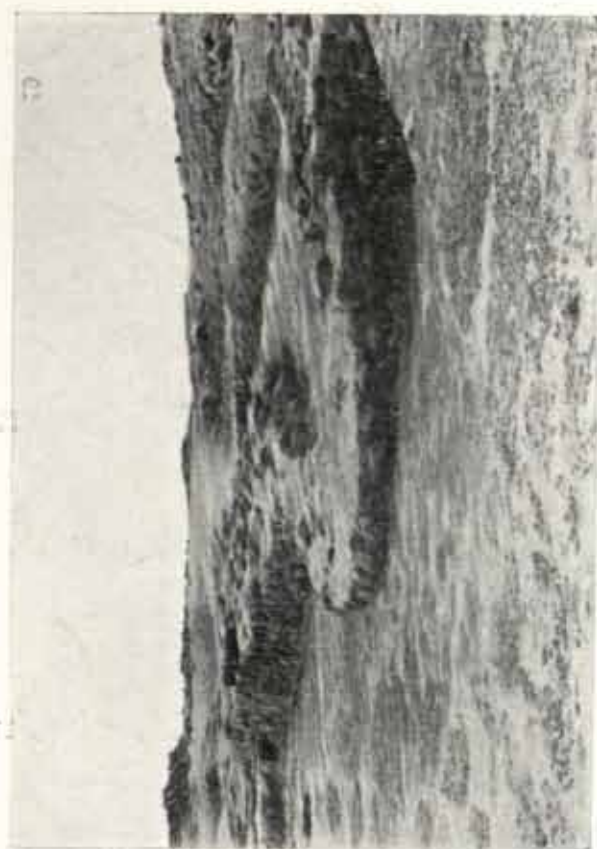
(c) Trial Trench in the Mound near Pir Ghāzi Shāh, Larkana District; from W.



(d) Trial Excavations at Lohri, Larkana District; from S. E.



(a) The Mounds at Ali Murād, Larkana District; from S.



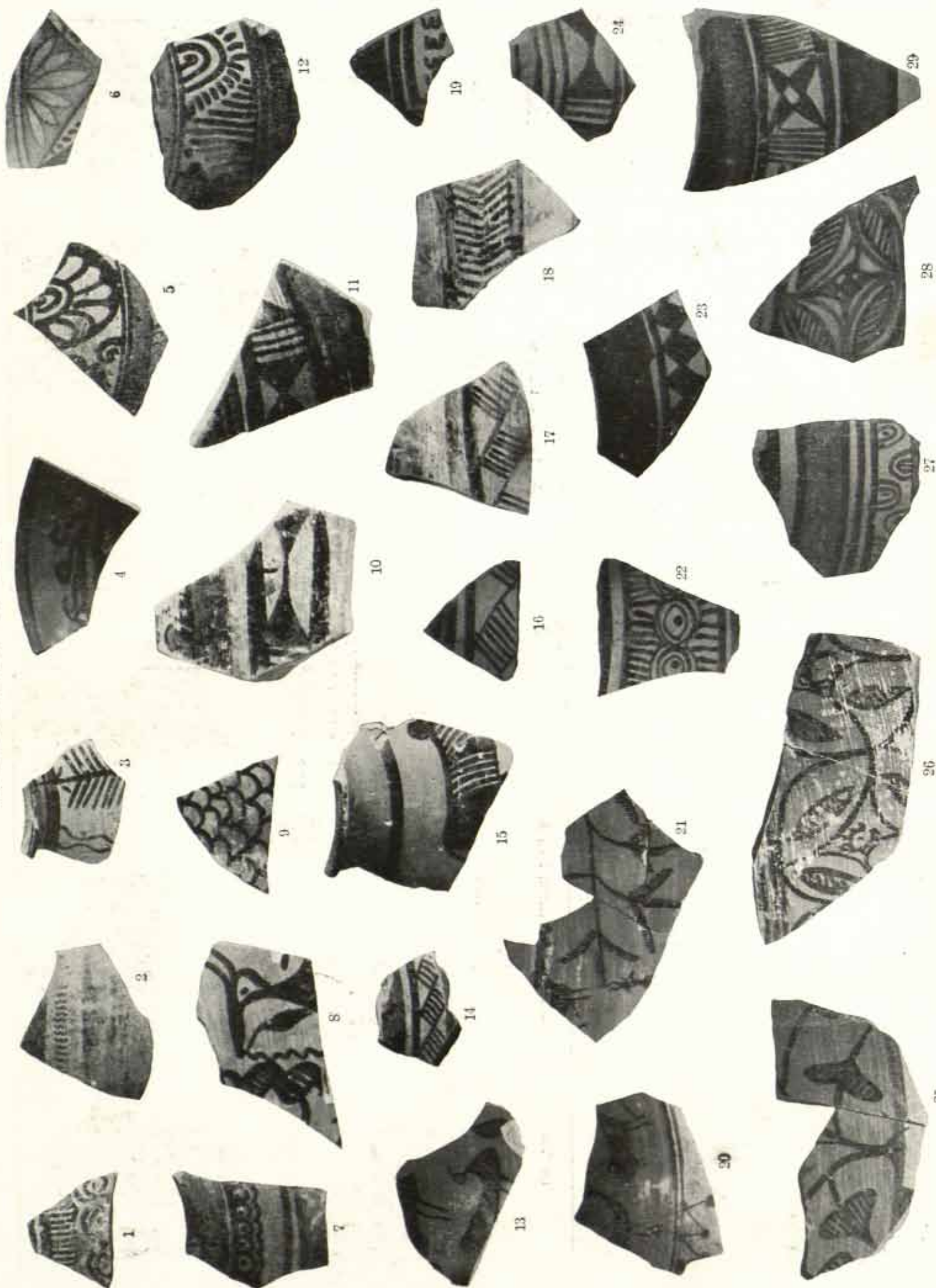
(b) Portion of the Rampart Wall excavated at Ali Murād; from S.



(c) Excavations on Kohrisa-buthi, Karachi District; from W.

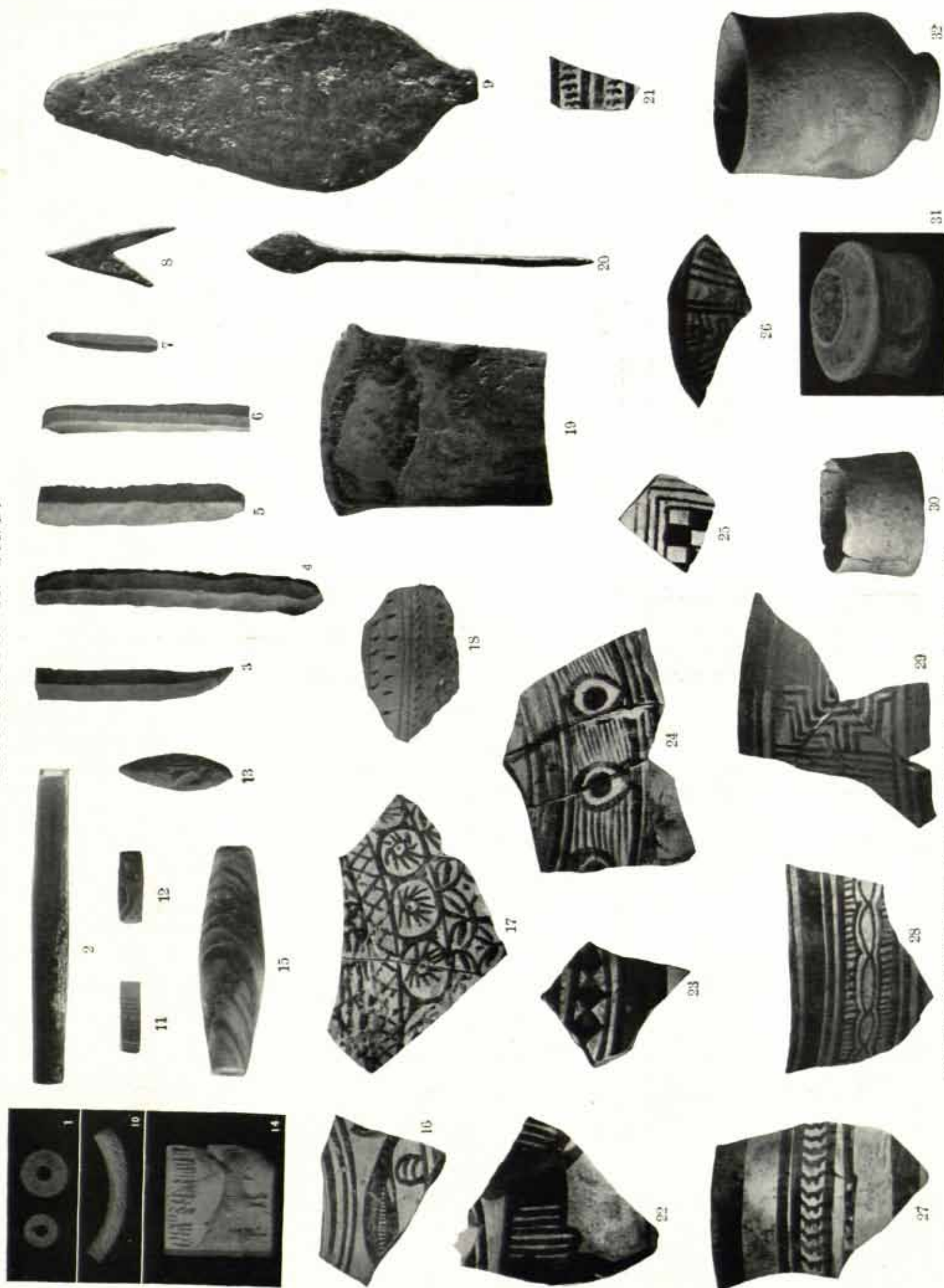


(d) Trial Trench in Mound at Pāndi Wāhī, Larkana District; from S.



Specimens of Painted Potsherds collected on Surface of, and during Trial Excavations at Prehistoric Sites in Sind.

EXPLORATION IN SIND.



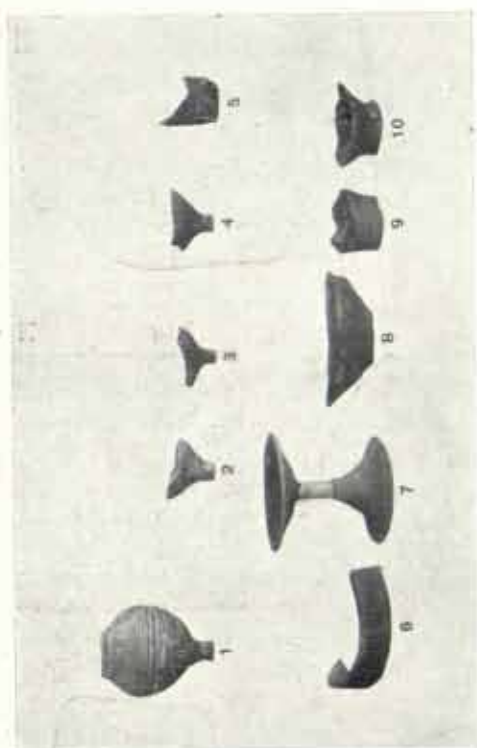
Specimens of Stone Implements, Copper Utensils, Beads, an Inscribed Seal, and Fragments of Ceramic Ware from Chalcolithic Sites in Sind.



(a) Chak Purbane Siyal, Montgomery: Finds of the Chalcolithic Period, including Terra-cotta Figures.



(b) Chak Purbane Siyal: Chert Fragments, Alabaster, Beads, &c.



(c) Chak Purbane Siyal: Specimens of typical 'Harappa' Pottery, including 'Dish-on-Stand.'



(d) Nāgārjunikopā, Guntur District: Two Slabs of the Buddha's Footprints, one incised, the other with Relievo-work.



(e) Nāgārjunikopā: A Brick of the Buddhist Period with two *aksharas*, probably in Brāhmī Script; perhaps a Mason's Mark.

EXPLORATION: NĀGARJUNIKONḌA.



(a) Carved Stone Pillar found near Kundeligutta Hillock.



(b) West Face of a Railing Pillar with Relievoes.



(c) Inscribed Pillar with Basso Relievoes found near Stūpa 9.



(d) Relief Slab, fragmentary: A Bodhi-tree Shrine with a Buddha in *abhaya-mudrā*.



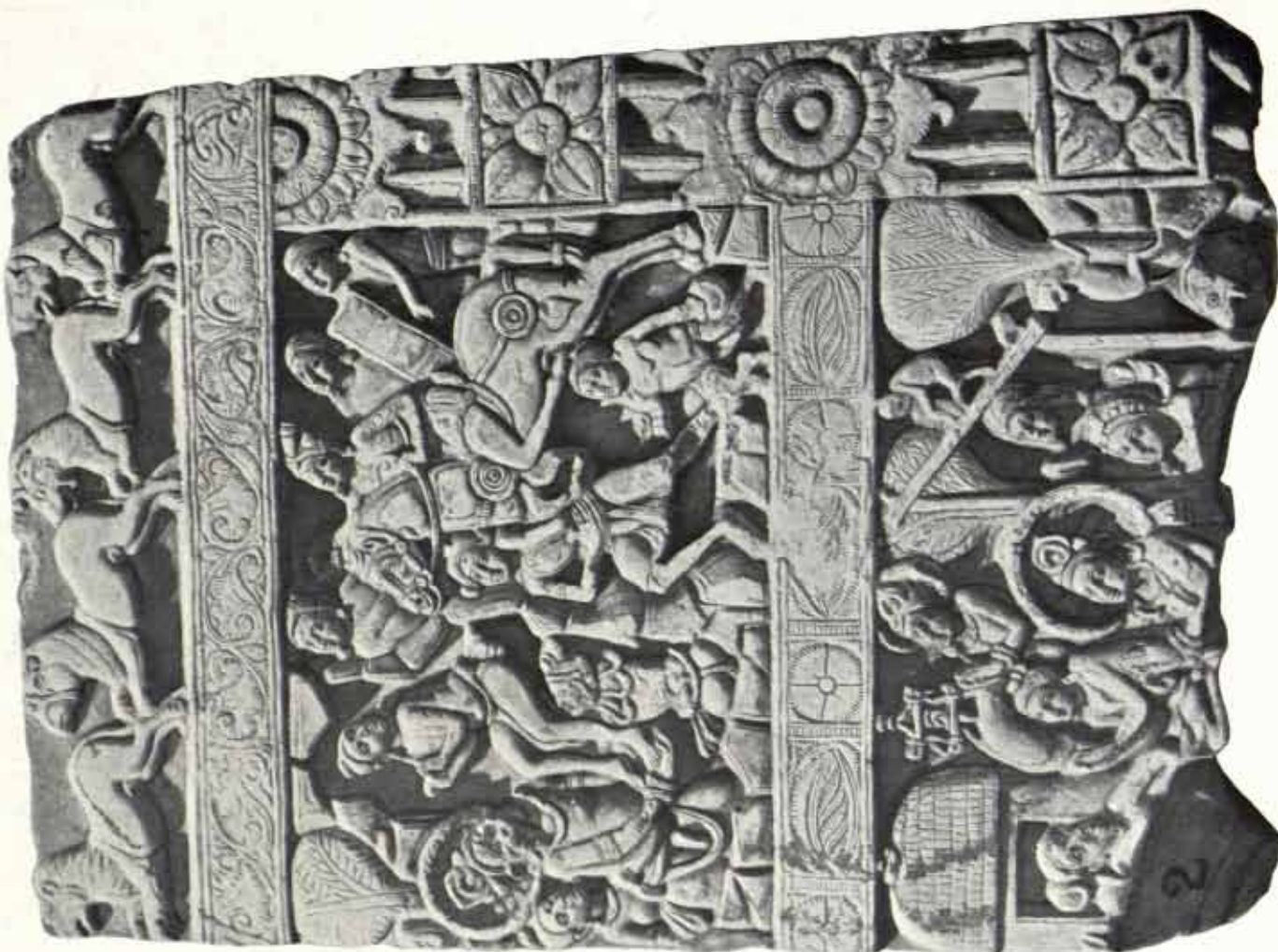
(e) Fragment of Ornamental Carving, probably from a Coping-stone of a Railing.

EXPLORATION: NĀGĀRJUNIKONḌA.



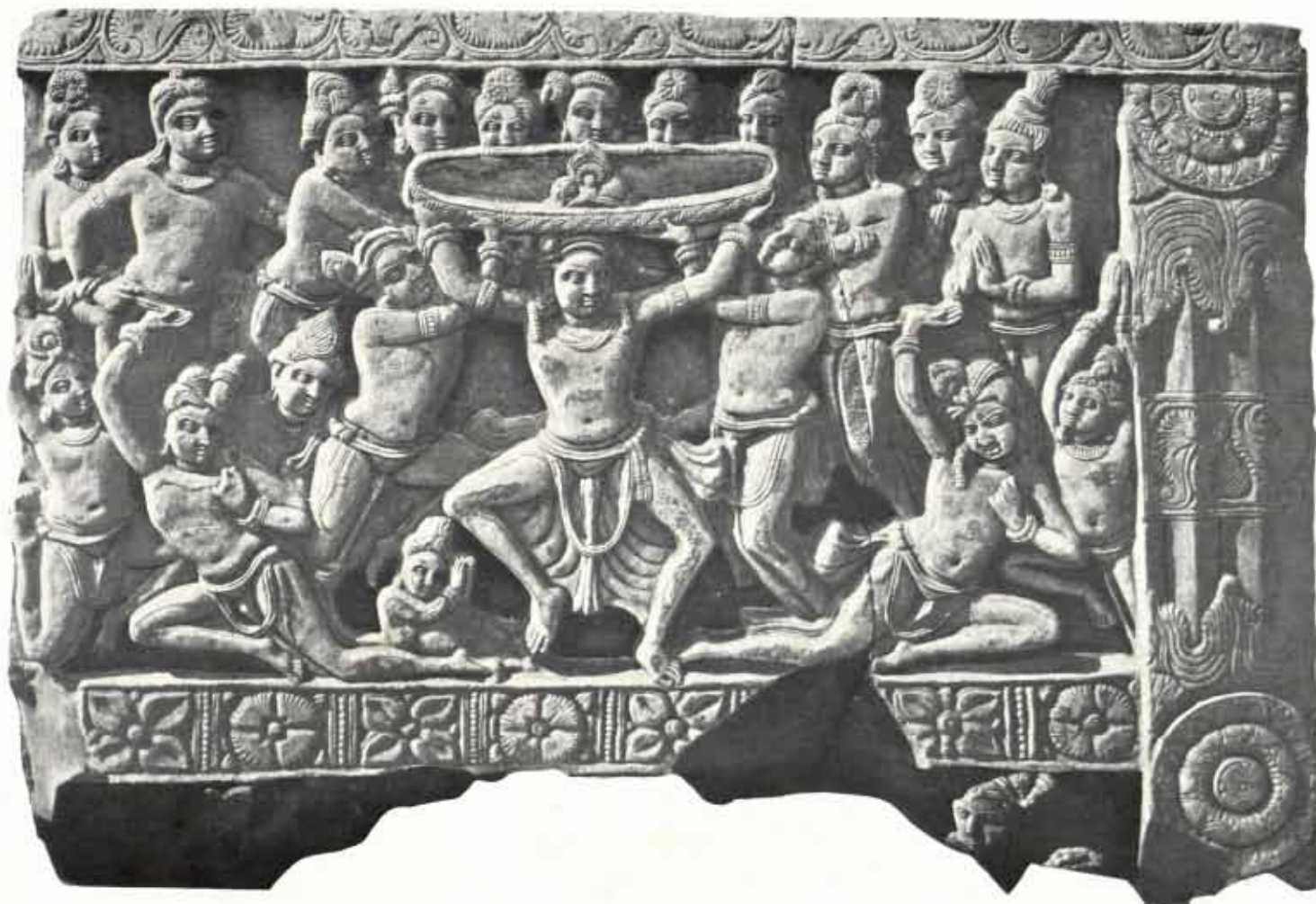
(a) Unidentified Relievoes: Ascetic in Rocky Country visited by Townsfolk; and a Prince receiving Advice from a Religious Man.

B.525



(b) Unidentified Relievoes: *Nāgarāja*, and Horseman jumping over Precipice; and Reverence being paid to a Hornet.

EXPLORATION: NĀGĀRJUNIKOṆḌA.



(a) Relief: The Gods carry up to Heaven the Head-dress of the Enlightened One.



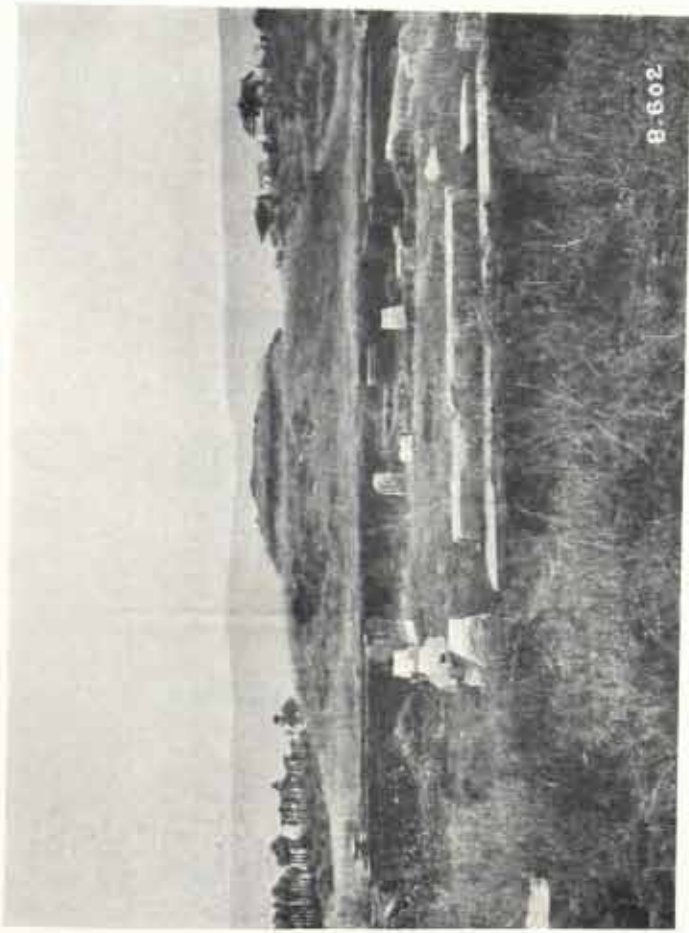
(b) Unidentified Relief: The Buddha preaching to a Prince in Rocky Country; and a Prince surrounded by Ladies in his Palace.



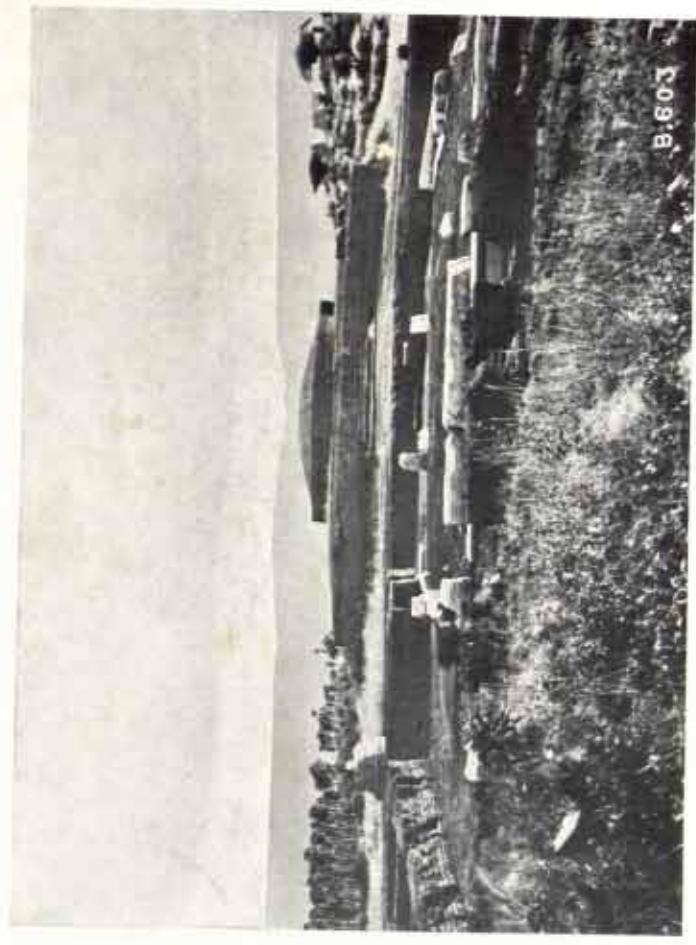
(a) Unidentified Relievo: Monk enters Royal Palace and shows the Prince and his Suite a Constellation of Moon, Stars and a Comet.



(b) Unidentified Relievo: Three Kings, who came from a Fort, worship the Enlightened One in Rocky Country.



(a) Stūpa No. 4: before Clearance and Repairs.



(b) Stūpa No. 4: after Clearance and Restoration.



(c) Chaitiya No. 4: before Repairs.



(d) Chaitiya No. 4: Restored, and with a Stopping-stone found nearby.



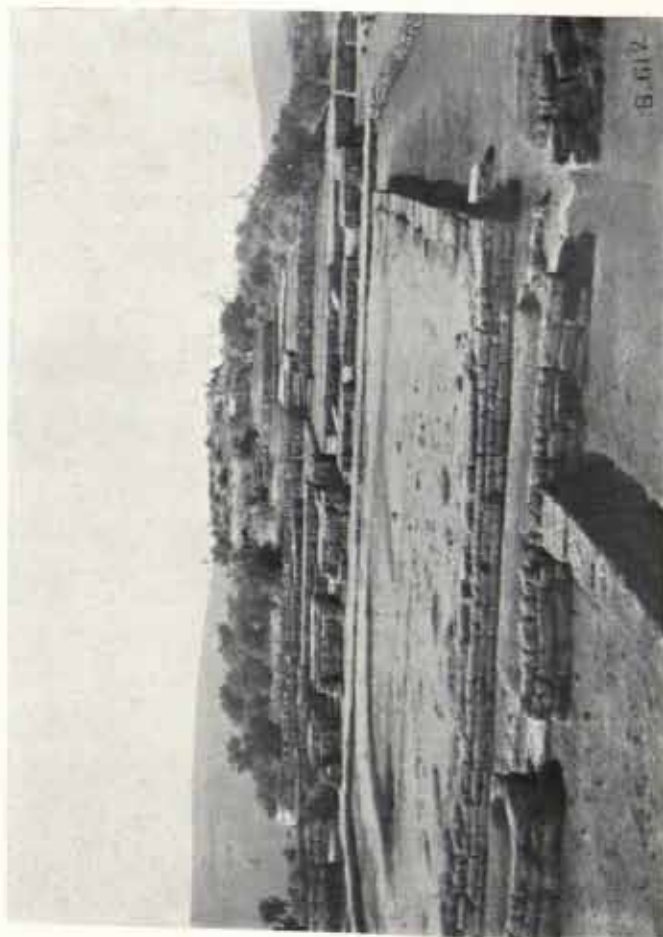
B.604

(a) Unidentified Relief Fragment: A Four-in-hand, preceded by armed Men.



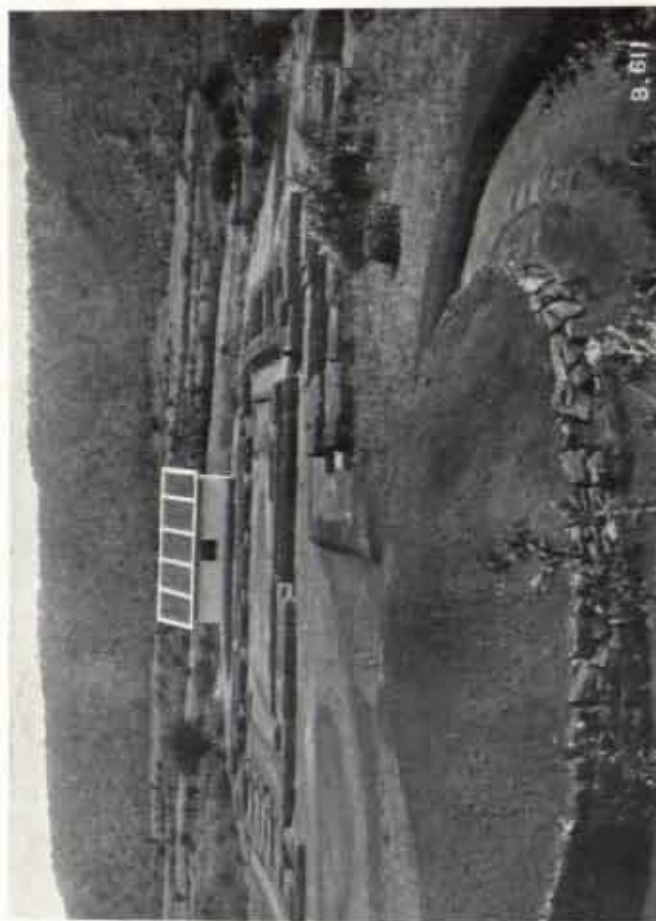
B.615

(b) Pottery found during Excavations; showing Deposit of Animal Bones extracted from *stūpas*.



B.612

(c) Stone Stūpa near Chaitya No. 2: showing State of Ruins after Restoration.



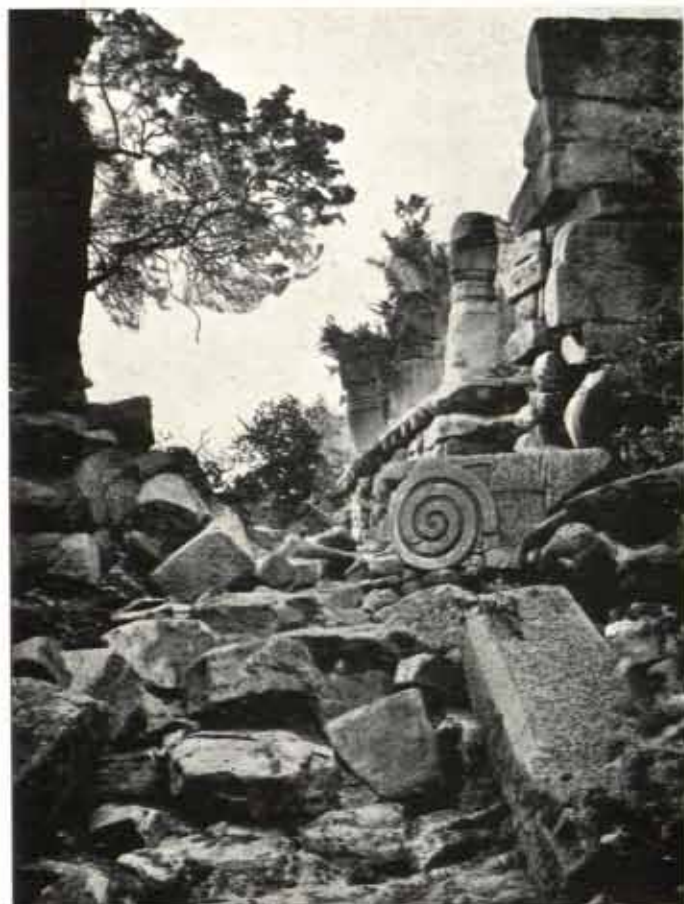
B.611

(d) Stone Stūpa near Chaitya No. 2: another View of restored Ruins, with Monastic Cells in middle Distance.

EXPLORATION: NĀGĀRJUNIKOṆḌA.



(a) Relievo Panel: Garlanded Bodhi-tree flanked by two Princely Personages with Reliquaries (?) in their Hands.



(b) Fragment of a Cross-beam of a *torana*, showing Volute Ornament of the Sanchi Type.



(c) Fragmentary Relievo Slab: Divine Musicians and Worshippers Floating in the Air.



(d) Fragment of Relievo Panel: Probably the *mahābhiniṣkramaya* of Prince Siddhārtha.



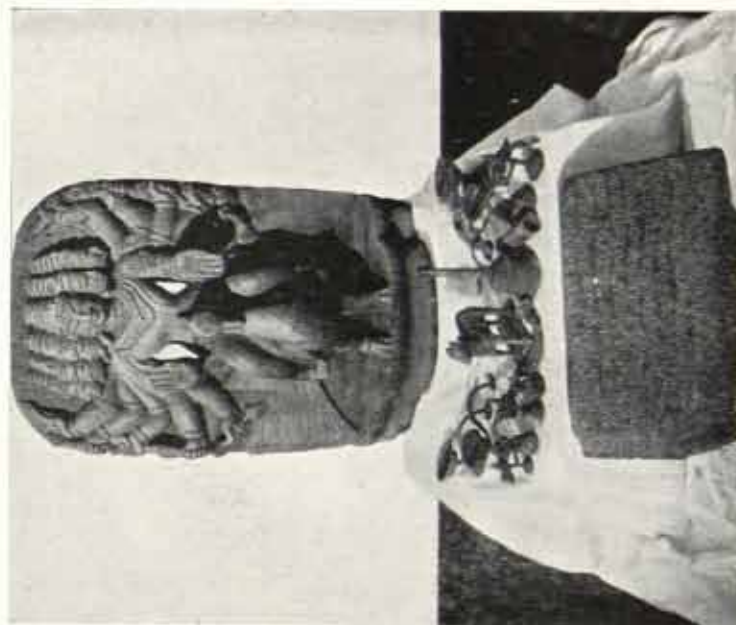
(a) Chettipalayam, Coimbatore District: Megalithic Monument; Showing Roof-Slab of Stone Chamber.



(b) Pithapuram, East Godavari District: Portion of large Stupa seen on Surface of Buddhist Mound; Showing radiating Arrangement of Bricks.



(c) Chettipalayam: Megalithic Monument; Showing Earthenware and Copper Vessels, one with an Animal for Lid-handle, found inside Megalithic Chamber.



(e) Rajahmundry, East Godavari District: Inscription on Stone; Six-headed Divinity in Stone; and Metal objects of Religious Purpose found in Old Judge's Compound.



(d) Buddhapadu, Nellore District: Surface Finds on Buddhist Mound.

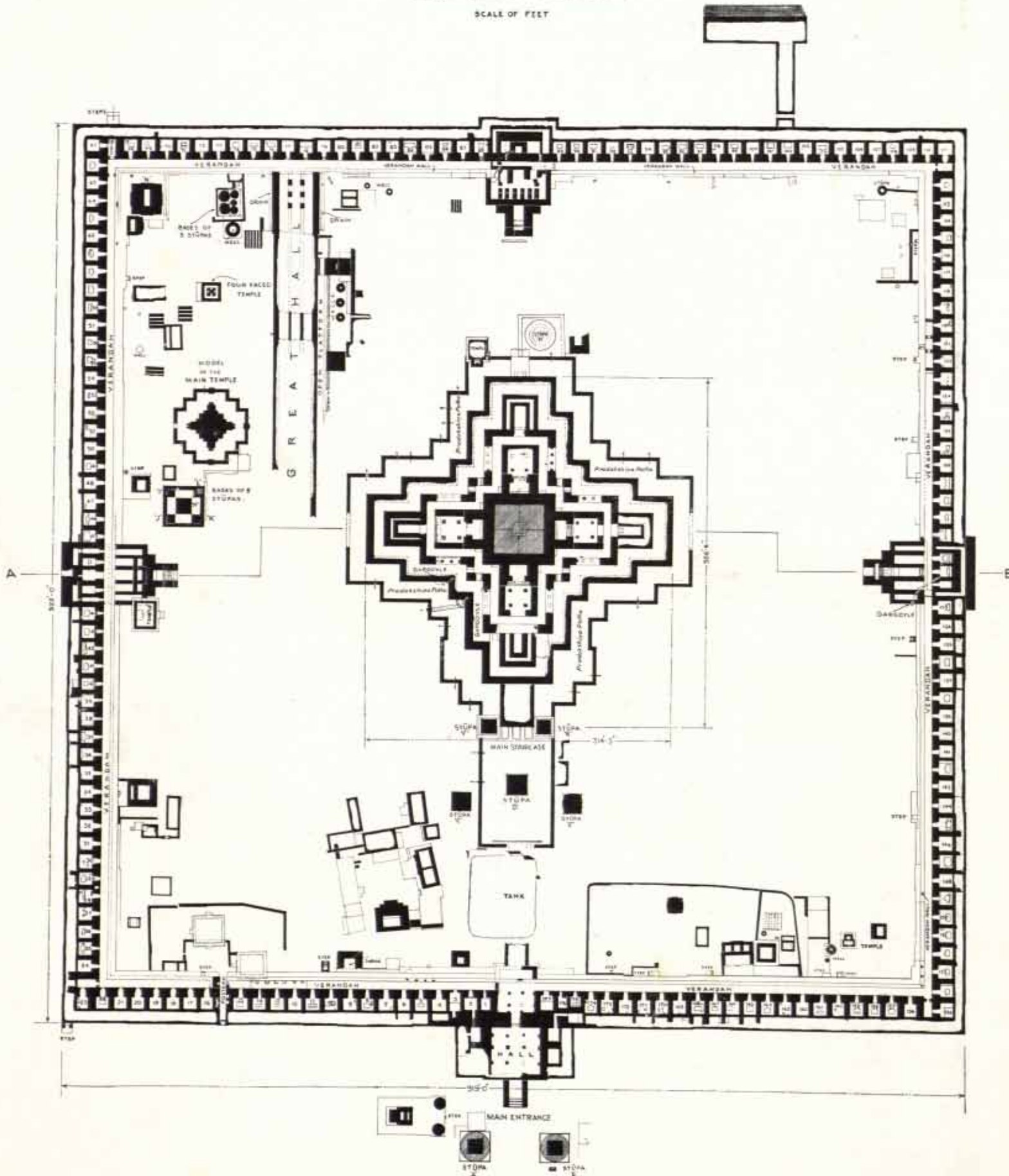
EXCAVATIONS AT PAHARPUR

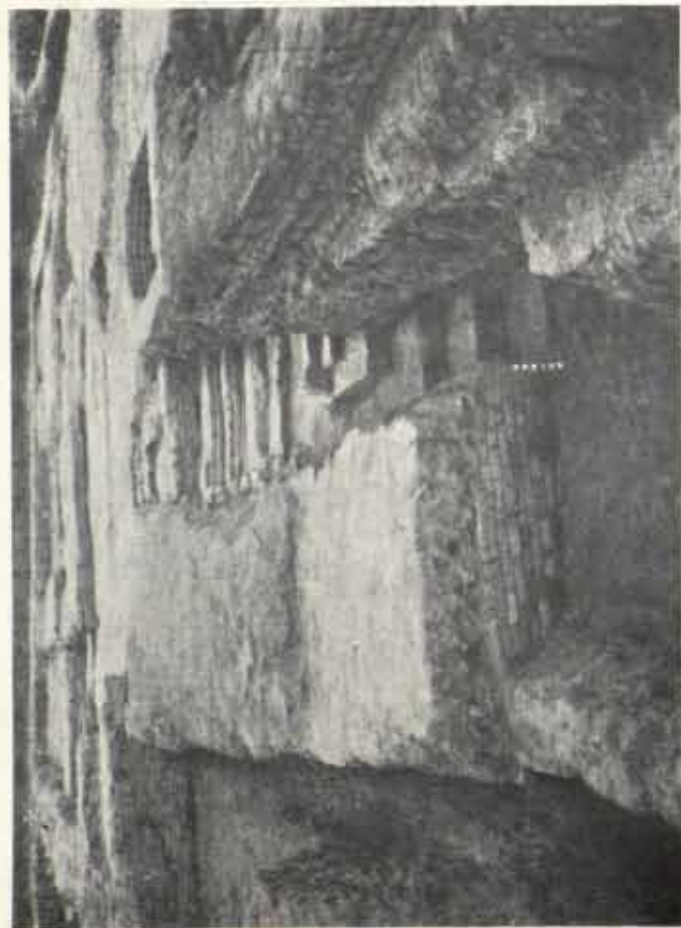
DISTRICT RAJSHAHI

GENERAL PLAN

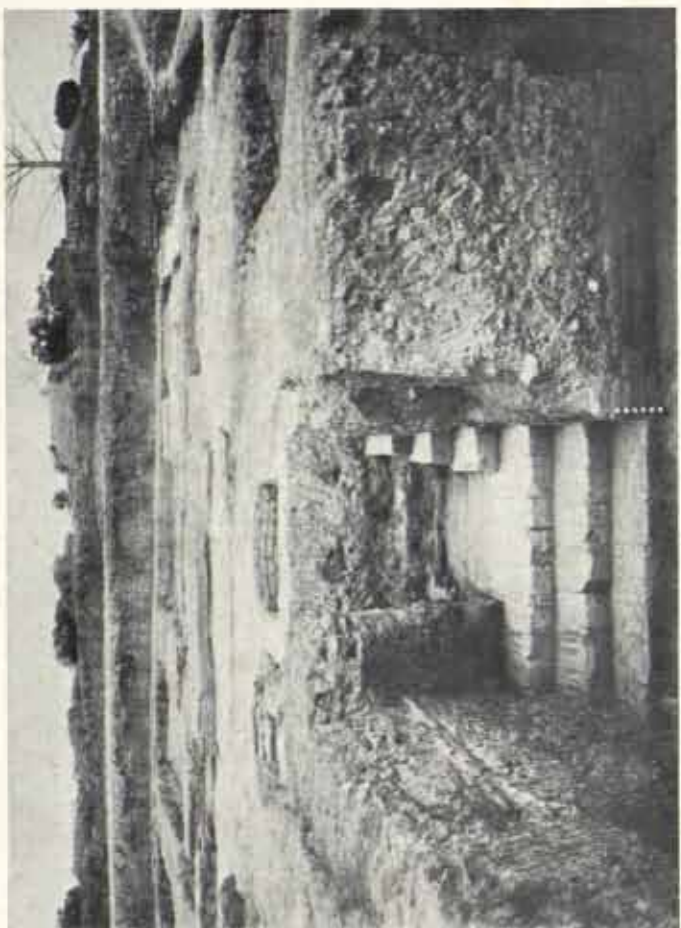
SHOWING EXCAVATIONS OF 1923-24 & 1925-26 TO 1931-32

SCALE OF FEET





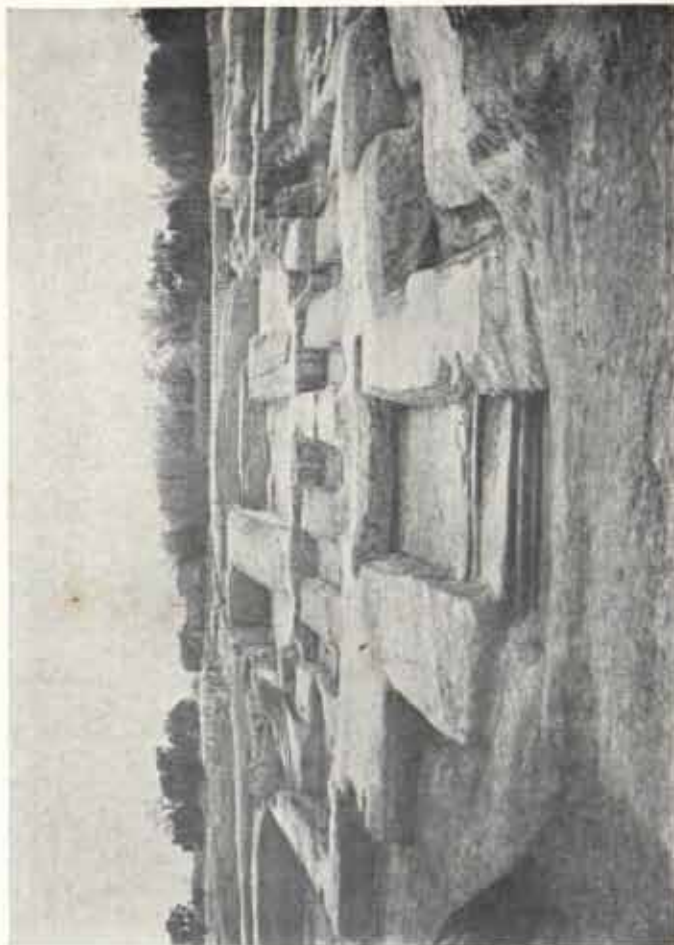
(a) Monastery, East Wing: Flight of Steps, showing various Strata of Construction; Northern Half.



(b) The same as (a), showing two Periods of Construction in the Southern Half.



(c) Monastery, S.E. Corner Cell: showing Offsets in deepest Layer.



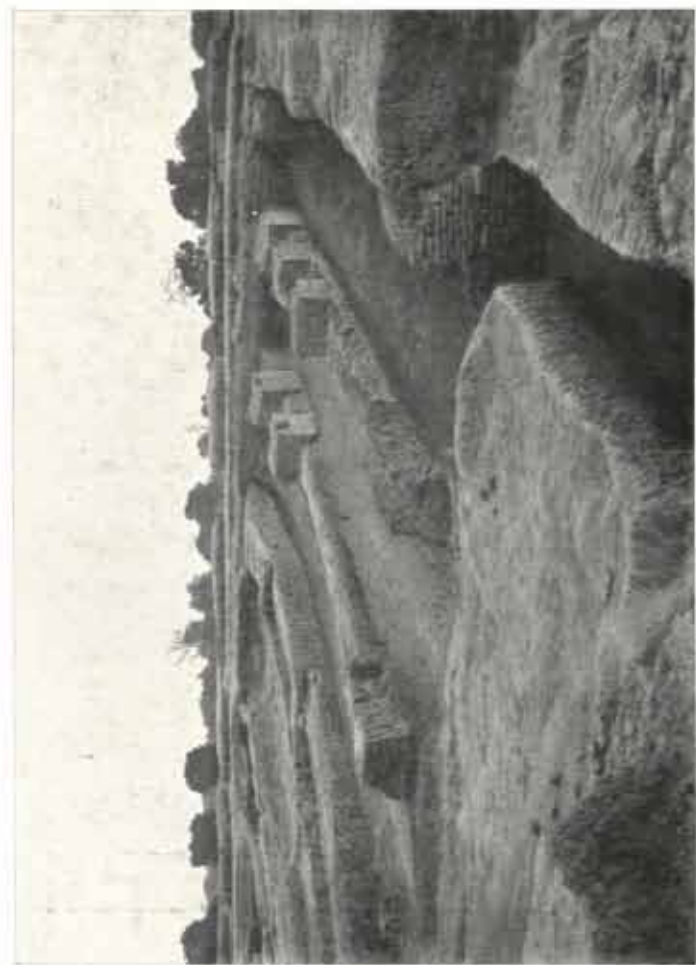
(d) Monastery, South Wing: Flight of Steps and 'Shrine' in the Middle of the Wing.



(a) Monastic Quadrangle: Panoramic View of S. E. Corner: showing 'Model of Main Temple,' Well, Stūpas, 'Assembly Hall' etc.

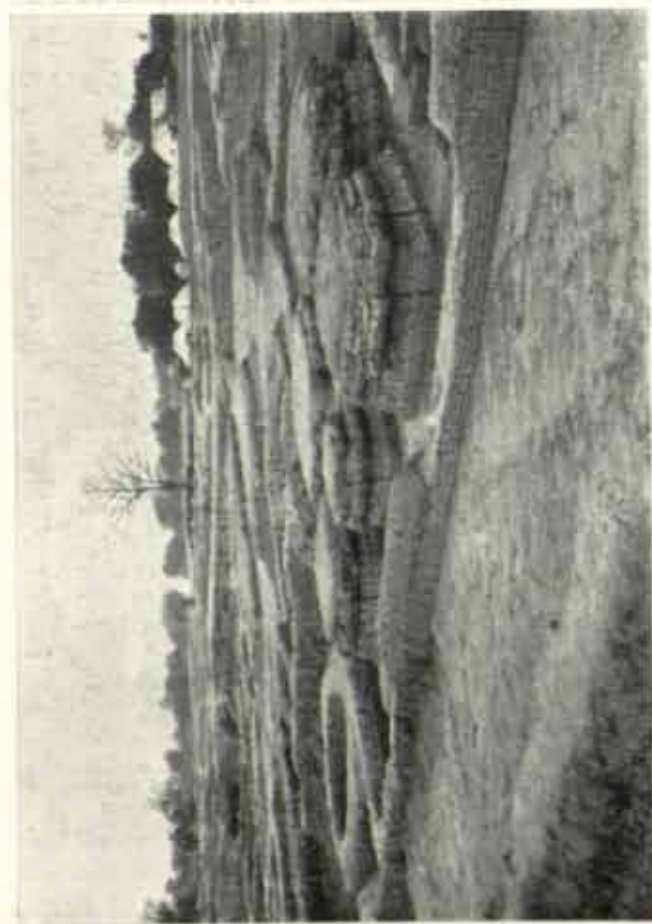


(b) Monastic Quadrangle, S. E. Corner: The 'Model of the Main Temple'.

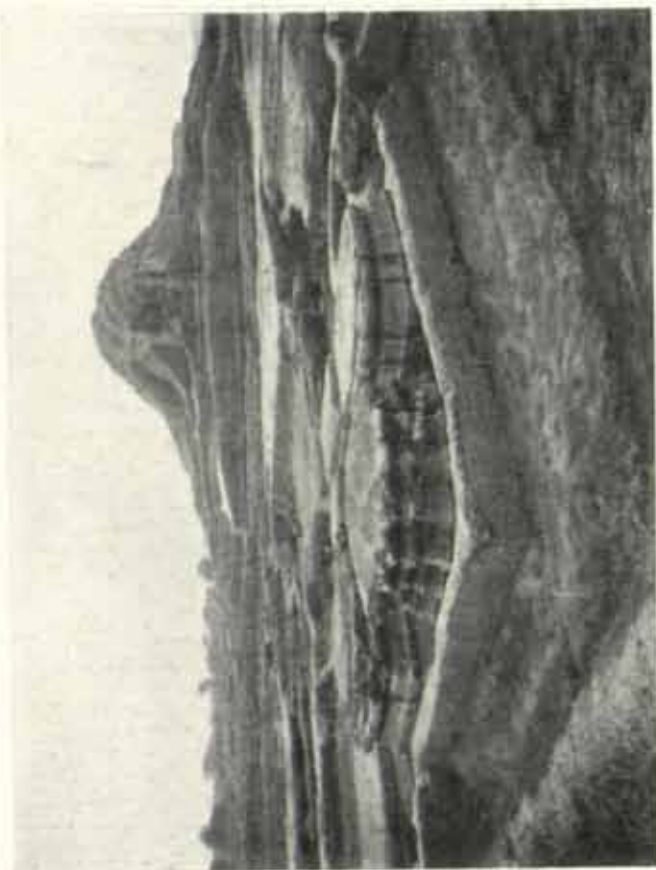


(c) Monastic Quadrangle, S. E. Corner: The 'Assembly Hall', partially excavated.

EXCAVATIONS: PAHARPUR.



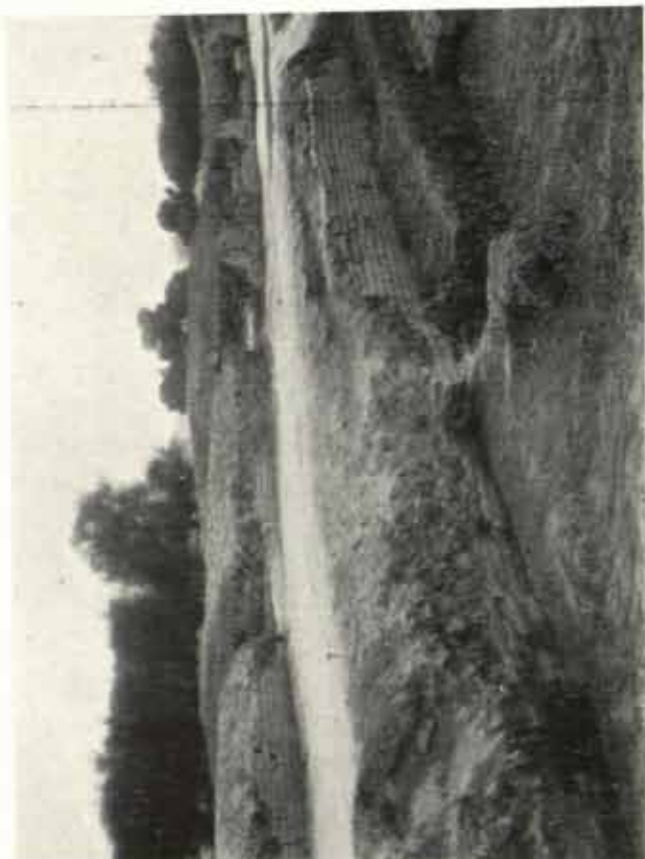
(a) Monastic Quadrangle, S. E. Corner: Group of Five Stūpas, and a Well.



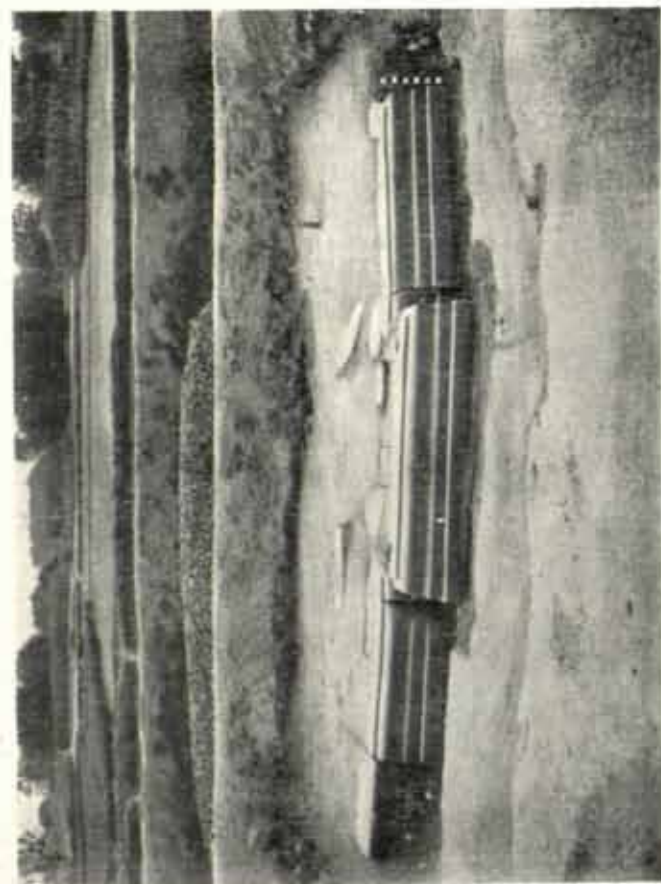
(b) The Group of Five Stūpas as in (a); showing Circumvallation with Drainage Outlets.



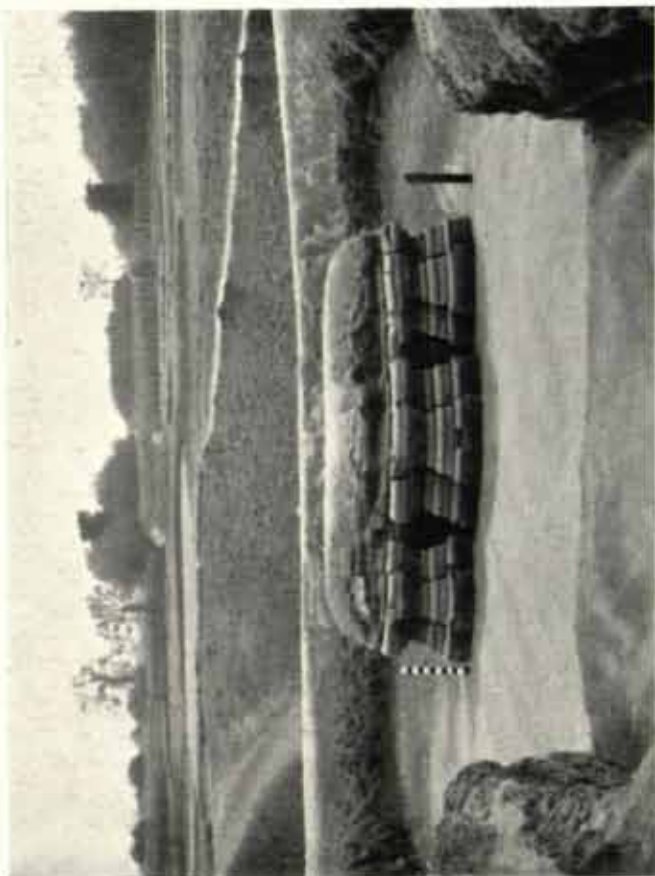
(c) The Group of Five Stūpas as in (a); showing earlier Bases.



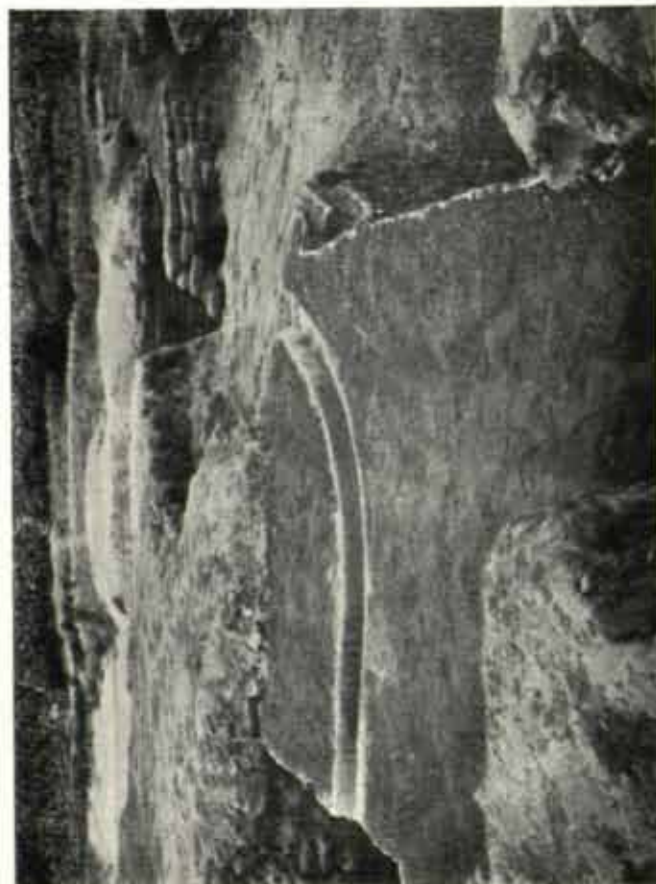
(d) Monastery, South Wing: The Verandah with two later Buttresses.



(a) Monastery, South Wing : A Stone Pedestal with Iron Clamps in one of the Cells.



(b) Monastery, South Wing : A Brick Pedestal in one of the Cells.



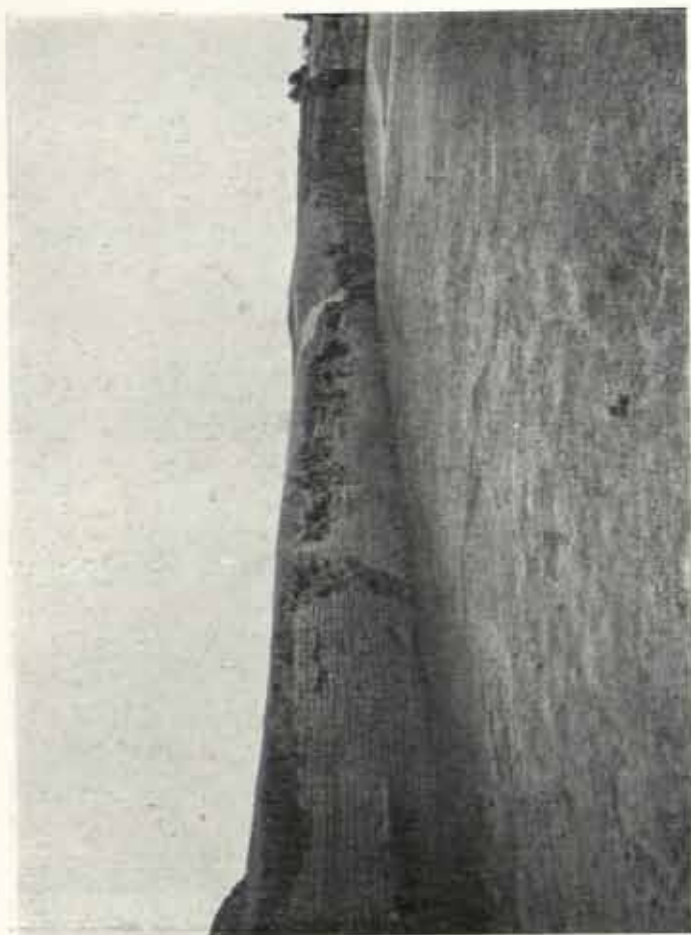
(c) Monastery, South Wing : Narrow, rectangular Drain in Central Cell.



(d) Monastery, South Wing : Row of Tetrastichia Plaques in situ ; with Hinduistic Subjects depicted.



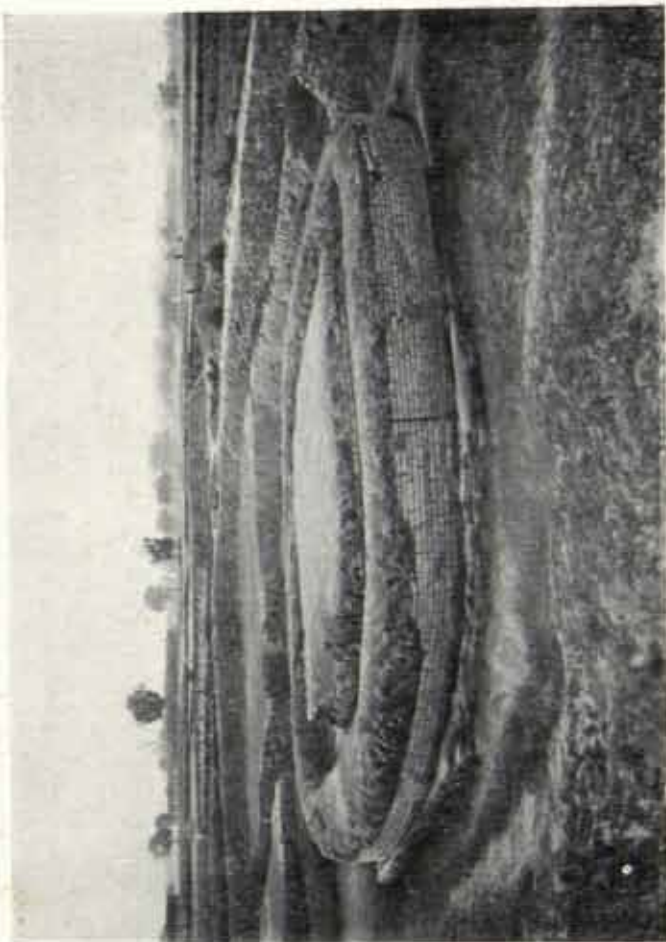
(a) Monastery, South Wing: View of Cells in the Western Hall.



(b) Monastery, South Wing: Traces of Windows in the outside Wall.



(c) and (d) The two Stūpas *śūri le mure*: Drums of two Stūpas on both Sides of the Main Entrance Gate, and outside the Walls.





(a) Monastic Quadrangle, S. E. Corner : Continuous Drain alongside the 'Assembly Hall', West Side.



(b) The Drain outside the 'Assembly Hall' : Showing the Eastern Side.



(c) The 'Assembly Hall' or 'Refectory' : Showing the Drains on the North Side of the Western Wall.



(d) Monastic Quadrangle : Rings in Terra-cotta, evidently for the Purpose of Pinnacles for votive stupas.



(a) Stone Figure of a *deārapāla* (7) found in one of the cells.



(b) Terra-cotta Panel: A *linga* with three Heads.



(c) Terra-cotta Panel: A Warrior, on a *mahara*-cart, drawing an Arrow from his Quiver.



(d) Terra-cotta Panel: Richly attired Lady seated on a Cushion.



(c—d) Basalt Image of Hevajra, found in 1927—28, now with seven Hands restored; front and back View of Sculpture.



(a—b) Miniature Image in Stone of Kuvera, found in Drains of 'Assembly Hall', with an Inscription of the Buddhist creed on the Back; 9th—10th Century A. D.

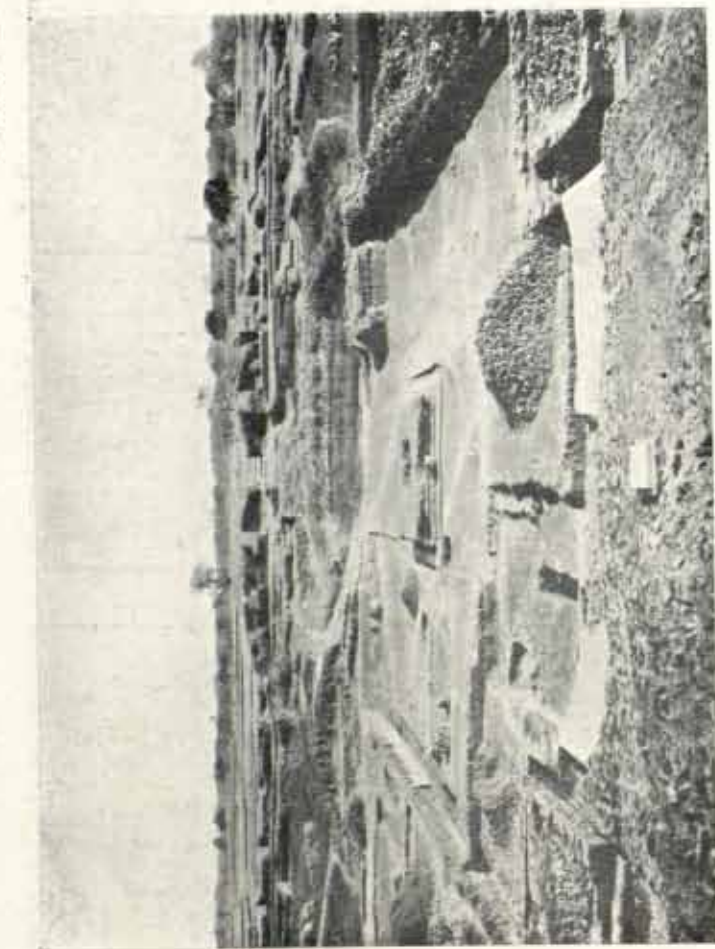


(g—h) Earthenware Plate with Handle; a Piece of Pottery with a grey Slip; top and bottom Views.

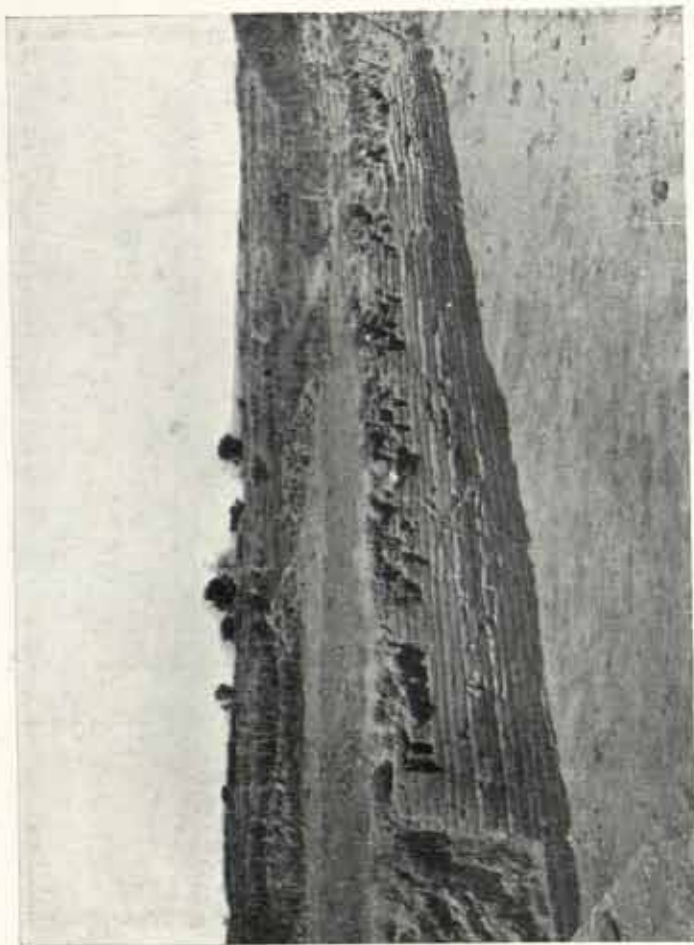


(e—f) Piece of Stone with *graffiti* found during the Excavations of 1931—32; two sides.

EXCAVATIONS: PAHARPUR.



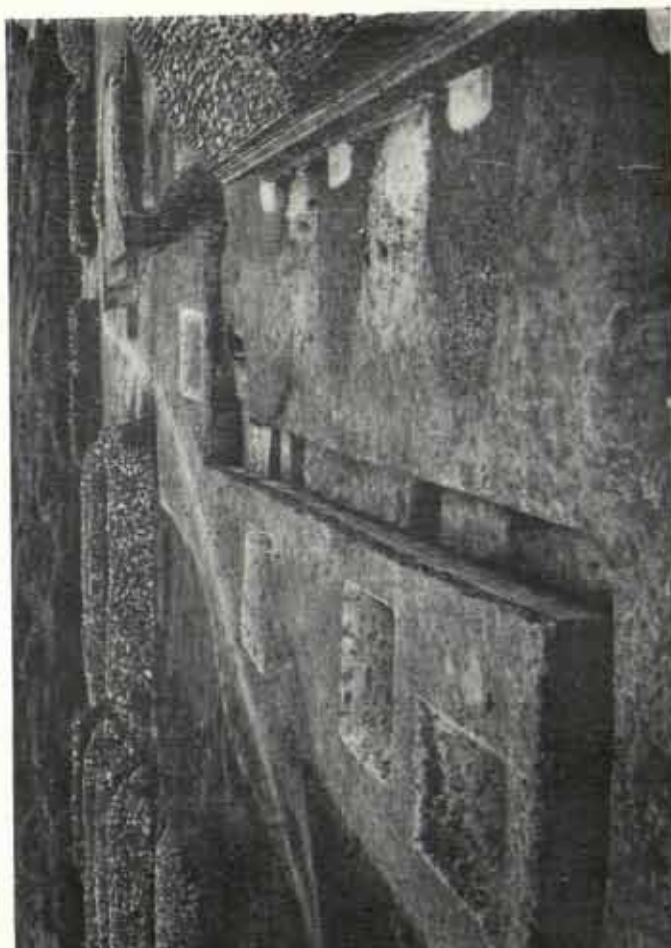
(a) Monastic Quadrangle: The Structures in Front of the North Staircase of the Main Temple.



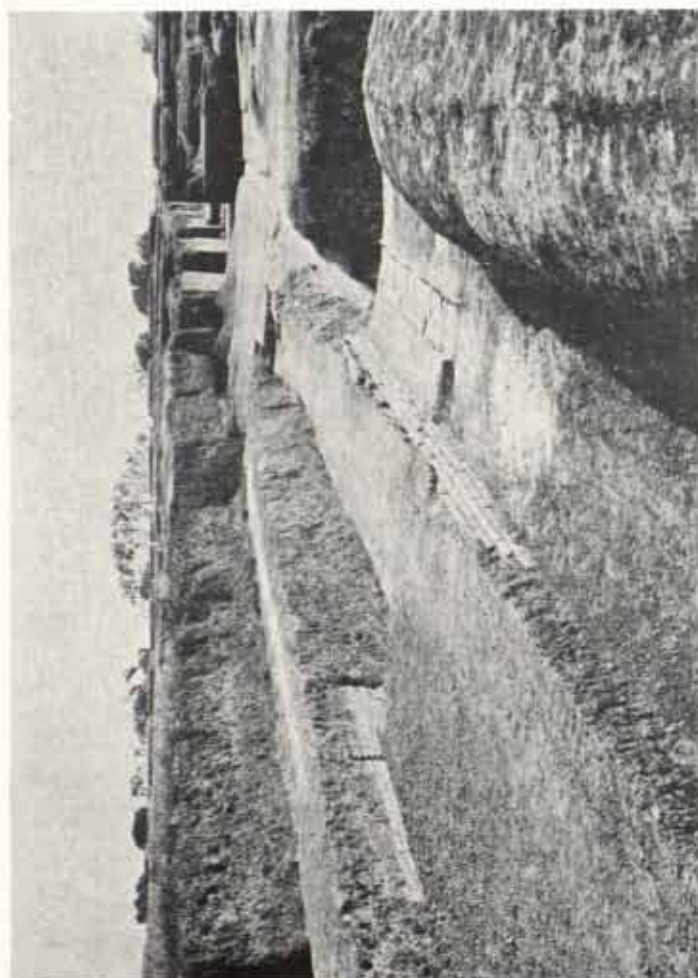
(b) Main Temple: *jāti* Work in the Wall surrounding Circumambulatory Passage; Portion near North Staircase



(c) Monastic Quadrangle, S.E. Corner: Group of Five Square Plinths upon one Platform; from N.E.



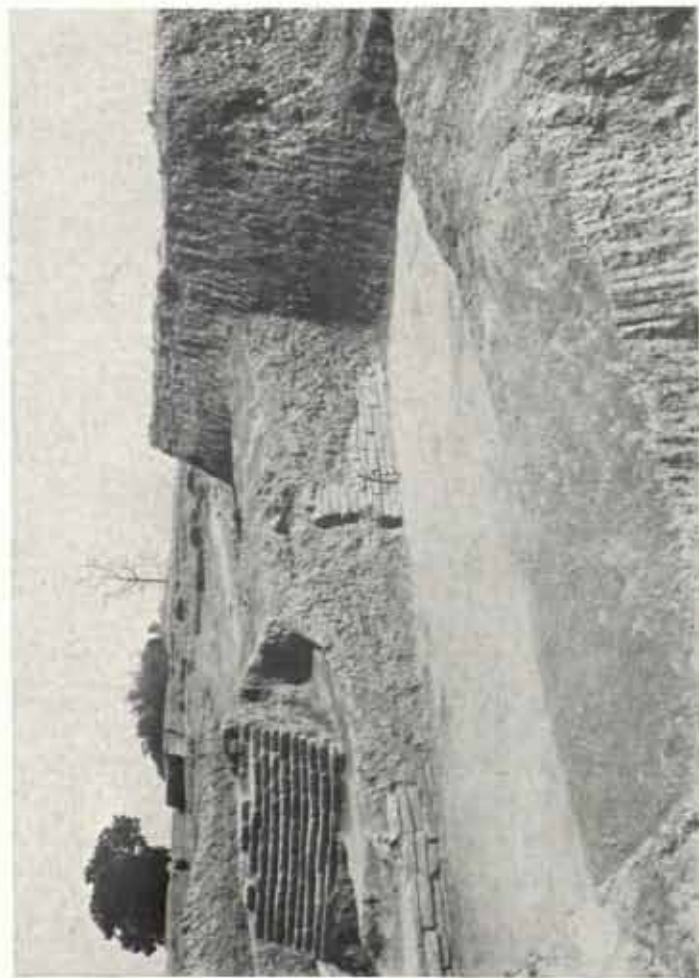
(d) Main Temple: Wall running Parallel with the *pradakṣiṇā* Passage, eastern Portion; from N.



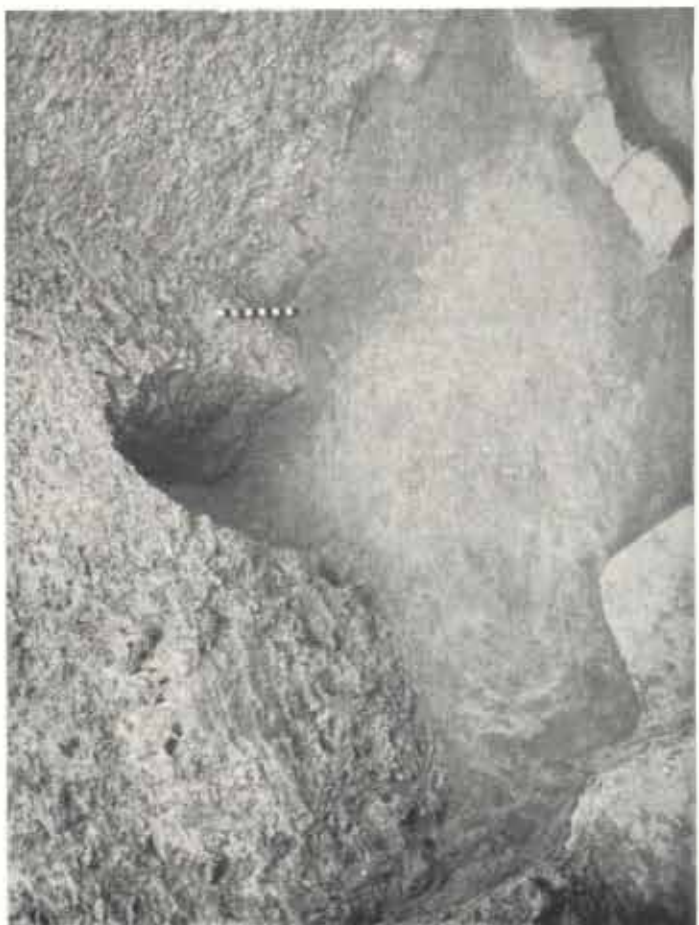
(a) The 'Assembly Hall': showing Western Wall with open Platform and earlier Brick Drain.



(b) The 'Assembly Hall': The early Brick Drain with broad, flat Bottom, to the West of the Hall.



(c) The 'Assembly Hall': Portion of Original Concrete Floor, from N.W.

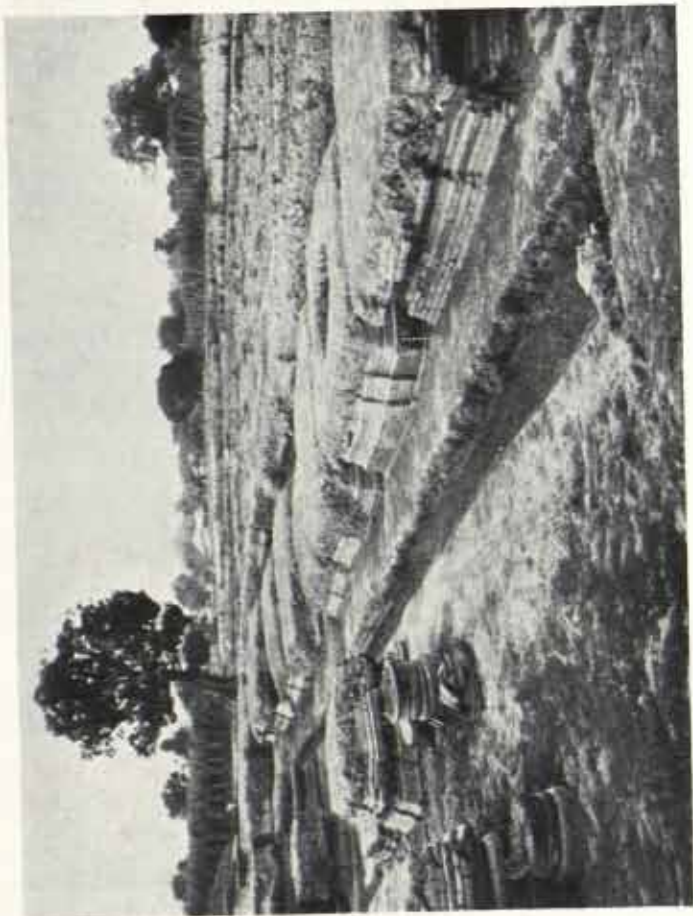


(d) The 'Assembly Hall': Another Portion of Pala Period Concrete Floor, towards Southern End.

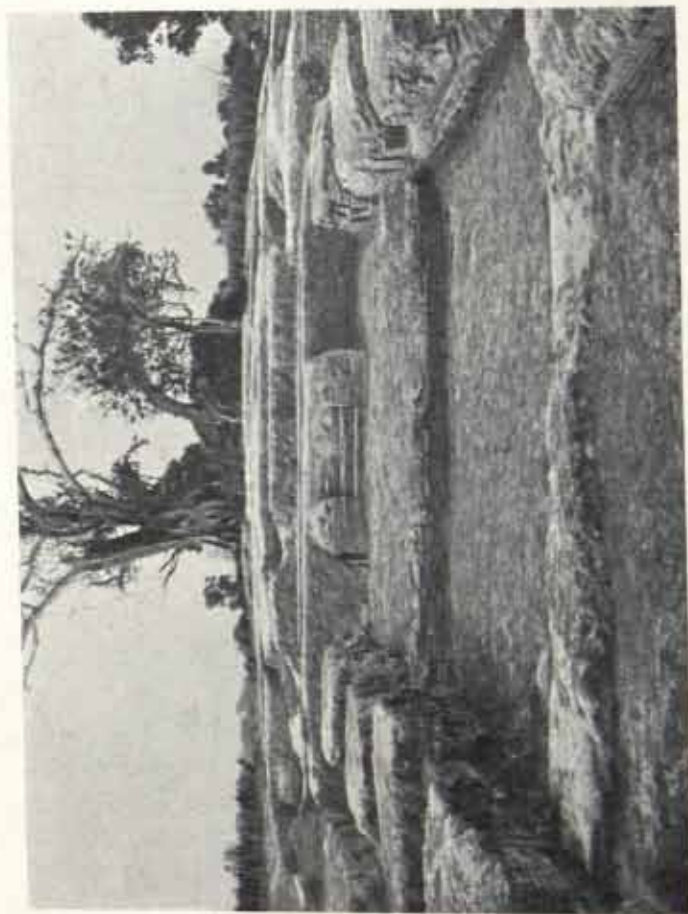
EXCAVATIONS: PAHARPUR.



(c) The Satyapir Bhitā: General View of excavated Site; from S.



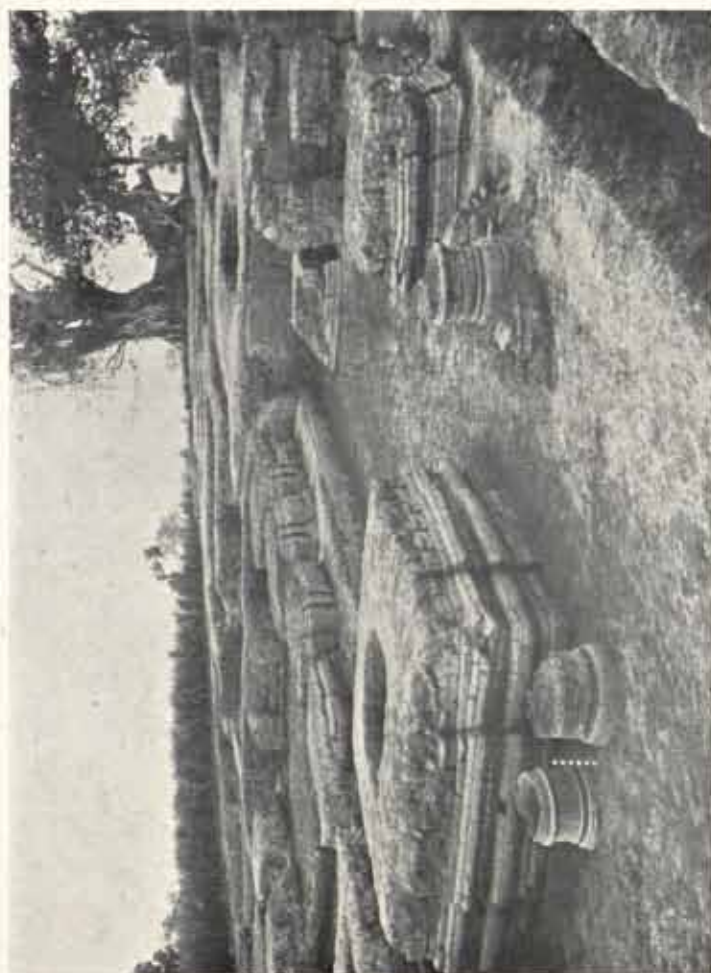
(b) The Satyapir Bhitā: Rows of votive stupas to the E. of Central Temple.



(e) The Satyapir Bhitā: Front View of Central Temple, showing Stairway and Courtyard of Latest Period.



(d) The Satyapir Bhitā: Steps leading to earliest Temple; probably a Temple of Tārā, the Saviour.



(a) The Satyapir Bhita: S.E. Area, showing in Left Foreground the Stūpa which contained large Deposit of Miniature Clay Stūpas.



(b) Specimens of Miniature Clay Stūpas found in a Square Stūpa shown in fig. a.



(c) Miniature Clay Sealings found encased in Clay Stūpas as shown in fig. b.



(d) The Satyapir Bhita: Two Terracotta Plaques, fragmentary, showing the Buddha in the *dhyanamudrā* (P).



(e) Clay Sealing with Buddhist Creed, found inside Buddha Plaque shown in fig. d.



(f) Clay Sealing with Buddhist Incantation, found inside Buddha Plaque shown in fig. d.



(a) The Satyapir Bhita: Rows of Votive Stūpas N.E. of the Central Temple.



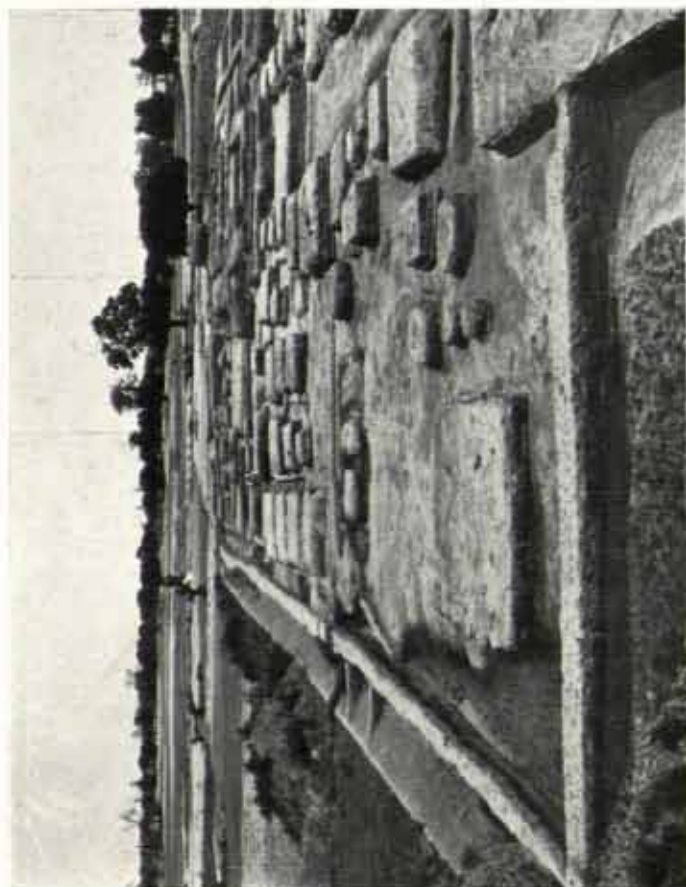
(b) The Satyapir Bhita: A Terracotta Slab from one of the Votive Stūpas, showing Rows of Buddhas in two Attitudes.



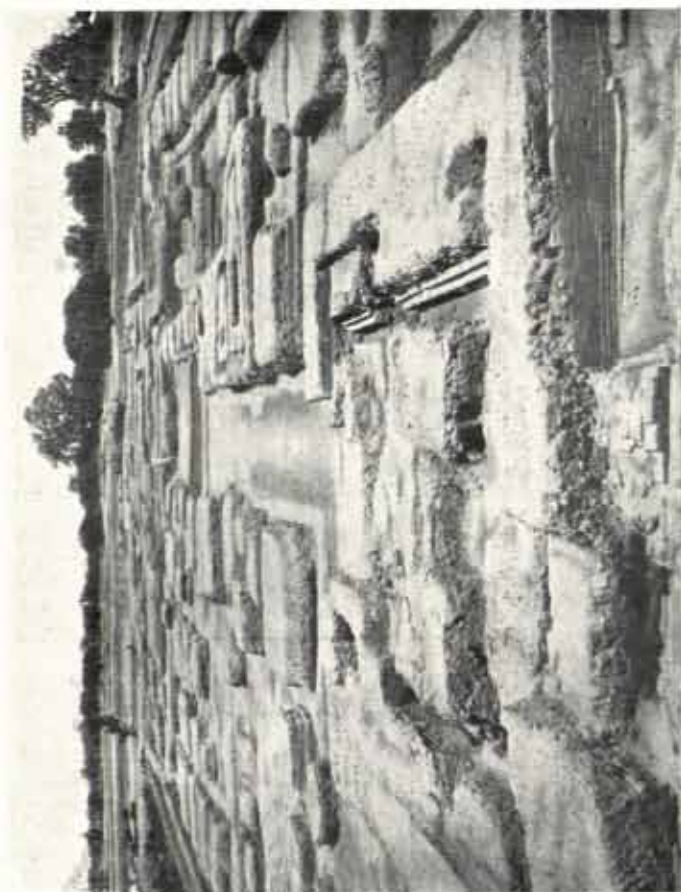
(c) The Satyapir Bhita: Basement of a Votive Stūpa, showing Terracotta Casing.



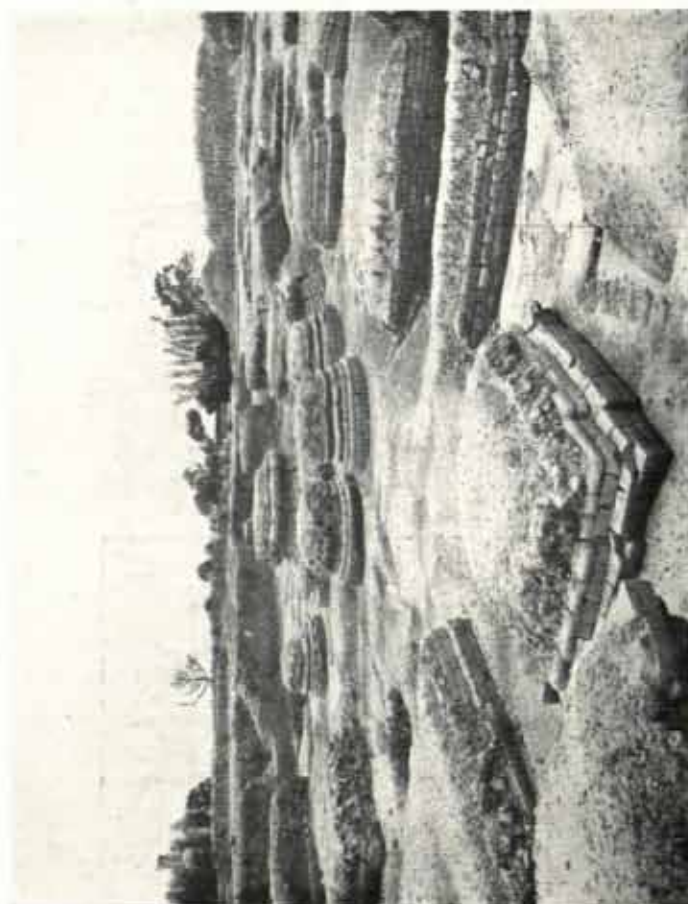
(d) Burnt Clay Sealings from the Satyapir Bhita, with Figure of Eight-armed Tārā.



(a) The Satyapir Bhitā: View of Excavations from S. W.



(b) The Satyapir Bhitā: View of Excavations, from S.



(c) The Satyapir Bhitā: Circular Stūpas Nos. 49 to 55; from N.



(d) The Satyapir Bhitā: Chamber with Terra-cotta Drain in the southern Courtyard.



(a) The Satyapīr Bhūā near Paharpur: Row of Stūpas Nos. 58 to 69; from E.



(b) Paharpur, Main Temple: Gargoyle and Drain in N.E. Basement.



(c) The Satyapīr Bhūā: Polychrome Painted Potsherd.



(e) Paharpur, Main Temple: Drain under First Terrace Verandah.



(f) Halud Vihāra, Rajshahi: Miniature Bronze Image of Gapeśa.



(d) The Satyapīr Bhūā: Polychrome Painted Potsherd.



(g) Mahāsthān: Terra-cotta Fragment of Female Deity, probably from the Maurya Period.

EXPLORATION: EASTERN CIRCLE.



(a) Rock-cut Figure of Bhairava on the W. Slope of the Kamakhya Hill, Assam.



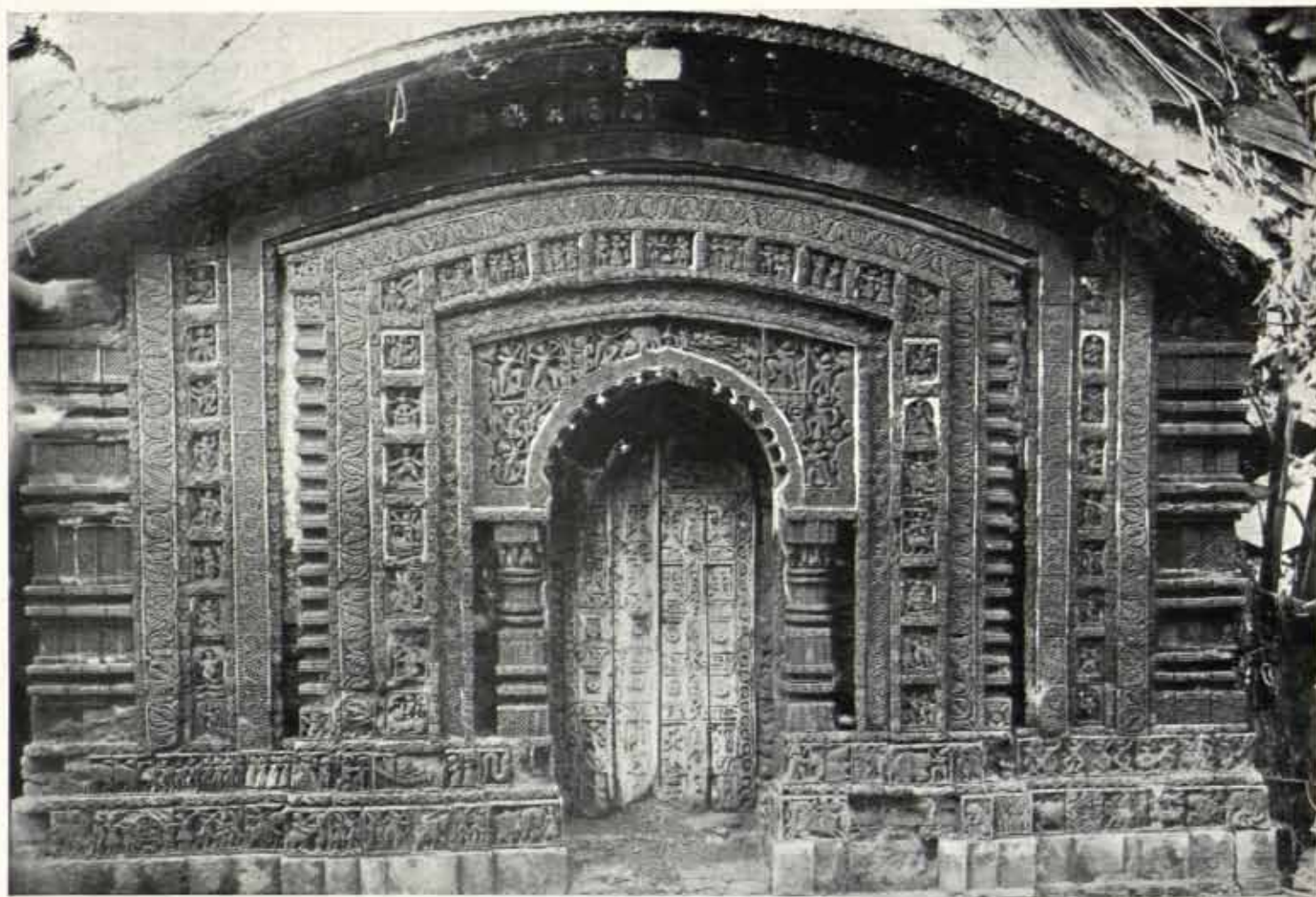
(b) Fragmentary Stone Image of Hara-Gauri from Mahāsthān, Bengal.



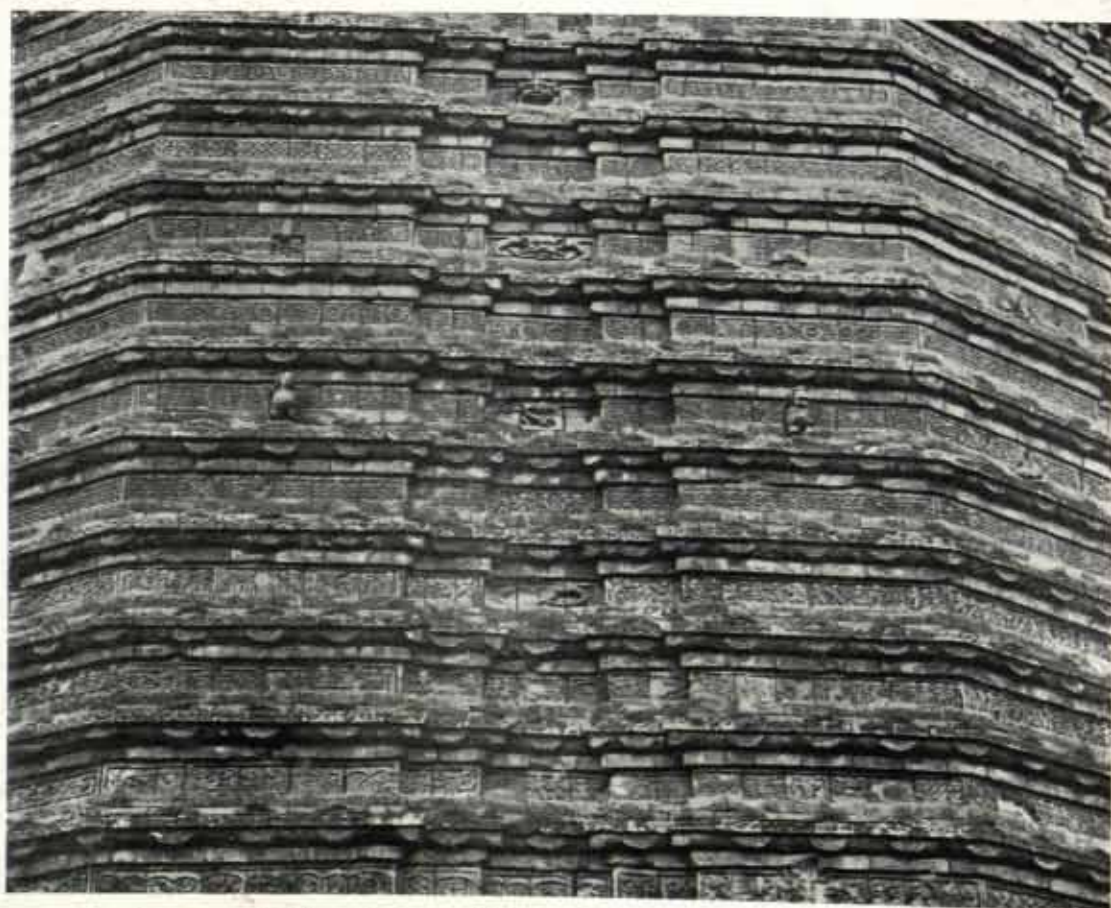
(c) Stone Image of Seated Male Figure, Bhairavi Temple, Kamakhya Hill, Assam.



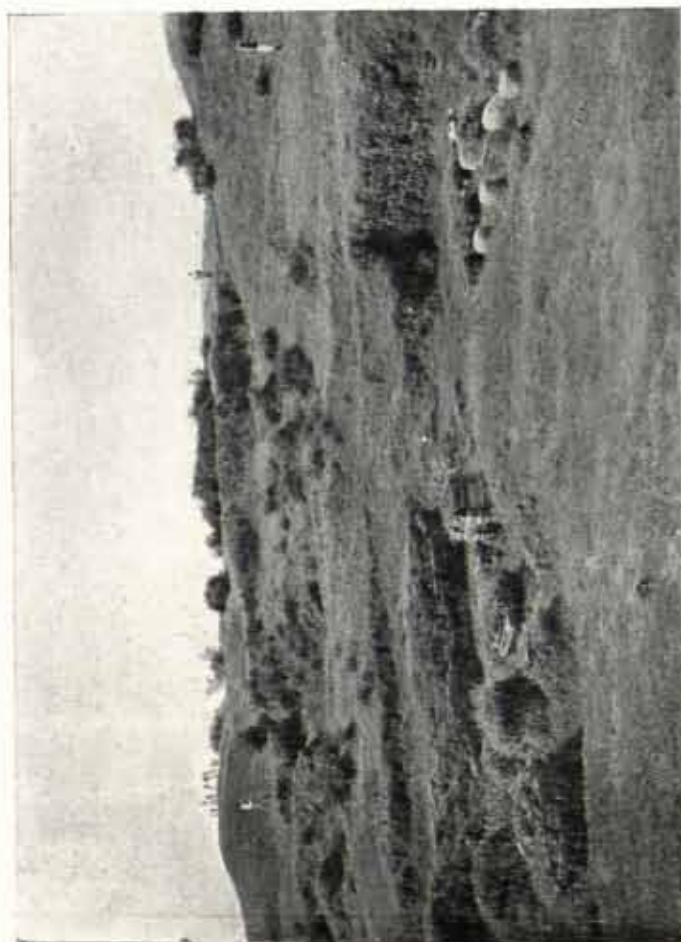
(d) Mathurapur, Faridpur District, Bengal: View of the bikhara-shaped Temple (deul); From E.



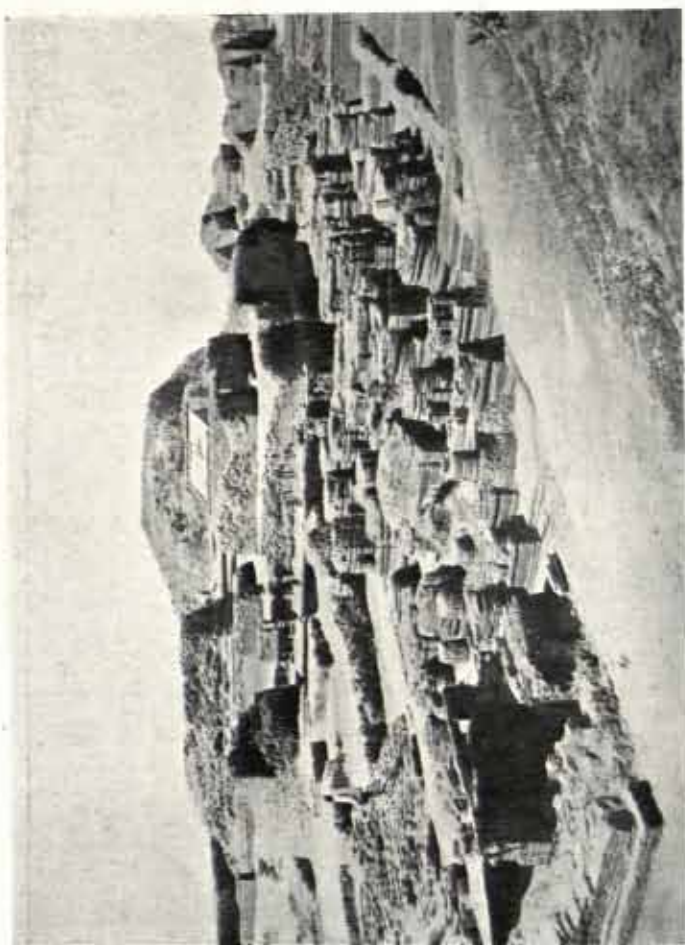
(a) Handial, Pabna District: The Bengali 'Curved Cornice' Temple made of Fashioned Brick and Terra-cotta; the Door-wings of Carved Wood; 17th—18th Century A. D.



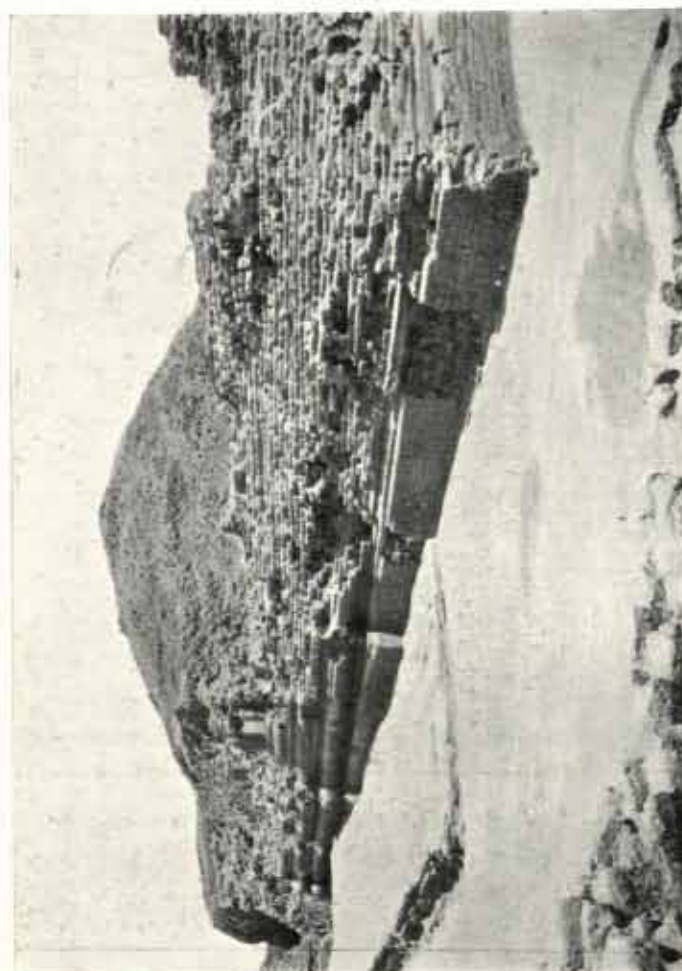
(b) Mathurapur, Faridpur District: A Portion of the *shikhara* of the *deul* shown in Plate LXIII, fig. d; with Scenes from the *Mahābhārata*, *Rāmāyana*, &c.



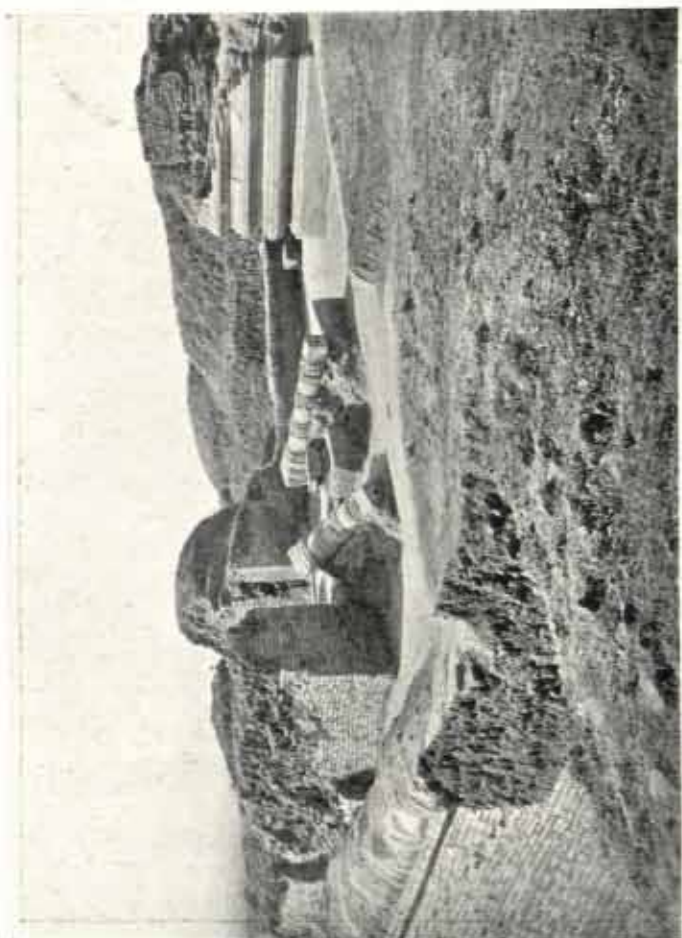
(a) Chaitya Site No. 12: Before Excavation, from S. E.



(b) Chaitya Site No. 12: showing excavated Main Shrine surrounded by votive Stūpas.



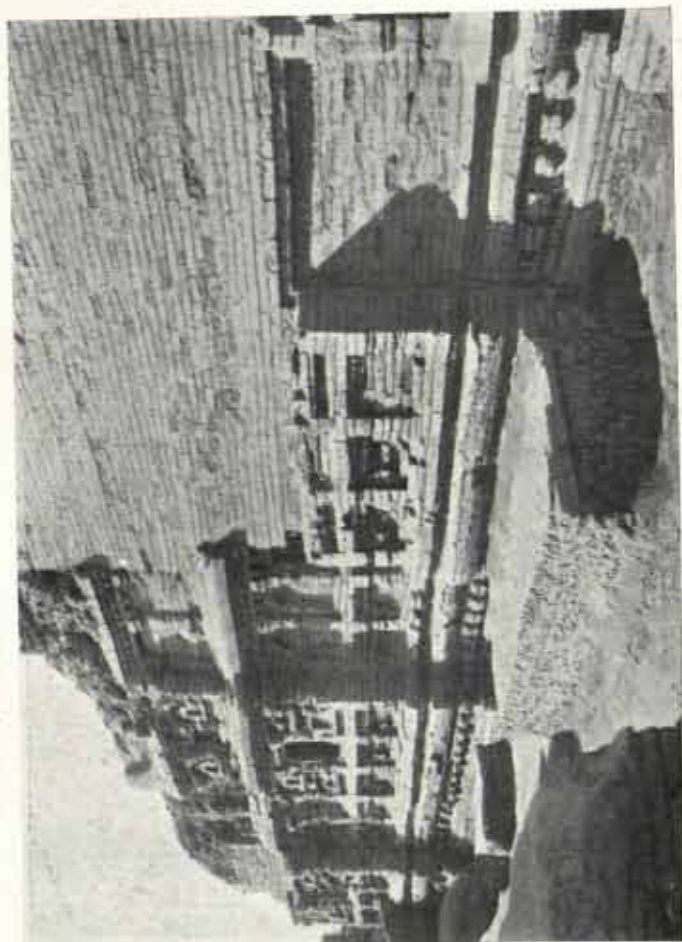
(c) Chaitya Site No. 12: West Façade of Upper Level Structure; from S. W.



(d) Chaitya Site No. 12: E. E. Corner of Main Shrine, Upper Level; showing two fallen carved Pillars and Bracket before Entrance.



(a) Chaitya Site No. 12: Main Shrine, earlier State, S. Façade.



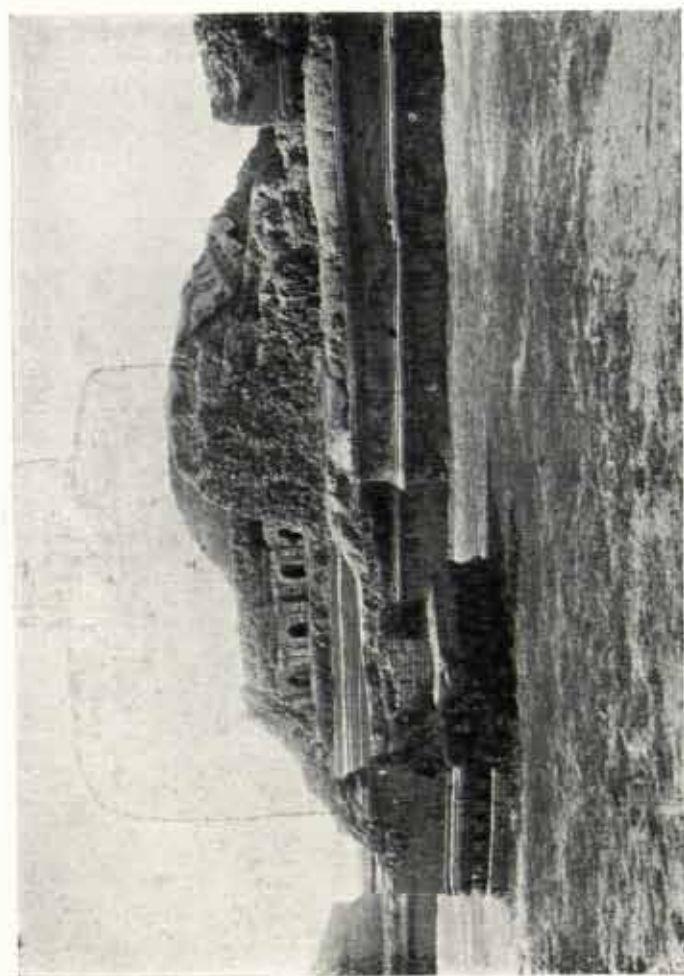
(b) Chaitya Site No. 12: Main Shrine, earlier State, E. Façade; showing Southern End.



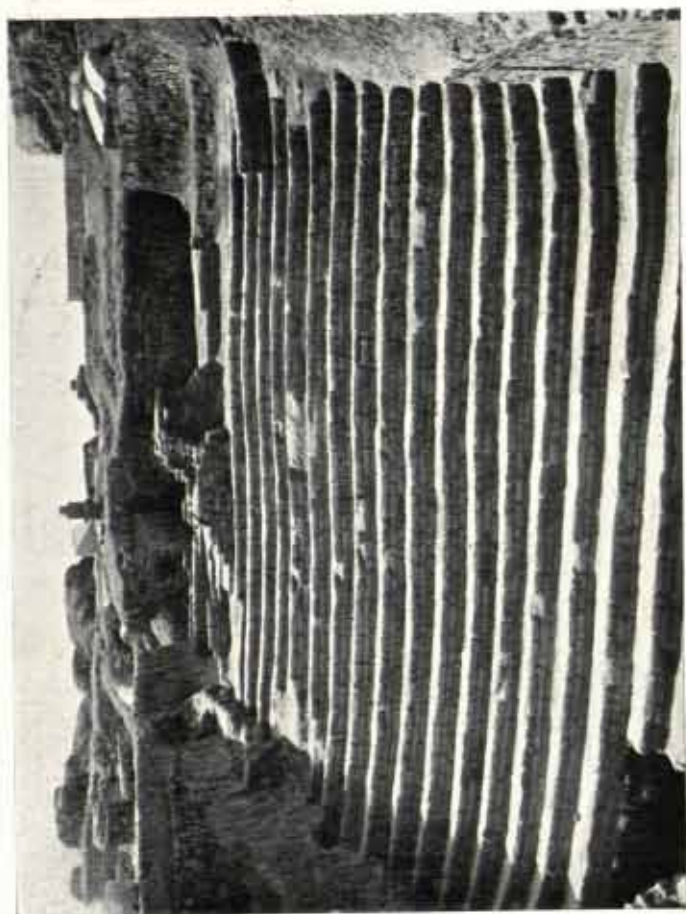
(c) Site No. 2: Stone Temple, from S. E.



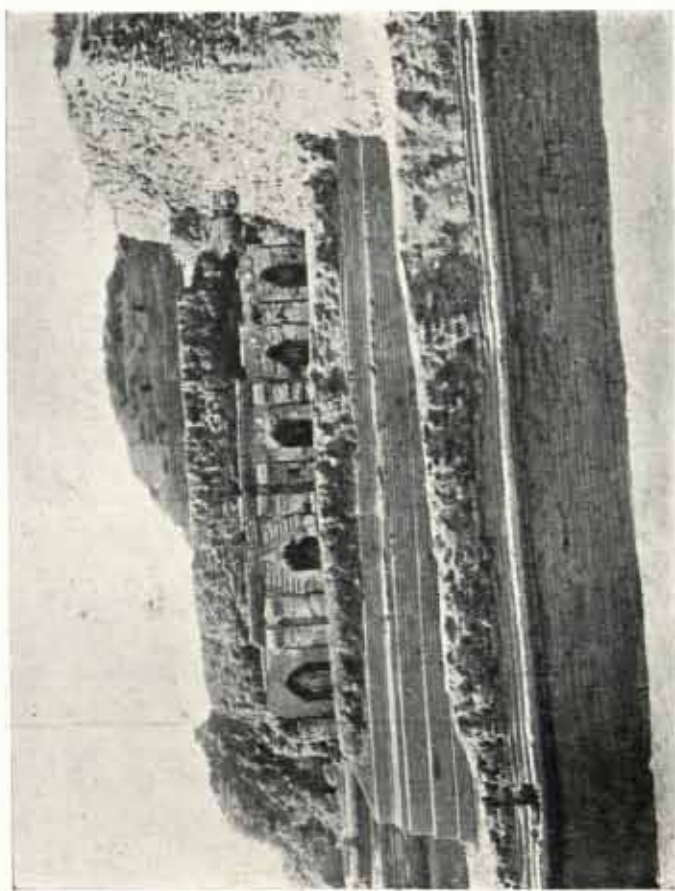
(d) Chaitya Site No. 12: Shrine of Colossal Buddha S. of the Main Shrine (after Conservation); from N. E.



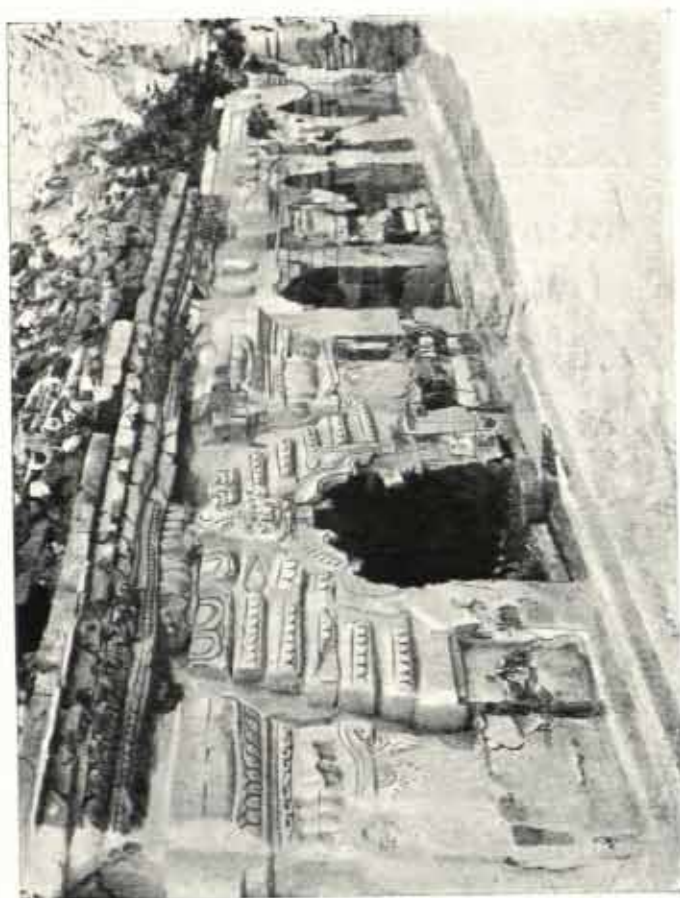
(a) Chaitya Site No. 12: N. Side of Main Shrine; the 'Envelope' Wall over the Previous Façade, showing collapse probably due to Earthquake.



(b) Chaitya Site No. 12: Broad Staircase leading to Main Shrine.



(c) Chaitya Site No. 12: N. Side of Main Shrine, showing E. Half of Earlier Stucco-decorated Façade.



(d) Chaitya Site No. 12: N. Side of Main Shrine, showing portion of Stucco-decorated Earlier Façade.



(a) Stone Image of Avalokiteśvara of the Gupta Period, probably the 5th Century A. D., found in a Small Shrine to the N. of the Main Shrine, Chaitya Site No. 12.



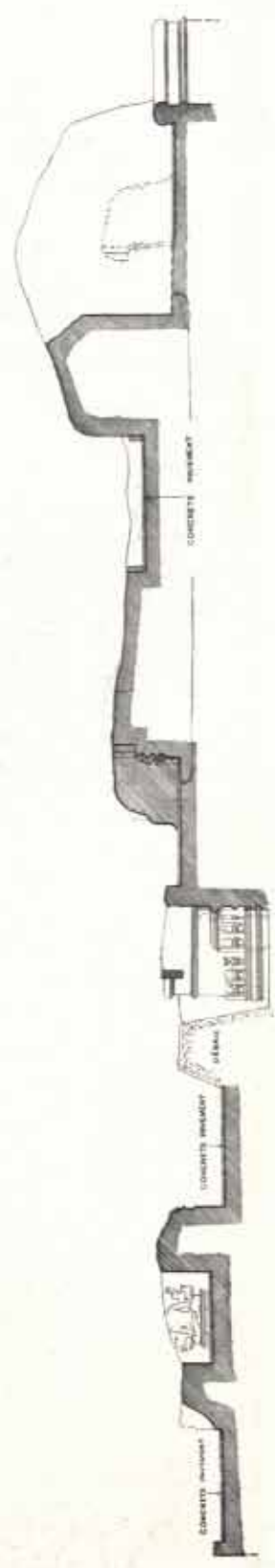
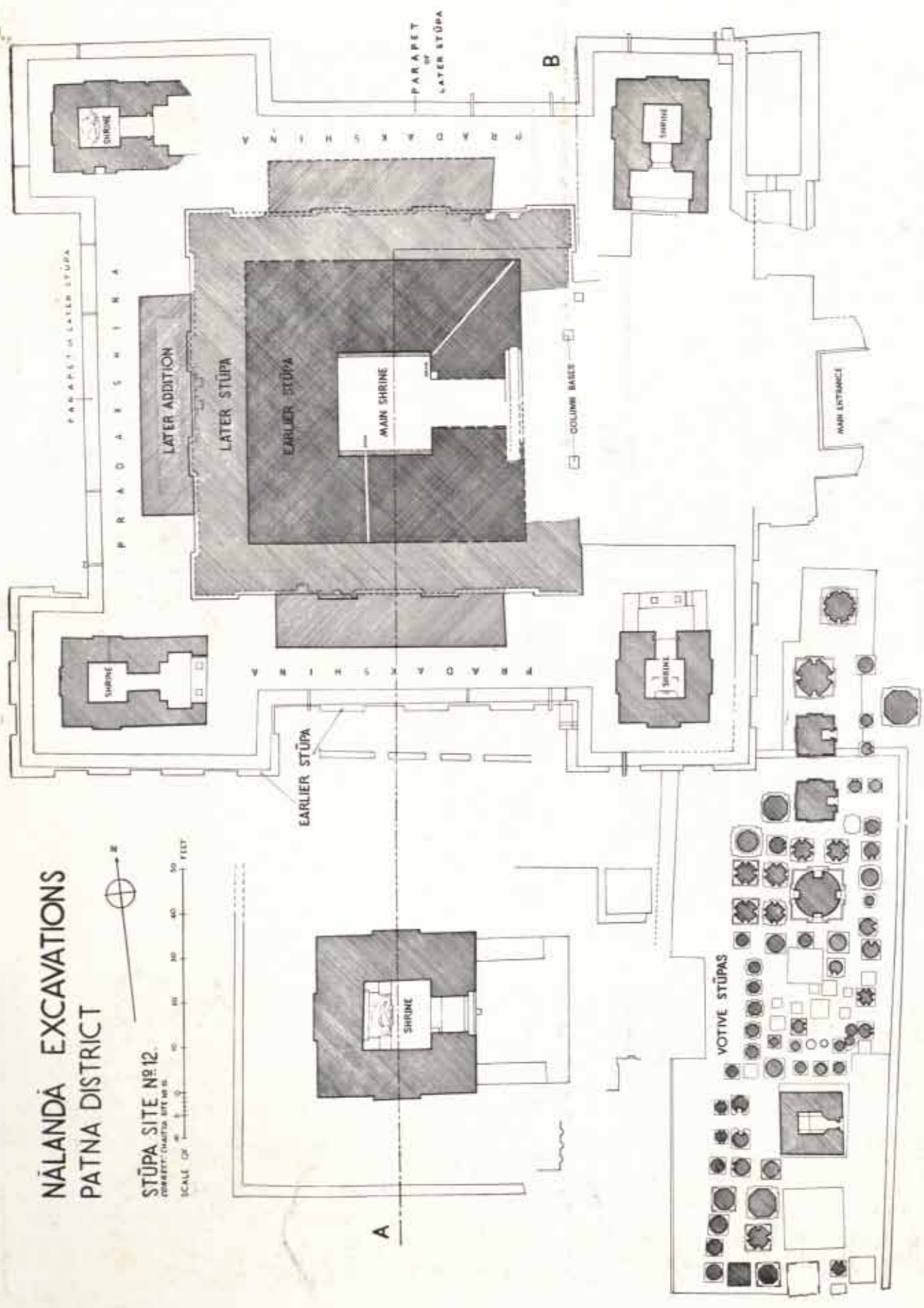
(b) Stone Image of Serpent-hooded Feminine Deity, with Four Hands, holding Sword, Axe, Fruit, &c., found in Monastery No. 9; probably from the 7th or 8th Century A. D.

NĀLANDĀ EXCAVATIONS
PATNA DISTRICT

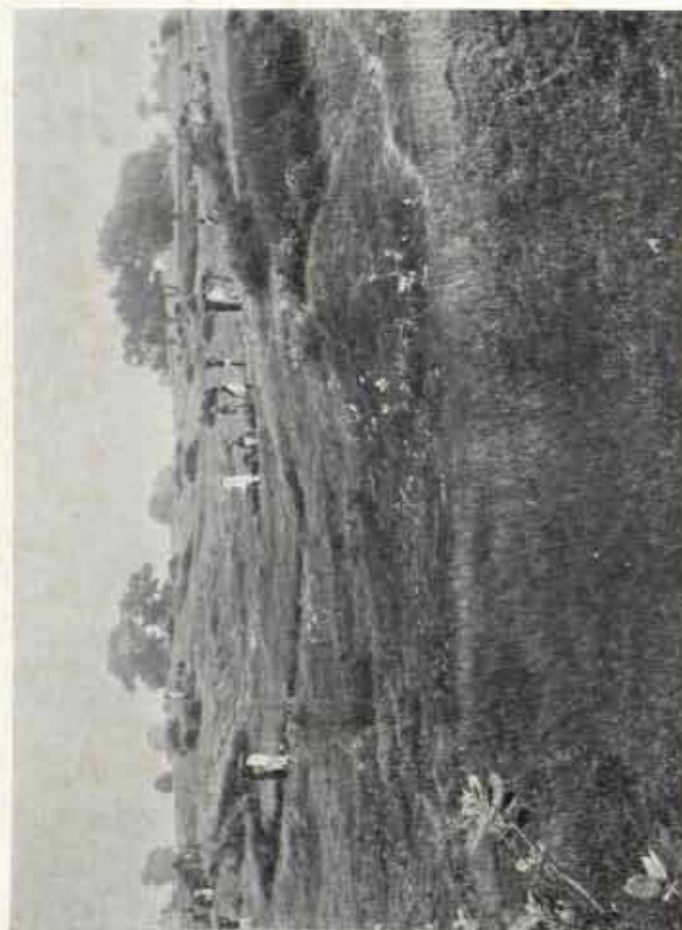
STŪPA SITE No 12.

ORIENT: CHARTER SITE No 12.

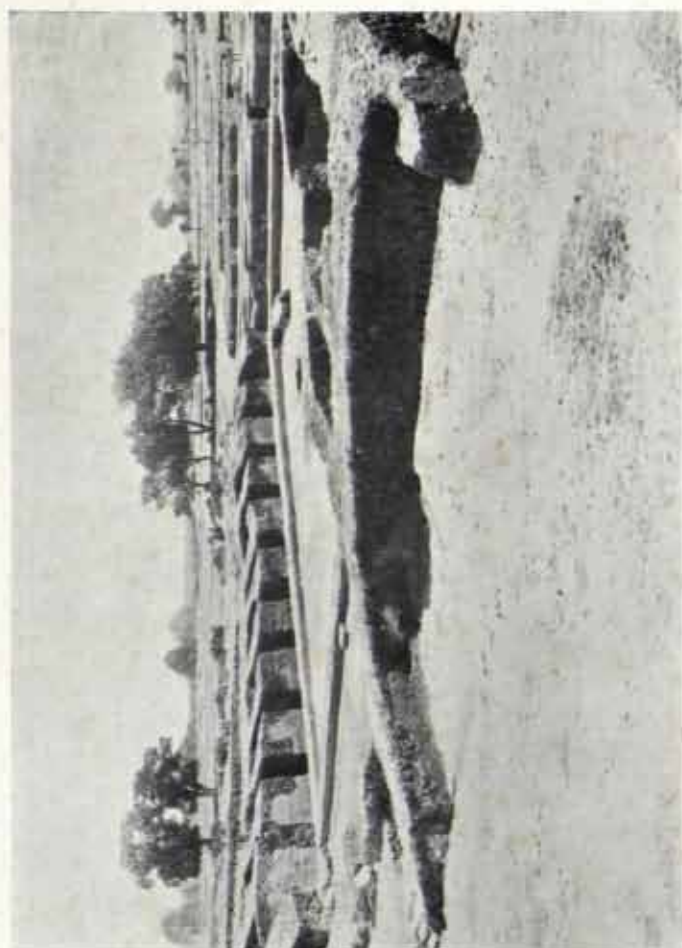
SCALE OF 0 10 20 30 40 50 FEET



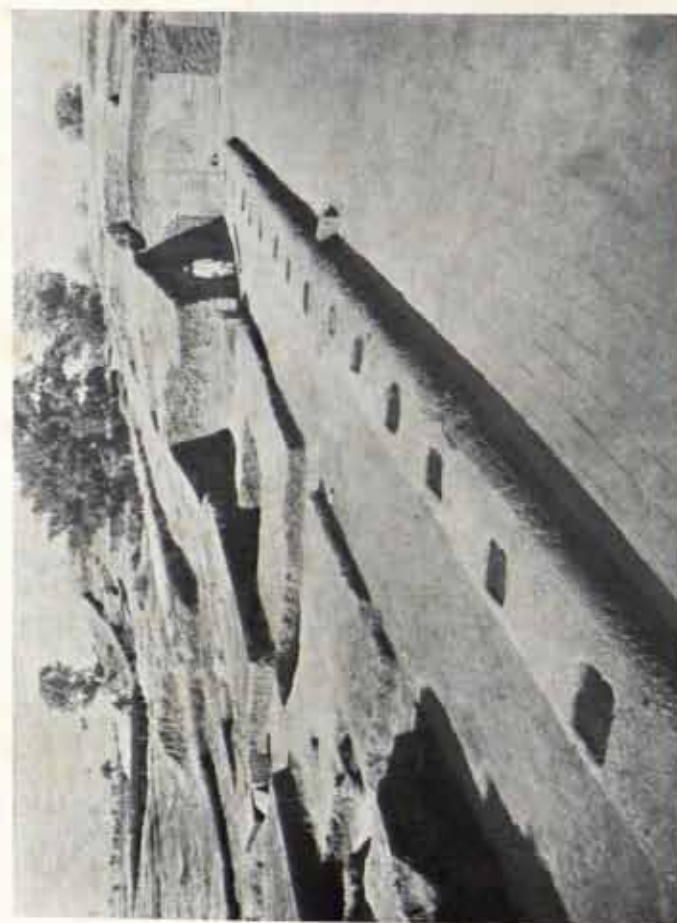
SECTION "A-B"



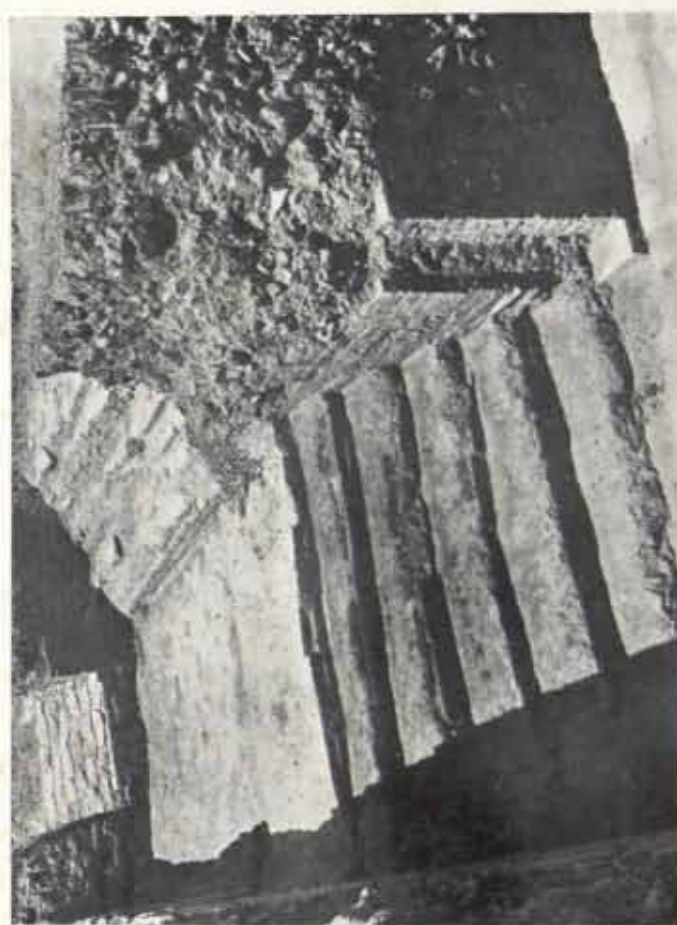
(a) Monastery No. 9; The Site before Excavation, from S.W.



(b) Monastery No. 9; General View of Quadrangle from S.W.



(c) Monastery No. 9; The Verandah, showing Holes for wooden Pillars which must have supported a Roof.

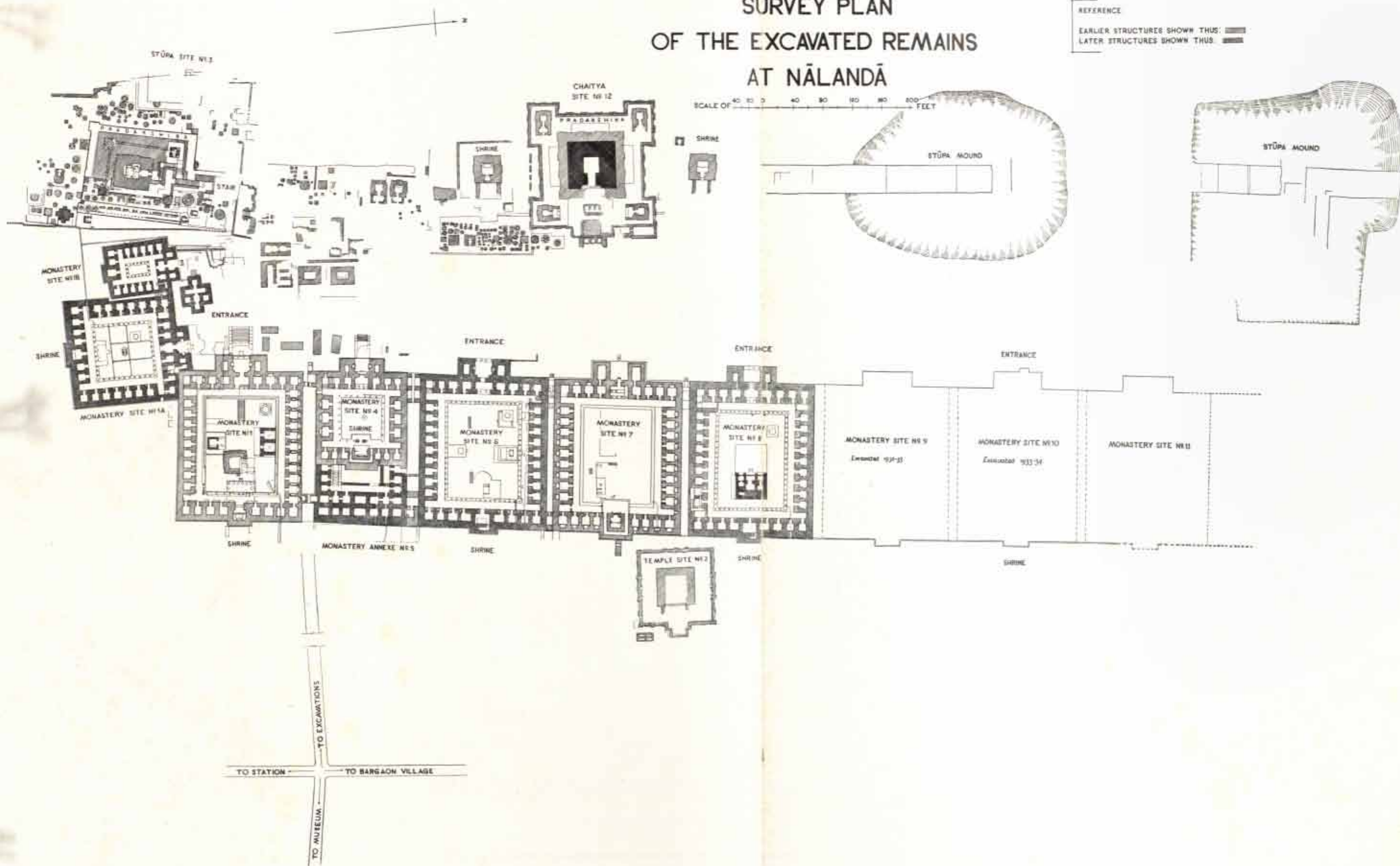


(d) Monastery No. 9; The Stairway of the W. Verandah, showing clearly Indications of former wooden Treads.

SURVEY PLAN OF THE EXCAVATED REMAINS AT NĀLANDĀ

REFERENCE


EARLIER STRUCTURES SHOWN THUS: 
LATER STRUCTURES SHOWN THUS: 



NĀLANDĀ EXCAVATIONS, PATNA DISTRICT.

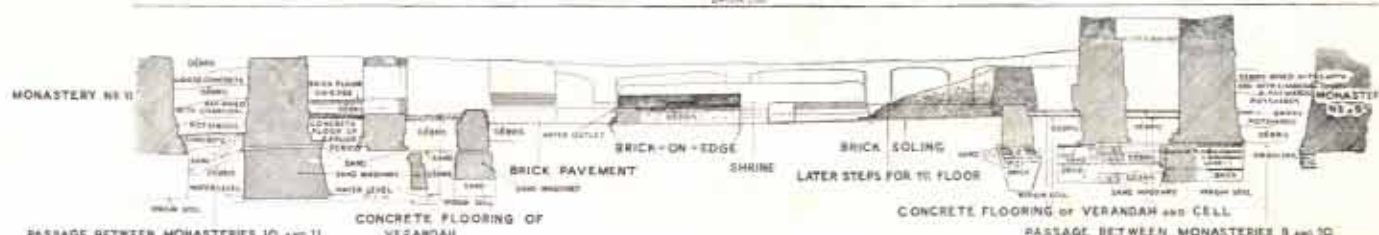
PLAN AND SECTIONS OF MONASTERY SITE N° 10.

YEAR 1933-34.

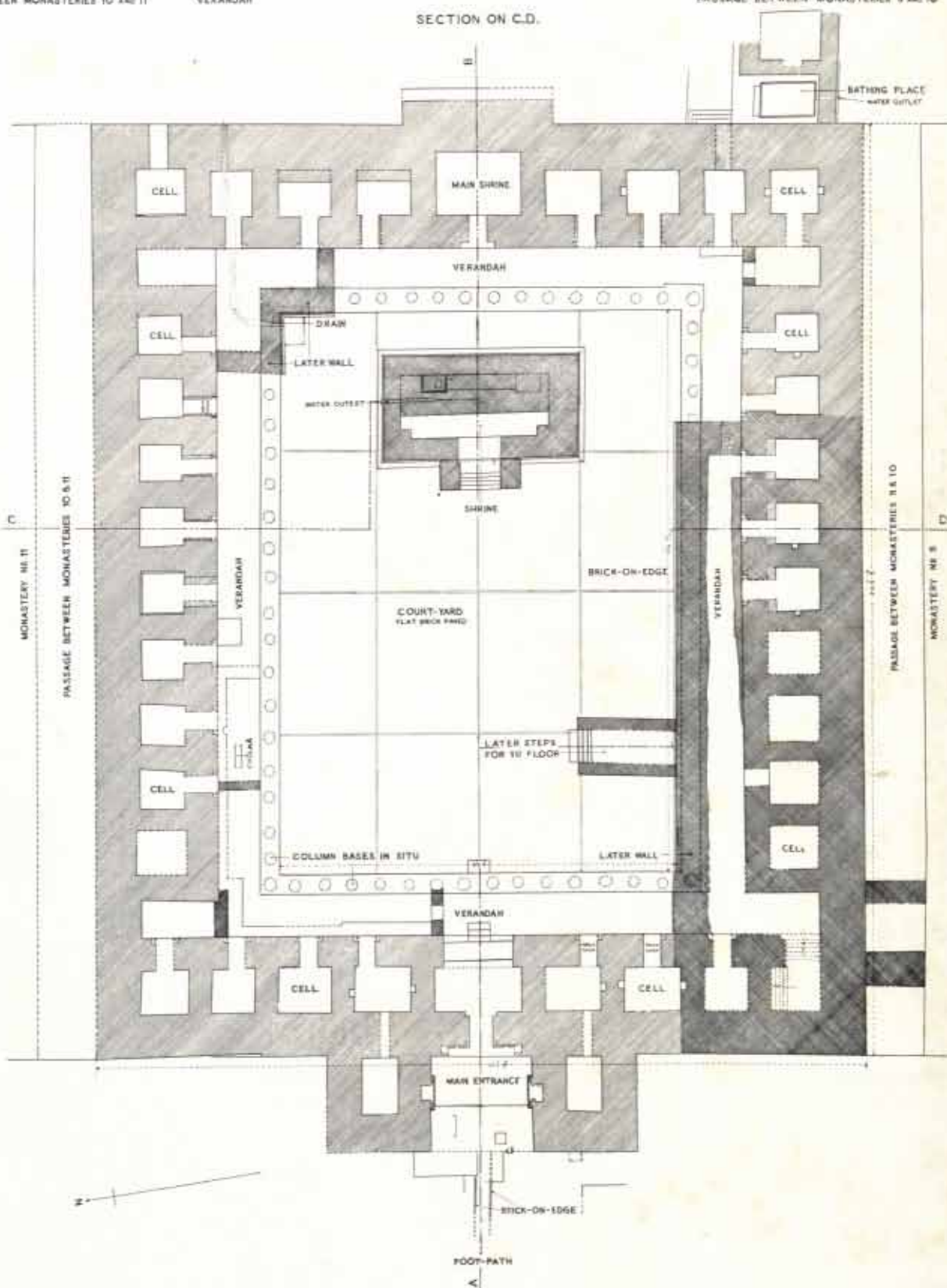
LATER STRUCTURES SHOWN THUS 

SCALE OF  FEET

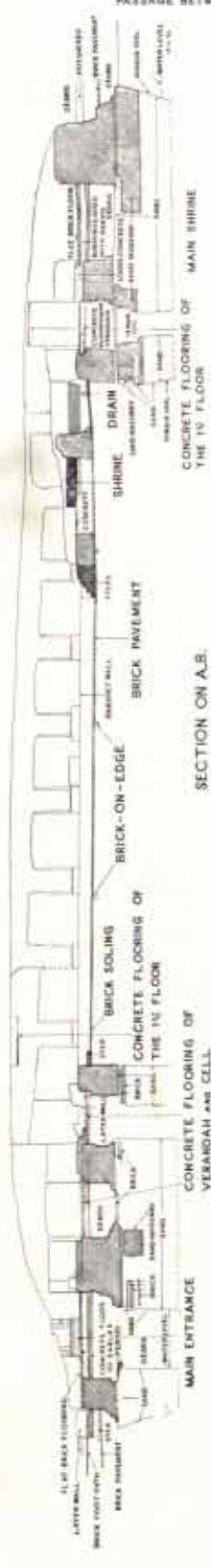
DRAWN 1935

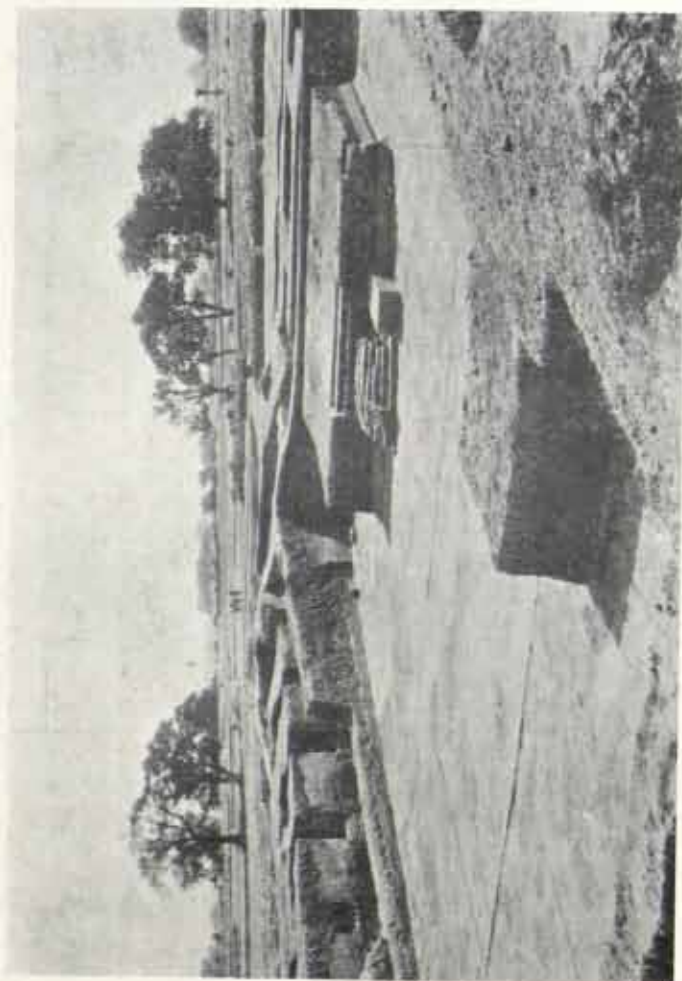


SECTION ON C.D.

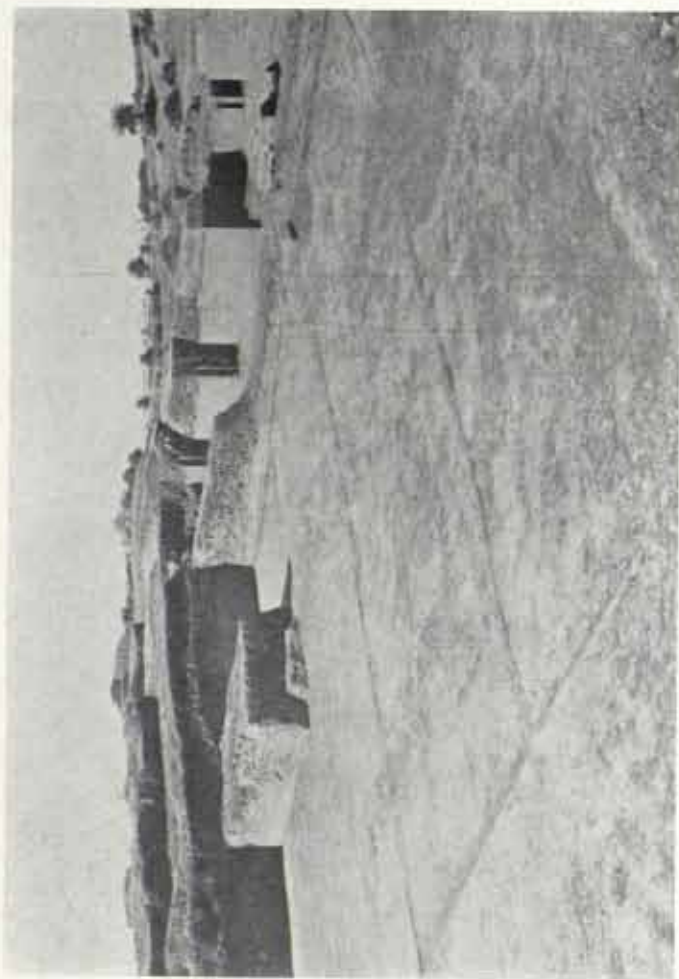


SECTION ON A.B.





(a) Monastery Site No. 10: The Courtyard from S.W.; showing Cells with Arched Doorways, and a Shrine of Late Period, with Steps.



(b) Monastery No. 10: The Courtyard from N.E., with Arched Doorways to Cells; and Portion of later Wall running along Verandah and Screening Cells.



(c) Monastery No. 10: Portion of a Door leading to one of the Cells; showing Remains of Brick Arch.



(d) Monastery No. 10: The Rectangular Stone Platform, probably a Place for Ablution, outside S.E. Corner.



(a) Monastery No. 10: The Main Entrance, seen inside, from N.E.; after Conservation.



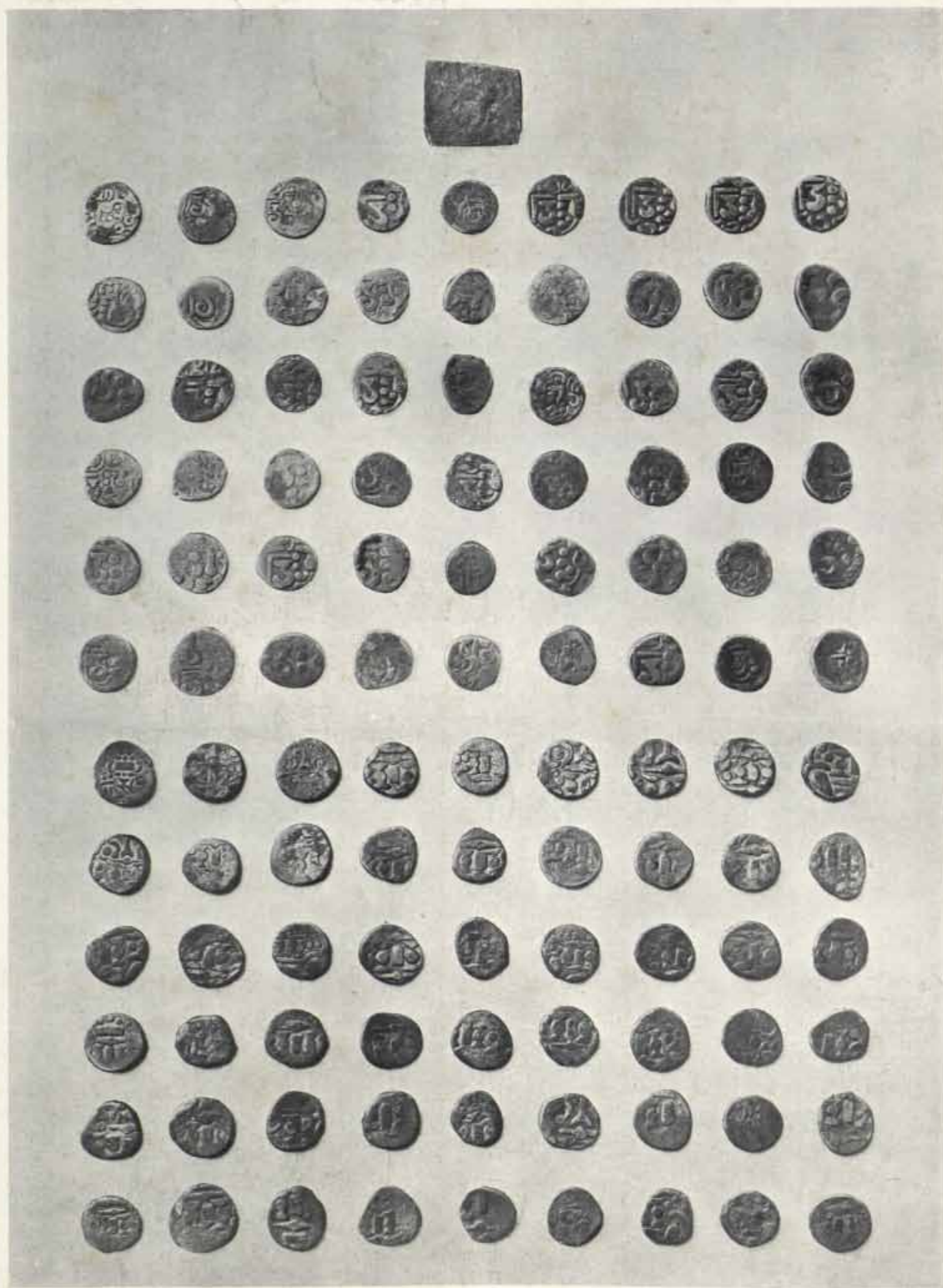
(b) Monastery No. 11: Staircase in S.W. Corner of Verandah, leading to Upper Floor, with Remains of a Window.



(c) Monastery No. 11: Holes for Beams in the Wall of the S.W. Corner of Verandah.



(d) Monastery No. 11: S.E. Row of Cells, with Bases of Pillars in Front of Verandah; and a Stone Pillar *in situ*.



A Hoard of 54 Billon Coins from Monastery No. 10; and (*top of plate*) a Square Gold-plated Copper Coin from Chaitya Site No. 12; all of the Hun Rulers; showing reverse (*top half of plate*) and obverse (*bottom half*).



(a) Semarsal: Prakrit Inscription in Brāhmī Characters of the 1st-2nd Century A. D.

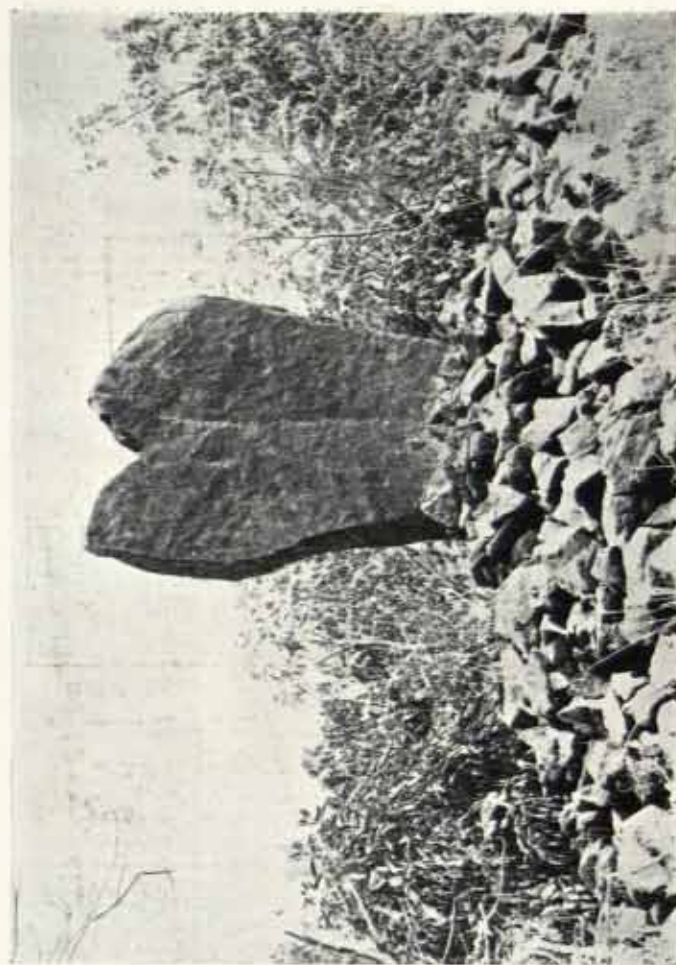


(b-c) Nanhwarā, Jubbulpur District: Two Stone Images of Jaina Saints found under the *dēbris* of a hut; probably Portions of a Temple Door of the 11th Century A. D.

EXPLORATION: CENTRAL CIRCLE.



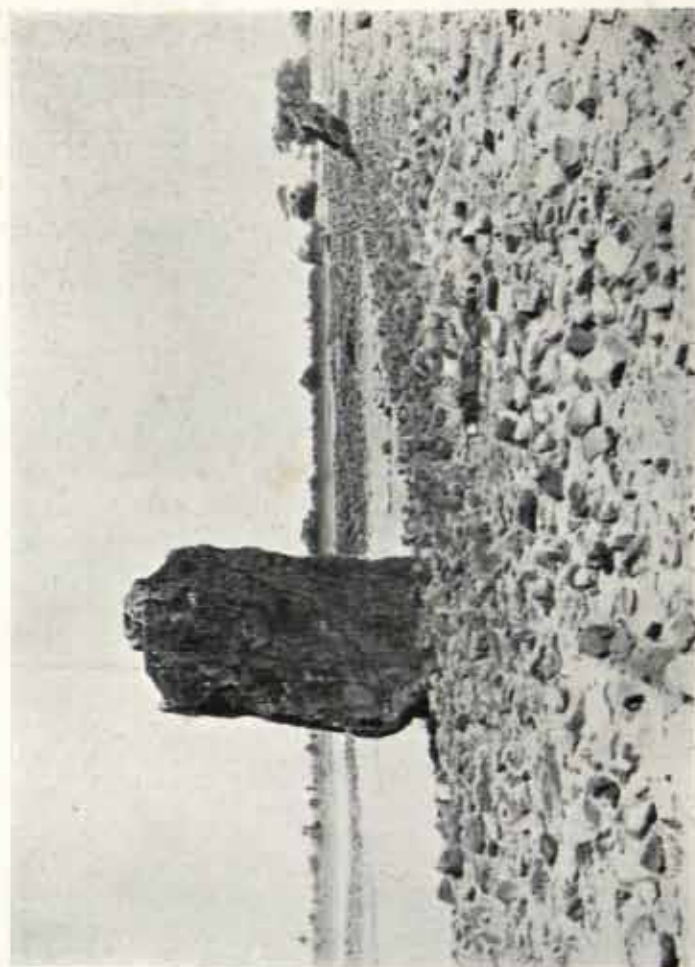
(a) Pipulgaon, District Bhandara: A *Dolmen*, consisting of a Square 'Chamber' formed by Megaliths.



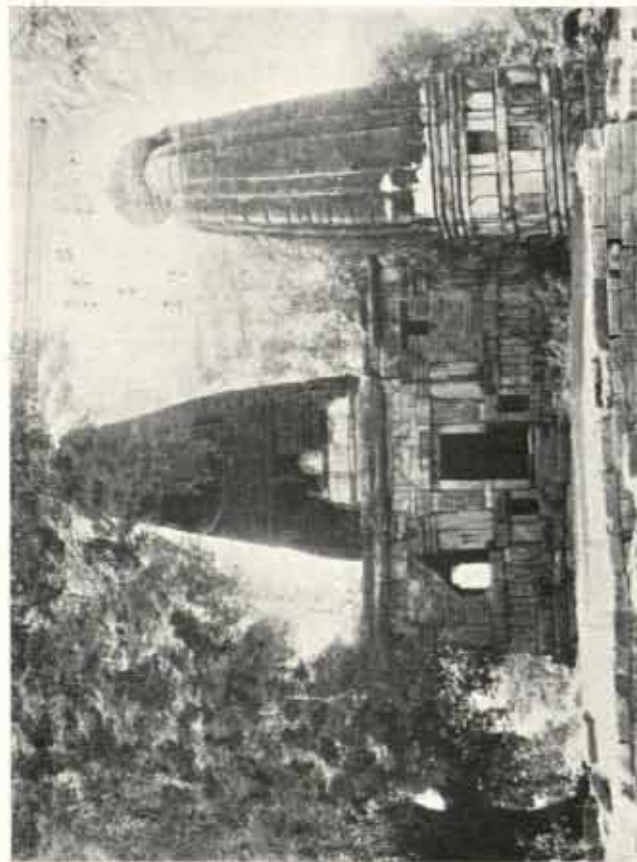
(b) Kabrabhat, District Drug: Megalith, surrounded by Heaps of Stones; perhaps a Burial Place; of unknown Age.



(c) Majagahan, District Drug: Rows of 'Burials' similar to that in fig. 4; showing unshaped Boulders some of which are still Upright.



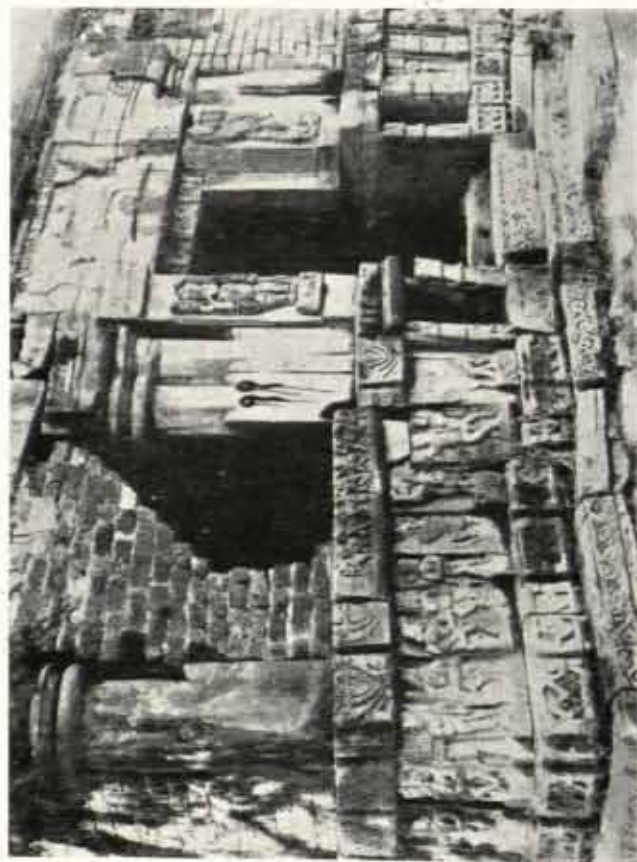
(d) Chirehuri, District Drug: More Megalithic Monuments like those in figs. b and c; showing large Area with heaped up Stones, and a few Huge Boulders.



(a) Narayanpur, Raipur District: The Vishnu Temple; General View, showing Front and Two *sikharas*; the right-hand one being a Shrine of Śiva.



(b) Detail of the Vishnu Temple shown in fig. a: Sculptures on North Wall of Larger Shrine.



(c) Entrance to the Vishnu Temple shown in fig. a: with Sculptured Pado in ruined Condition.

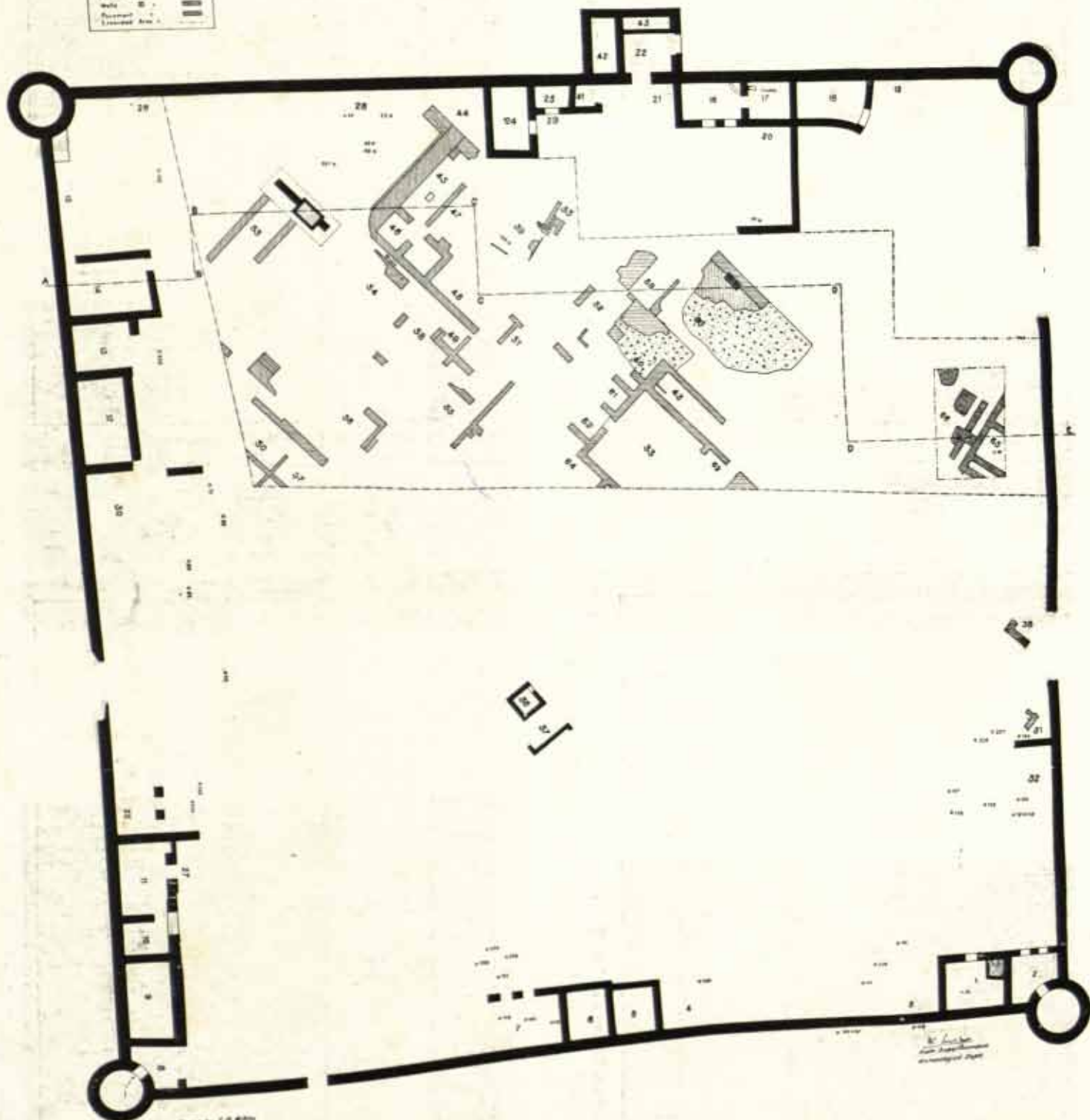


(d) Vishnu Temple at Narayanpur: The Ornamented Doorway leading to the Sanctum.

ARCHAEOLOGICAL EXCAVATIONS
AT
THEH-POLAR, DISTRICT KARNAL
1933-34

Scale 1/2 inch = 10 feet
2 inches = 100 feet

Representations	
Walls	—
Columns	—
Doors	—
Windows	—
Stairs	—
Roofs	—
Ground	—
Water	—
Excavated Area	—



Drawn by T.A. & Co.
(Architects & Surveyors)

EXCAVATION: THE POLAR.



(a) Mound C: View before Excavation.



(b) Mound C: Structures of First Stratum after Excavation.



(c) Mound C: View of Structures of the Second Stratum.



(d) Mound C: Part of Third Stratum exposed.



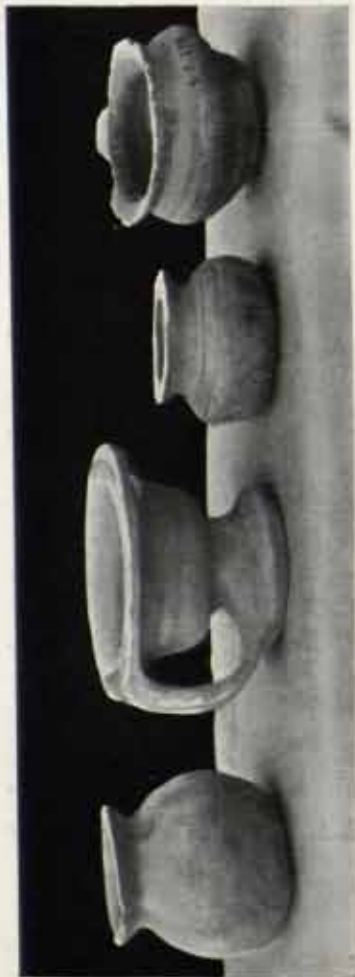
(e) Mound B: Showing Excavations in Trench A.



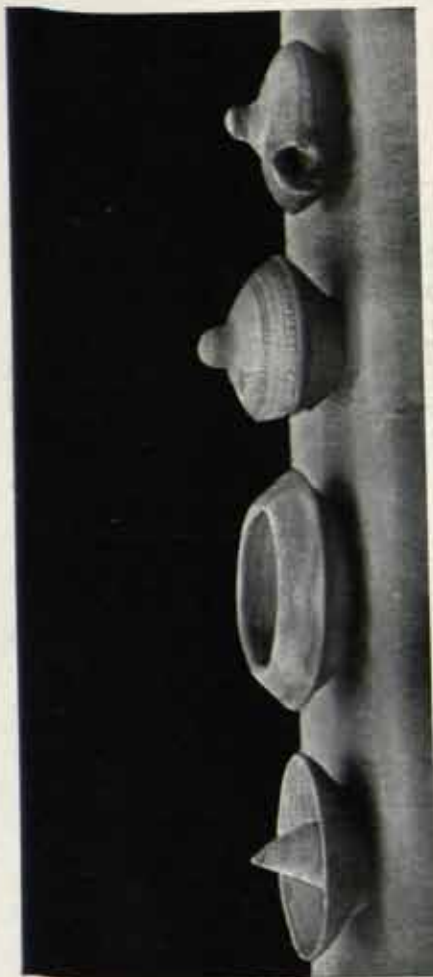
(f) Mound B: Trench B; showing Remains partially exposed.



(a)



(c)



(b)



(d)



(e)



(f)

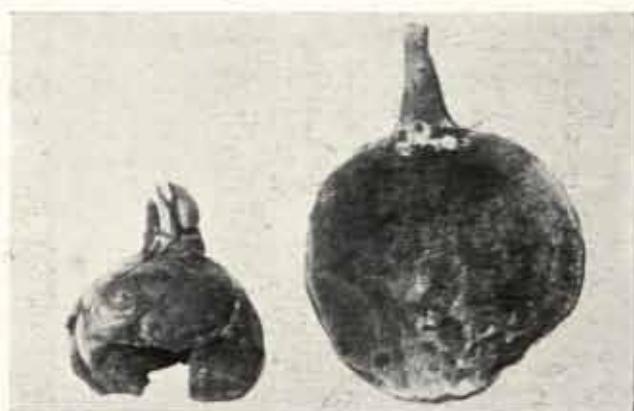
Mounds B and C: Specimens of Pottery found during Excavations.

EXCAVATIONS: THE POLAR.



(a)

(b)

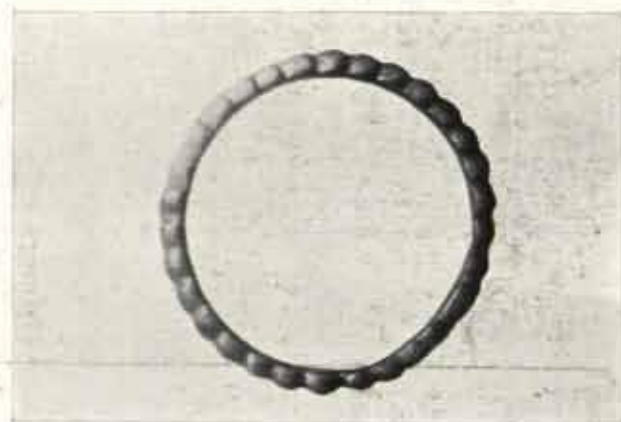


(c)

(d)



(e)



(f)



(g)



(h)



(i)



(j)

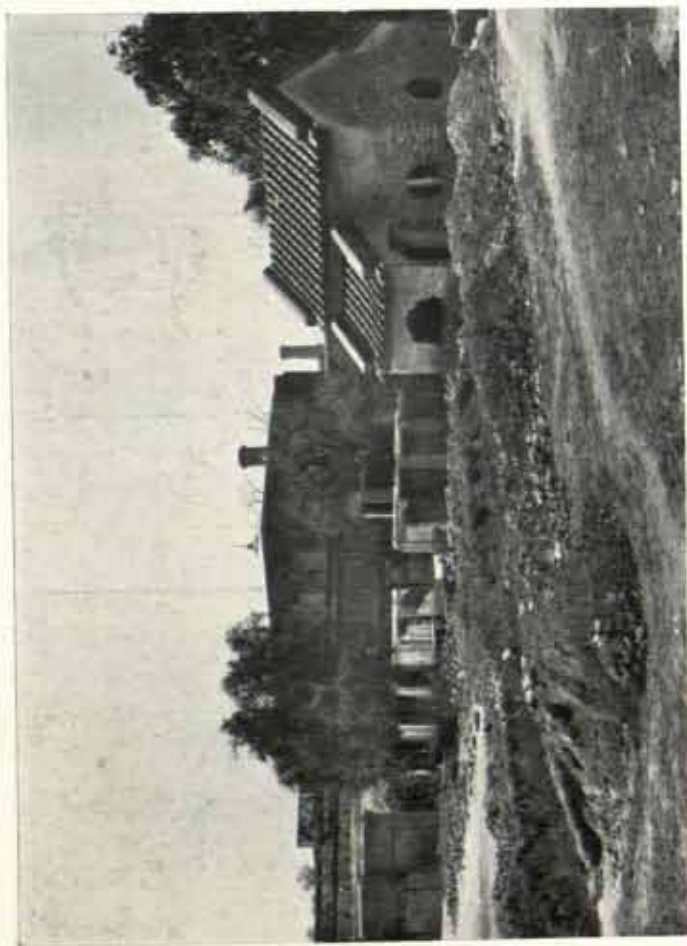


(k)

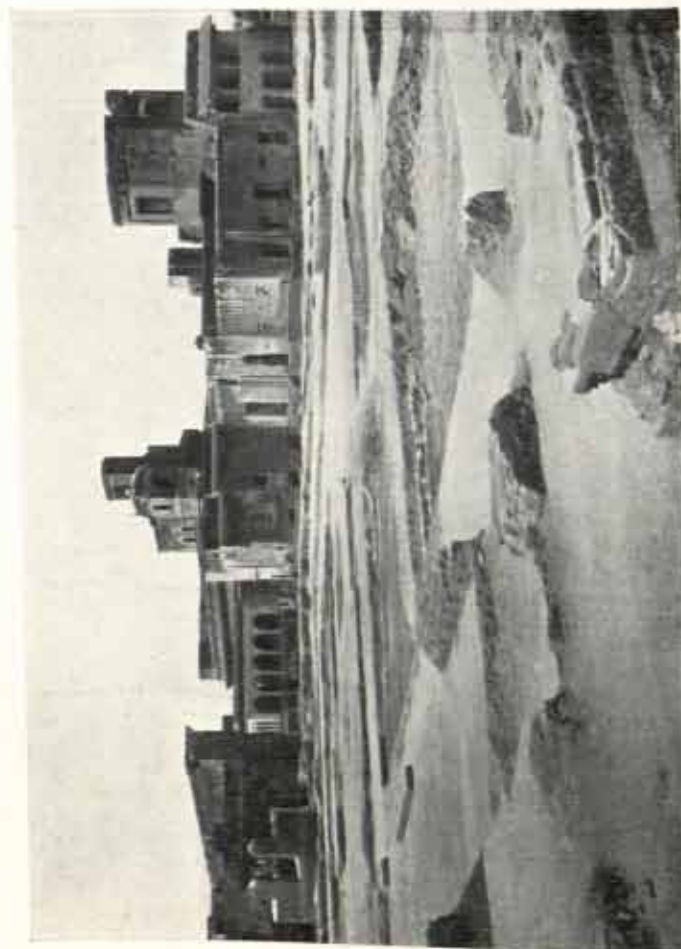


(l)

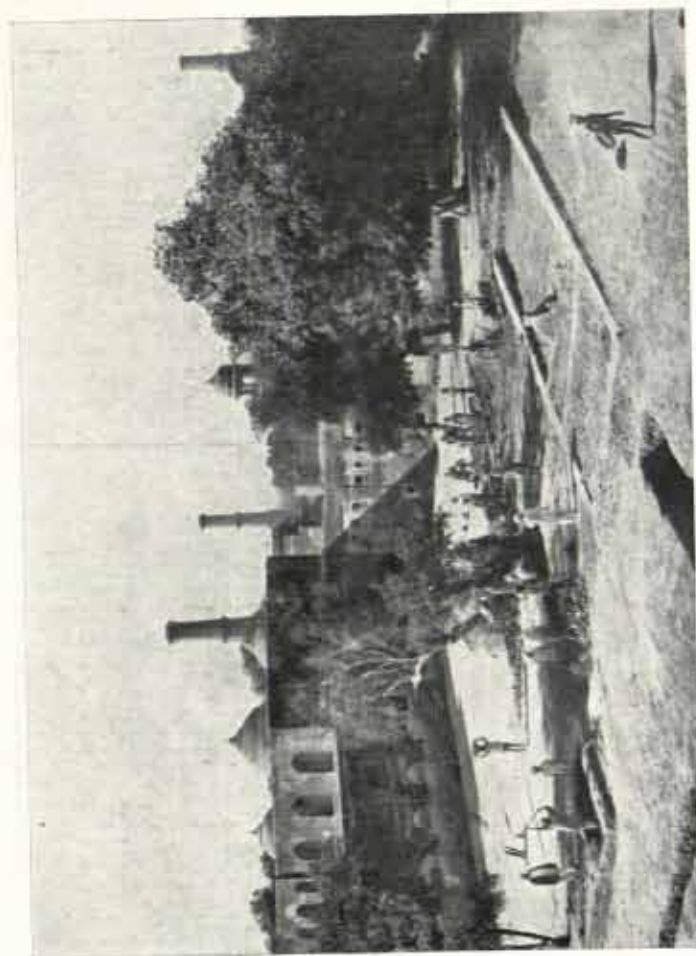
EXCAVATIONS: LAHORE FORT.



(a) Area to the S. of the *ḥammāms*, before Excavation; from S. E.



(c) Area to the N. of the *ḥammāms*; showing Excavated Remains; from S. E.



(b) The Area shown in fig. a, during the Excavations in 1930-31; from S. E.



(d) Excavations near the N. E. corner of the Diwan-i Am; showing Work of 1930-31, from N. E.



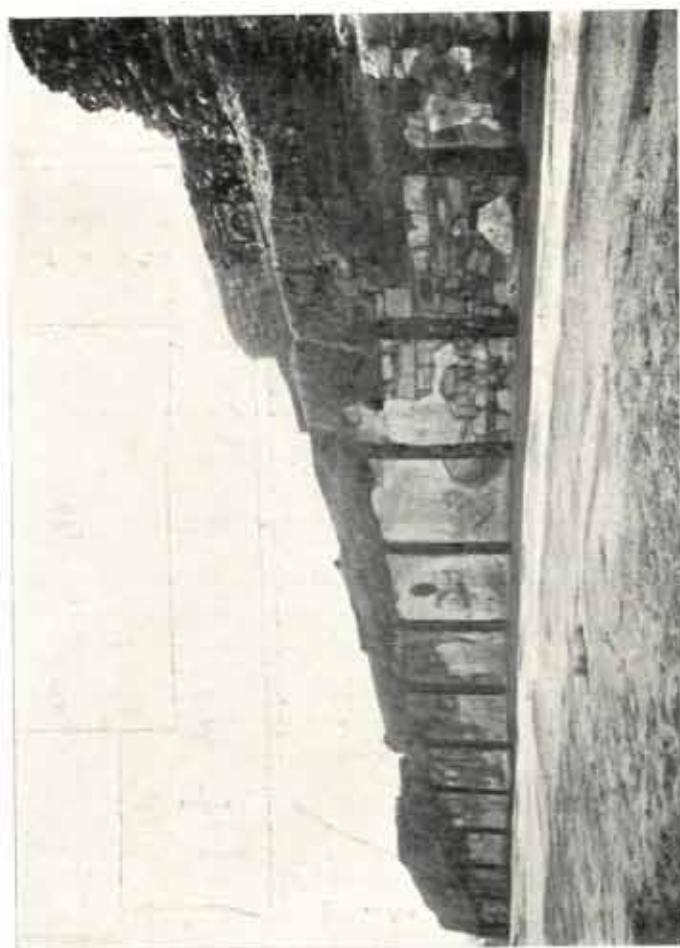
(a) Lahore Fort: West Wall, showing Plinth exposed during 1931—32.



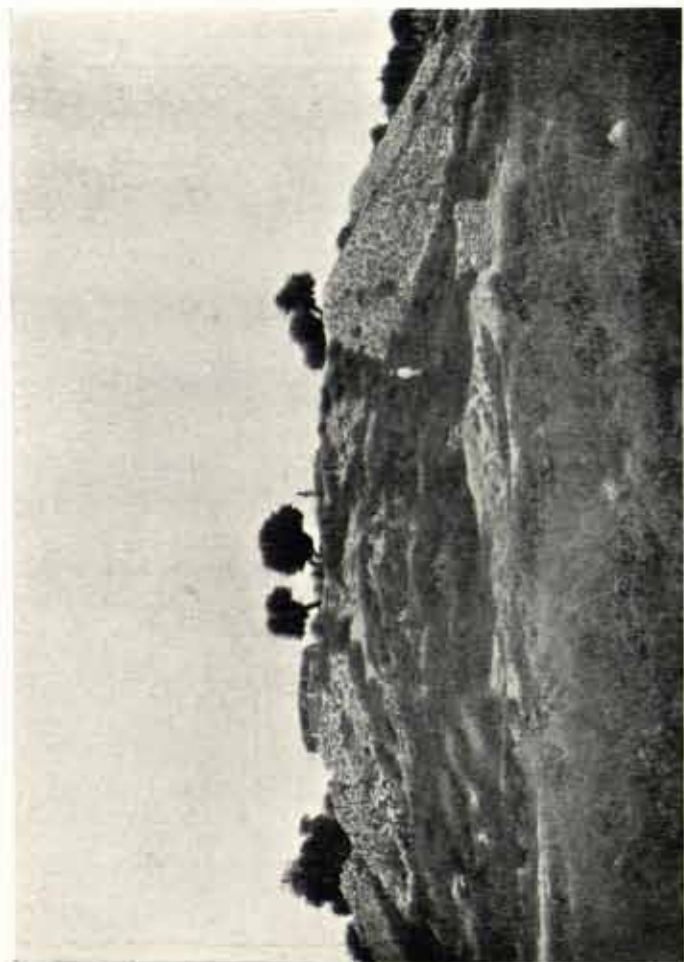
(c) Bijai Mandal, Delhi: View of N. Side, before Excavation.



(b) Lahore Fort: Excavation in Progress during 1931—32 West of the Mosque Courtyard



(d) Bijai Mandal: View of N. Side, after Excavations of 1930—31.



(a) View of E. Side of Mound before Excavation.



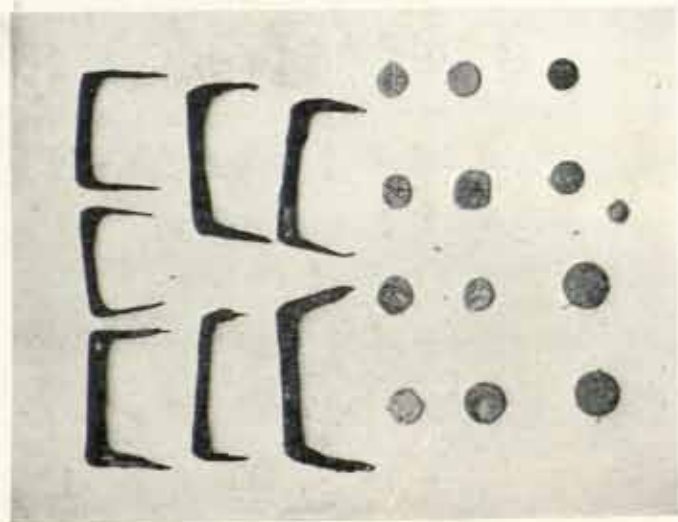
(b) East Side of Mound, after Excavations in 1930-31.



(c) View of West Side, before Excavation.



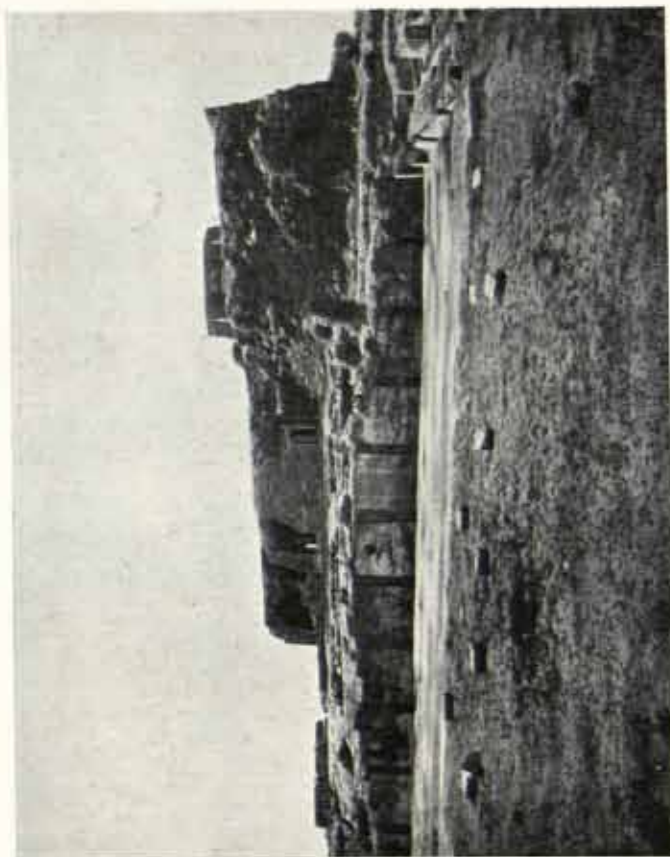
(d) West Side of Site, after Excavations in 1930-31.



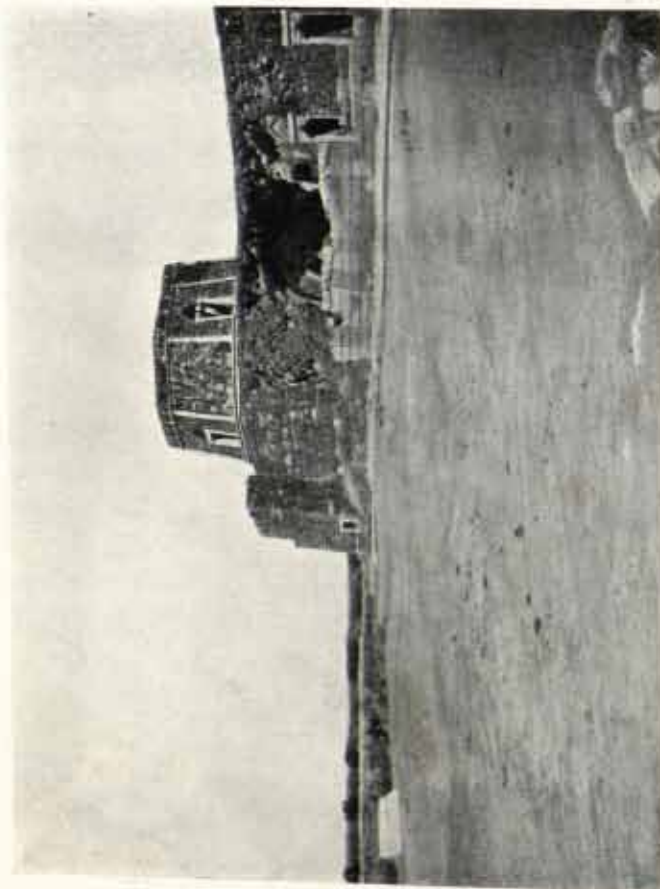
(a) Iron Dowels, China Discs and Stone Balls found during Excavations.



(b) Fragments of China Dishes, and of so-called *Ghori* Plates; and Lamps.



(c) The Area North of the Eminence: with Rows of Pillar Bases; Probably the Hall of the Thousand Pillars.



(d) Courtyard to S. of Stone Hall; showing *dāsā* Stones now exposed.



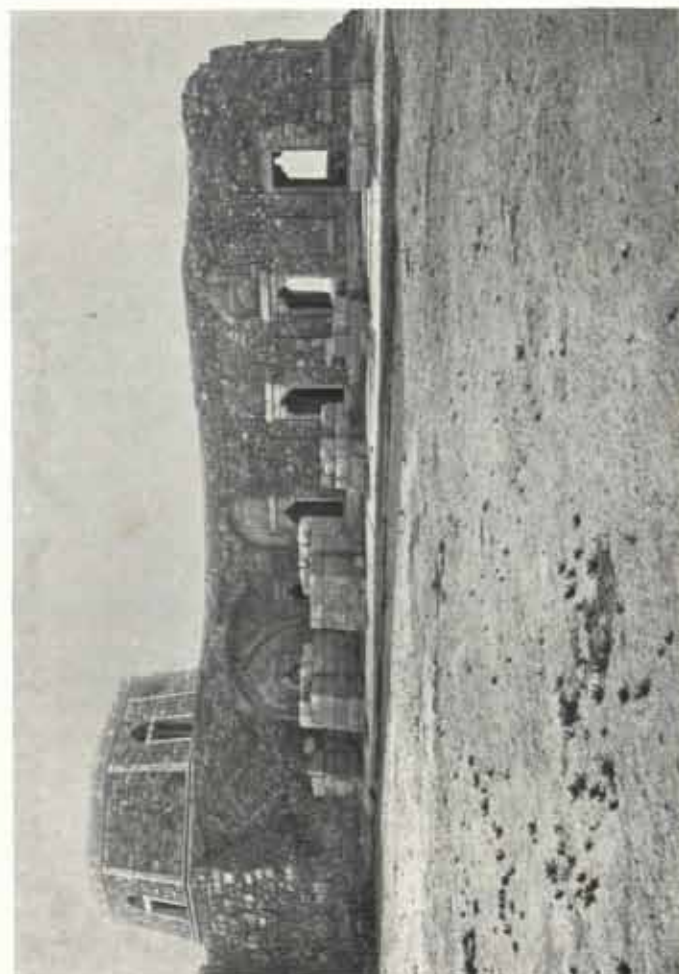
(e) Ruins of a *lotus* hall exposed on the W. Side.



(a) The Ruins of Walls and Chambers exposed at the N.E. Corner of the "Hall of the Thousand Pillars".



(b) View of *pakka* Ramp, Entrance Drive, Drains *etc.*, on the S.E. Side.



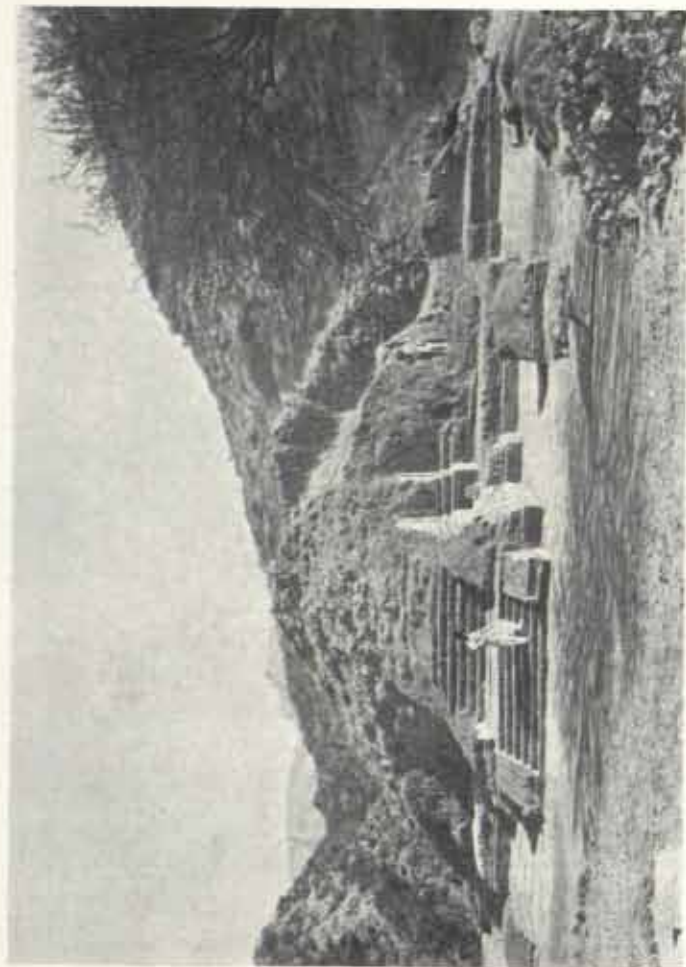
(c) The Central Stone Hall on the Enlincence; inside which were found the two Treasure Walls.



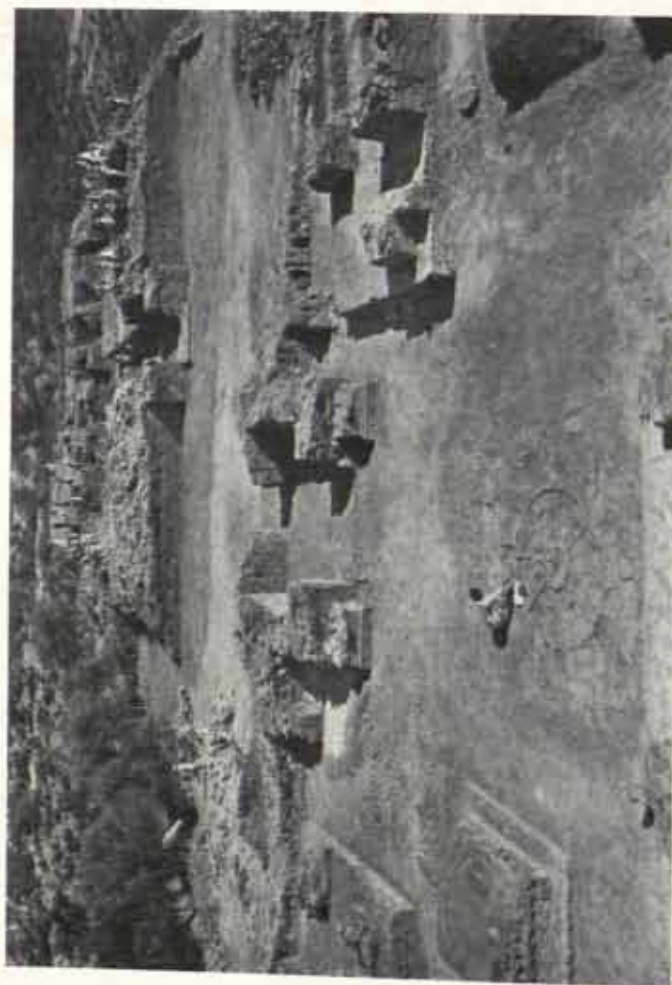
(d) N. Side of Central Stone Hall; showing Brackets which probably supported the Royal Balcony facing the Thousand-pillared Hall.



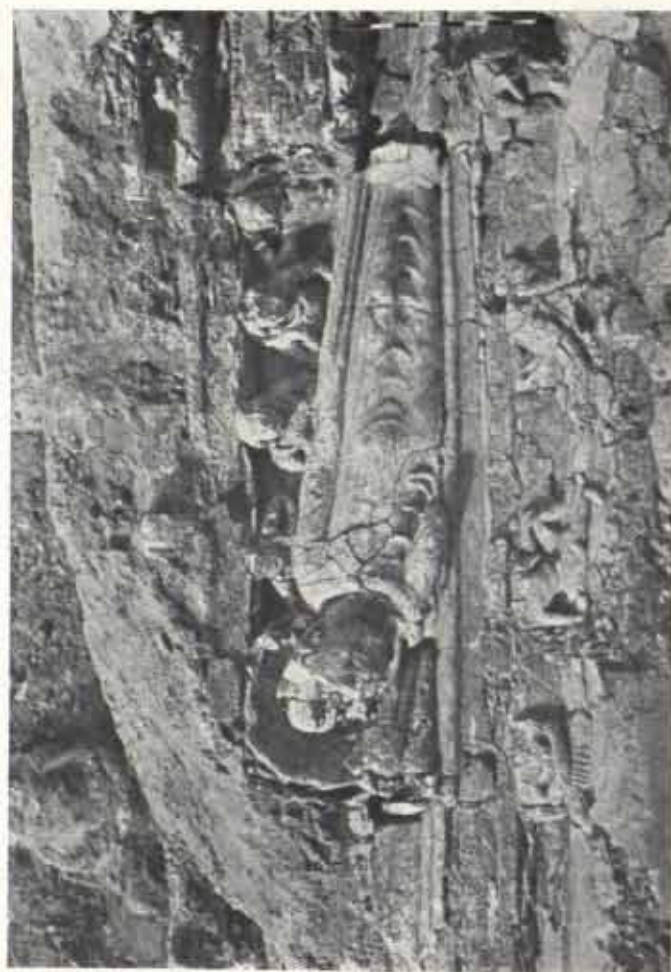
(a) View of the Site at Bhamāla from the S.; showing River sweeping round Foot of the Hill.



(b) Main Stūpa at Bhamāla from S.W.; after Excavation.



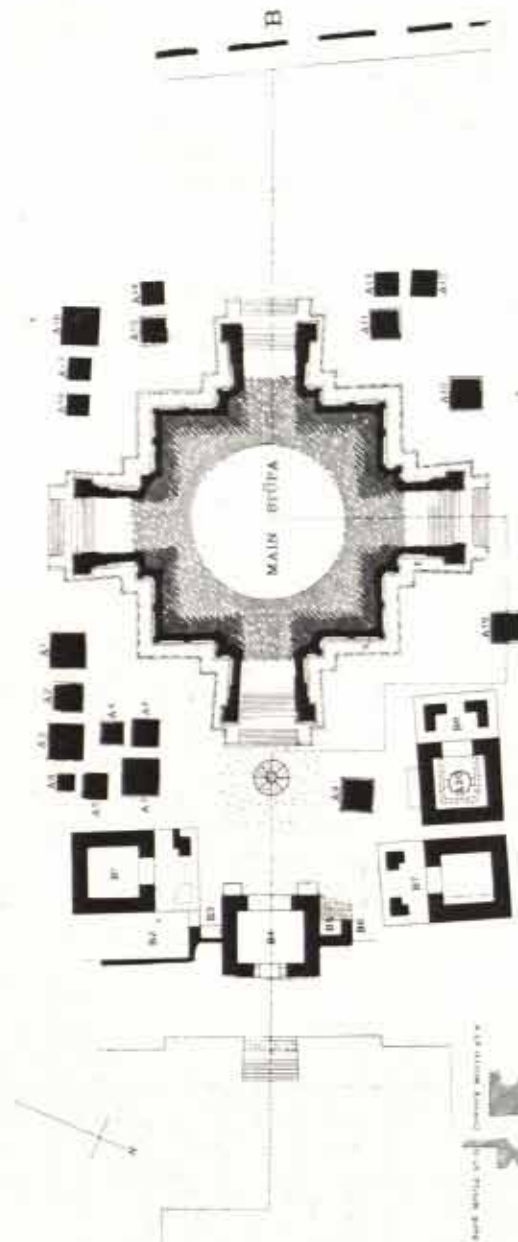
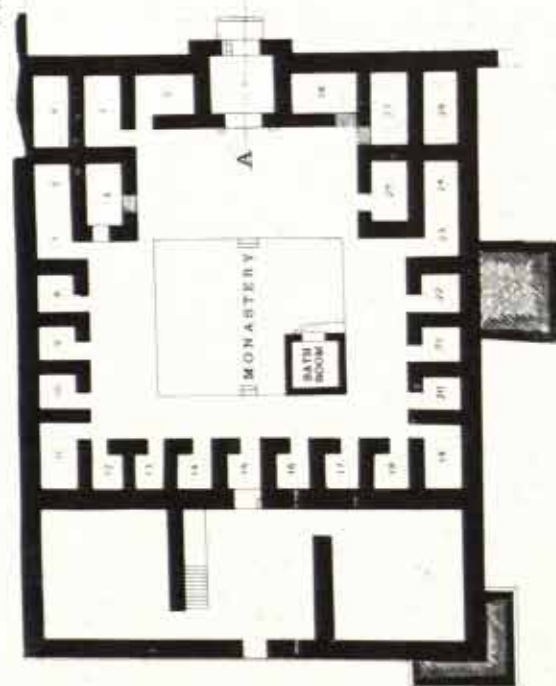
(c) View of Monastery at Bhamāla as seen from the Stūpa.



(d) Stucco Figure of the dying Buddha at Bhamāla.



(a), (b) and (c) Three Stucco Heads from the Blumilla Monastery.



SECTION ON A-B

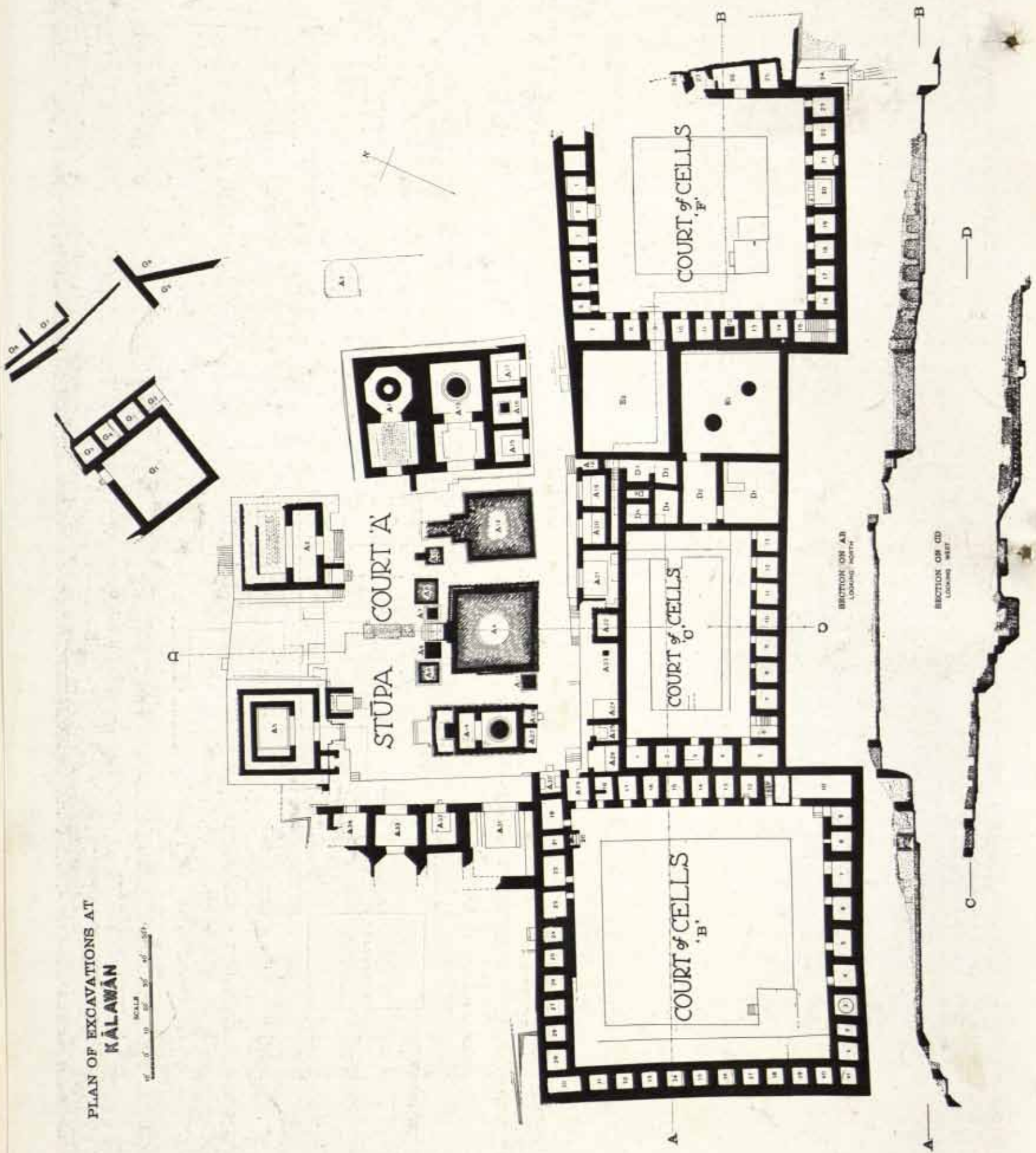
Small Stupa in the Courtyard

SCALE 0 10 20 30 40 50 FT

A

B

PLAN OF EXCAVATIONS AT
KĀLAWĀN



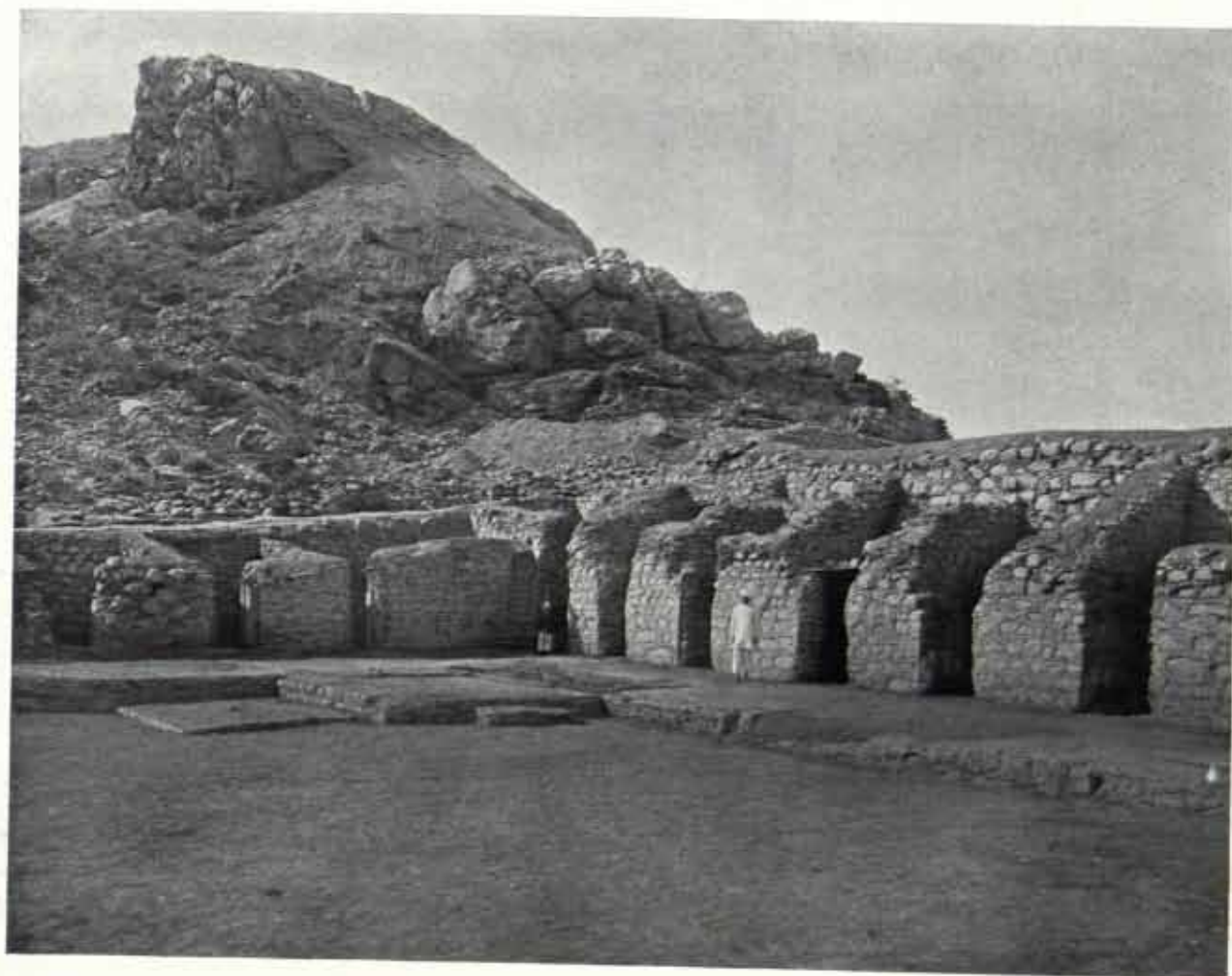
30-31



View of Eastern Half of Buddhist Monastery at Kalawan as seen from the Hillside above it on the South.



(a) Kālawān: The Main Stūpa A 4, and other Monuments in the Stūpa Court; from N.E.



(b) Kālawān: View of S.W. Corner of Court of Cells F.



(a) Stupa-shaped Relic Casket covered with Gold-leaf, from Stupa A 1, Kālawān.



(c) Stucco Head of Bodhisattva from Kālawān.



(d) Gandhāra Stone Relief of Asotie in his Hut, from Stupa Chapel A 1, Kālawān.



(b) Relics from Stupa A 1: including Gold-leaf covered Casket, Rosettes of thin Gold-leaf and Silver, Beads, Precious Stones, etc.



(e) Gandhāra Stone Relief depicting 'The Dream of Queen Maya', from Stupa Chapel A 1, Kālawān.



(a) and (b) Two Terra-cotta Portrait Heads from Chamber F 12 at Kālawān.



(c) Clay and Terra-cotta Group in Chapel 20, Court B, at Kālawān

EXCAVATIONS: TAXILA.



(a) Head of Buddha, from the Group illustrated in fig. c of previous Plate.



(b) Head of Bodhisattva, from the same Group as fig. a.

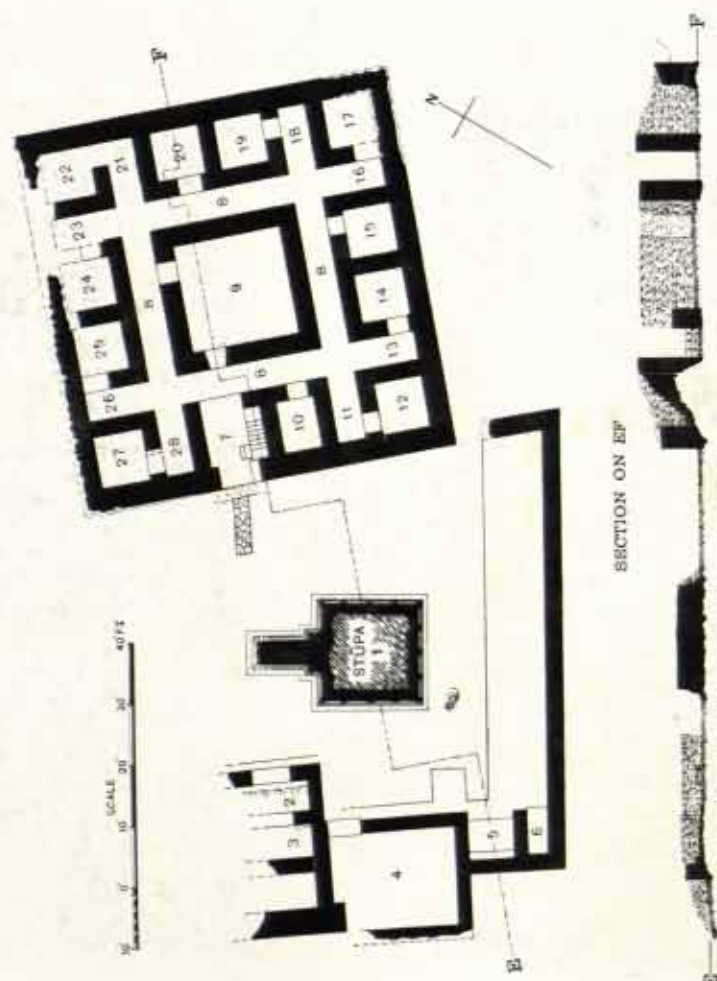


(c) Head of a *deva*, from the same Group as fig. a.



(d) Head of a Monk, from the same Group as fig. a.

EXCAVATIONS: TAXILA.



(a) Plan of Building H and Uppermost Terrace at Kālawān.



(b) A Corridor in Monastery H, Kālawān; looking South.



(a) A *stupa* in an 'Envelope', in a field near Thiipyitsaya Village, Pagan.



(b) An other 'Encased' *stupa*, found N. of Tawyagyaung Monastery, Thiipyitsaya, Pagan.



(c) A Terra-cotta Votive Tablet found among the *debris* of the *stupa* shown in fig. a.



(d) Medieval Image of the Buddha, found in the Relic Chamber of the *stupa* shown in fig. a.



(a) An 'Encased' *stūpa* near the Ścinnyet-Nyi-Ama Temple, Myinpagan.



(b) An Earthenware Vessel, found in the Relic Chamber of the *stūpa* shown in fig. a.



(c) Inscribed Terra-cotta Votive Tablet found in the Relic Chamber of the *stūpa* shown in fig. a.



(d) Another Terra-cotta Votive Tablet found in the *stūpa* shown in fig. a.



(e) A Miniature *stūpa* in Stone, with the Silver and Gold Relic Caskets found in it; from an other 'Encased' *stūpa* near Pagan.



(a) Stone Sculpture found at a Mound S. of the Taw-ya-gyauing Monastery, Thipyitsaya, Pagan.



(b) Bronze Image of a Bodhisattva, found near Thipyitsaya.



(c) Stone Sculptured Slab with the Buddha in the Centre, found near Thipyitsaya.



(e) Two Stone Images of the Buddha in the *bhavisparśa-mudrā*, found in the Kubyauk Temple, Thipyitsaya.



(d) Sculptured Stone Slab with the Buddha in the Centre, from Thipyitsaya.



(f) A Bull-heart shaped Vessel which contained Mercury, from Thipyitsaya.

EXPLORATION: BURMA.



(a) and (b). Outline Copies of Wall-paintings in the Abéyadana Temple, Myinpagan;
representing a God (above), and Padmapāṇi (below) with two Attendants.



(a) Outline Copy of a Wall-painting in the Abeyadana Temple, Myinpagan: a God.



(b) Another Mural Painting in the Abeyadana: the Goddess Tara with Two Hands



(c) Wall-painting in the Abeyadana: An Unknown Goddess with Six Arms, seated in a Cave.



(d) The Tale of the Ascetic, the Kinnaris and the Spider: The first Panel of a Series of Wall-paintings in the Abeyadana.



(a) The Same Tale as shown in Plate CII, d: The Ascete, seduced by the beautiful *Kinnari*, kills the Monstruous Spider; from a Wall-painting in the Abéyadana Temple.



(b) The last of a Series of Wall-paintings in the Abéyadana Myinpagan, illustrating the Tale of the Ascete and the Beautiful *Kinnari*: The Hermit, now a Father of several Children lives with his Wife in a Cave.



(c) Copy of another *al secco* Wall-painting in the Abéyadana: A Goddess with Two Snakes, and a Devotee.



(d) The Tāntric Element in the Wall-paintings of the Abéyadana: A God with a Terriific Appearance, in a Cave,



(a) Outline Sketch after an *al secco* Mural Painting in the Sanctum of the Abéyadana Temple, Myinpagan: Vishnu on Garuda; the latter with two Snakes.



(b) For Comparison with the Outline Drawings: Photograph of the same Panel as fig. *d* below; showing the Technique of the Paintings.



(c) Hindu Gods in the Sanctum of a Buddhist Shrine: A Panel showing Brahmā on his Goose, in the Abéyadana Temple.



(d) Outline Copy of the Wall-painting reproduced in fig. *b* above: Śiva on his Bull, depicted in a Buddhist Shrine of the 11th Century A. D.



(a) Lower Part of a Large seated Buddha Statue found in a *stupa* excavated South of the U Kywet Monastery, Myinpagan.



(b) Image of the Buddha in the *bhūmisparśa-mudrā*, with Two Disciples; from Myinpagan.



(c) and (d). Two Inscribed Terra-cotta Votive Tablets discovered in the Relic Chamber of the *stupa* shown in fig. a above.



(a) Front View of the Kyazin Temple, Myinpagon.



(b) Terra-cotta Votive Tablet recovered from the Relic Chamber of the Kyazin Temple, and assignable to the Time of King Anoratha (1044—1077 A. D.).



(c) Another Terra-cotta Votive Tablet found in the Kyazin, and bearing an Inscription of the "Dispenser of Truth", King Anoratha.



(a) Stone Image of the Buddha in the *bhūmisparśa-mudrā* (ht. c. 3'), found in the Village Temple of Myinpagan; 11th—12th Century A.D.



(b) A Votive *stupa* in Stone, found in the Relic Chamber of a Temple in the Village of Myinpagan. (Ht. 1' 10").



(c), (d) and (e). Terra-cotta Votive Tablets found in a Temple S. E. of the Nagayon, Myinpagan; bearing *nāgarī* Legends on the Obverse, and hand-written Texts in Pāli, in Burmese Characters of the 11th—12th Century A. D., on the Reverse.

EXPLORATION: BURMA.



(a) A Plaster Image of a Bodhisattva, found in a Ruined Small Shrine near the Nagayon, Myinpagan.



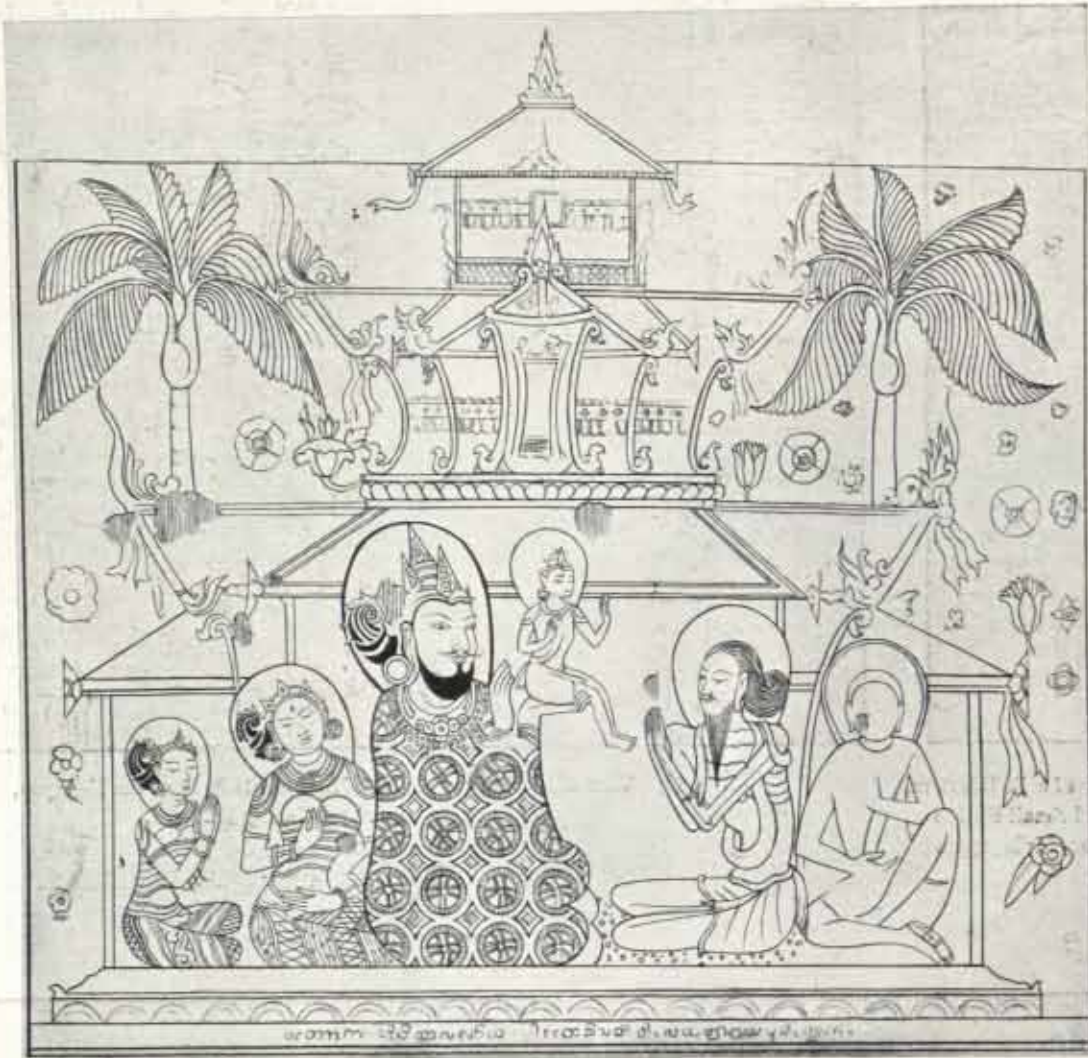
(b) View of some of the Ancient Monuments S. E. of the Nagayon, Myinpagan, excavated during 1931-32.



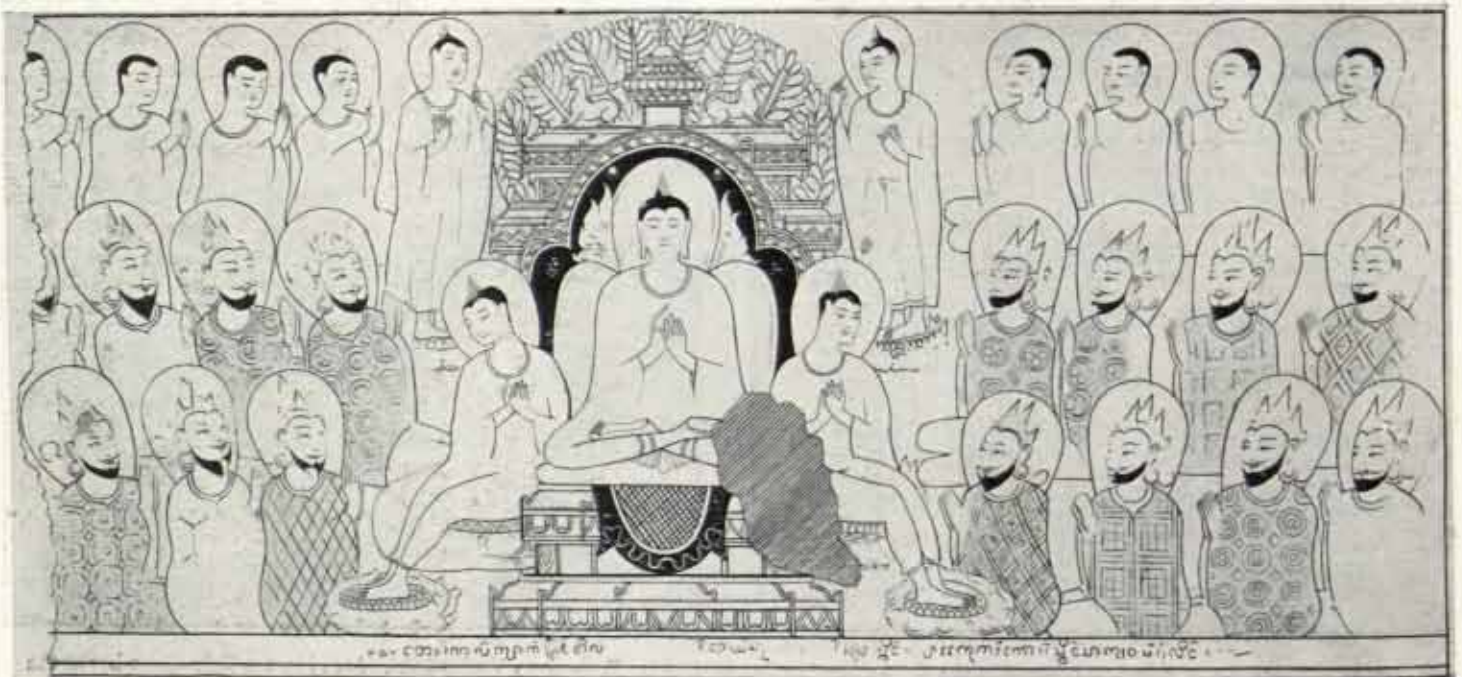
(c) A Miniature Stūpa in Stone found in the Relic Chamber of the Middle Shrine in fig. b above.



(d) Terra-cotta Votive Tablet found in the Relic Chamber of the Central Stūpa shown in fig. b; with an Inscription in Pāli of the "Chief Queen Trilokavataṃsakā".



(a) Outline Copy of a Wall-painting in the Patothamya Temple, Pagan: The *rishi* foretells the Future Greatness of Prince Siddhārtha, shown to him by the King and the Queen; on 11th Century Painting with an Old Môn Legend below the Panel.



(b) The *yamaka pāṭihāriya* of the Buddha: Another Wall-painting in the Patothamya Temple, showing the Enlightened One among Monks and Ascetics; with an Inscription in Old Môn.



(a) Wooden Image of the 14th Century A. D., representing a Crowned Buddha; found in a Cave Temple, Kyaukse.



(b) Another Wooden Image from the Cave Temple at Kyaukse: A Buddha with a conical Protuberance supported by Elephants.



(c) An Image of the Buddha in Royal Attire; found in a Ruined Shrine in the Pyezu Quarter, Pagan.



(d) Another Image from the Ruined Shrine in Pagan: The Buddha in the Parileyyaka forest with his sole Companion, the Elephant; with a Burmese Inscription of the



(a) Seated Bronze Image of the Buddha discovered in the Pyezu Quarter, Pagan; with an extra Thumb in the Left Hand.



(b) The Buddha Preaching: Another Bronze Image found together with figs. a, c and d.



(c) Stone Image of an arhat, from the same Place as fig. a.



(d) Bronze Image of a Buddhist arhat from Pagan; with a Burmese Legend dated 1602 A.D.



(e) Copy of a Wall-painting in the Patothamya Temple, Pagan; A 14th Century Work with an Inscription. (See also Plate CIX).

EXPLORATION: BURMA.



(a) A Sculptured Slab found in the Shwezayan Pagoda, Thaton; with Faint Remnants of an 11th—12th Century Inscription.



(b) Another Inscribed Stone Slab found in the Shwezayan Pagoda; with an 11th—12th Century Inscription.

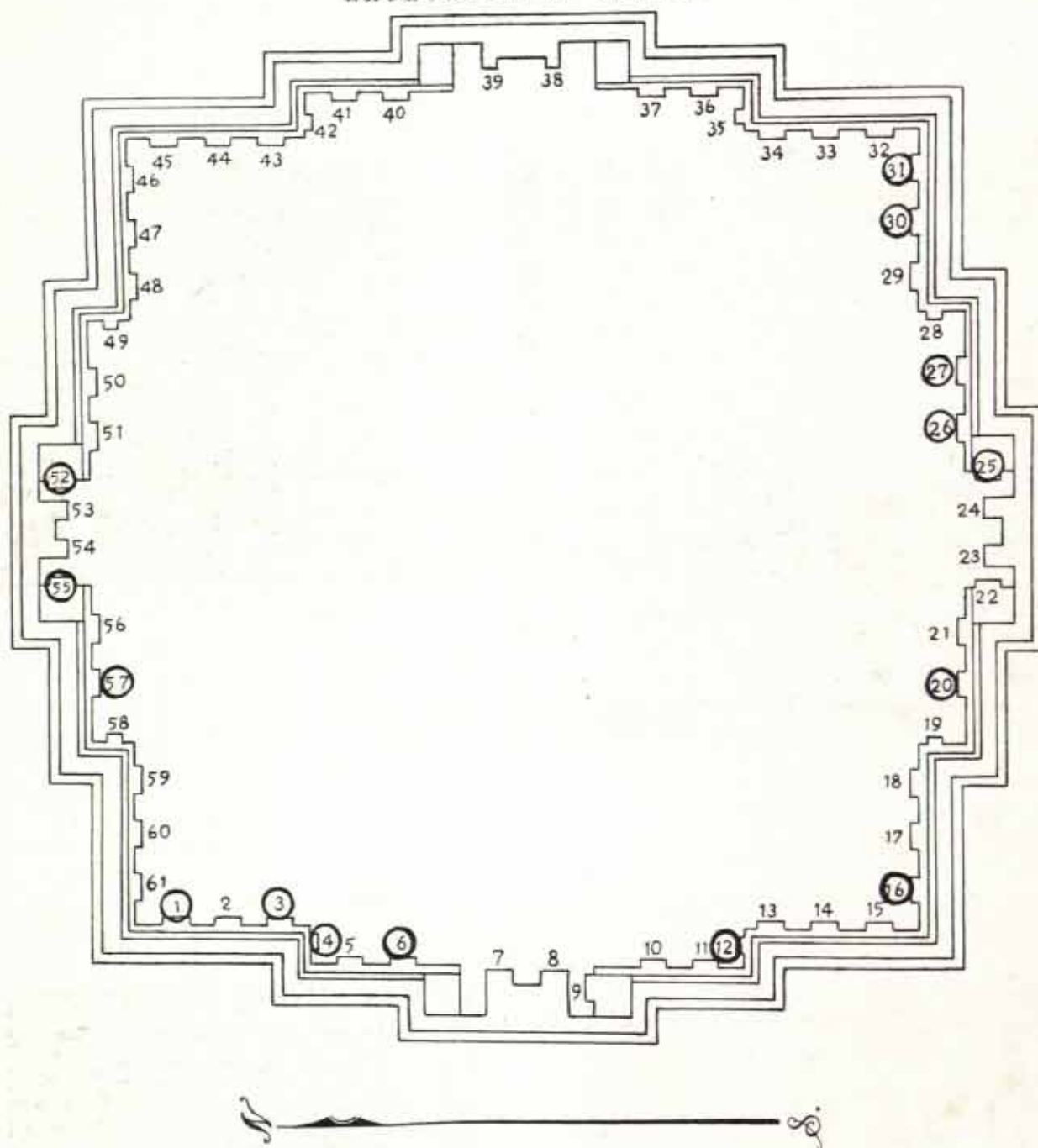


(c) View of the Thagya-paya at Thaton; showing the Situation of the Terra-cotta Bas-reliefs illustrated in Plates CXIII, CXIV and CXV.



(d) A Bronze Image of the Dipankara Buddha, now at Thaton; probably a Work of the 7th—8th Century A. D.

EXPLORATION: BURMA.



(a) Sketch Plan of the Second Terrace Walls of the Thagya-paya, Thaton; showing the Situation of the Terra-cotta Relieves; those still *in situ* being marked by a Circle.



(b) A Terra-cotta Plaque of the Thagya-paya: The *Vessantara Jataka*. (The Outlines have been slightly emphasized in Black Ink).



(c) Another Terra-cotta Plaque from the Thagya-paya: The *Vidhura Jataka*. (The Outlines have been slightly emphasized in Black Ink).

EXPLORATION: BURMA.



(a) A Scene from the *Vidhura Jātaka* illustrated in a Relief Panel on the Thagya-paya, Thaton. (Cp. fig. b). (The Outlines have been slightly emphasized with Black Ink).



(b) For Comparison with fig. a: The *Vidhura Jātaka* illustrated in a Terra-cotta Plaque in the Petleik Temple, Pagan.



(c) Another Terra-cotta Tablet on the Terrace Walls of the Thagya-paya, Thaton: A Scene from the *Mahā-Ummagga Jātaka*.



(d) The *Bhuridatta Jātaka* as illustrated in a Relief on the Thagya-paya, Thaton; a very much damaged Terra-cotta Plaque.



(a) A Terra-cotta Plaque in the Terrace Wall of the Thagya-paya, Thaton; probably a Scene from the *Bhṛidatta Jātaka*.



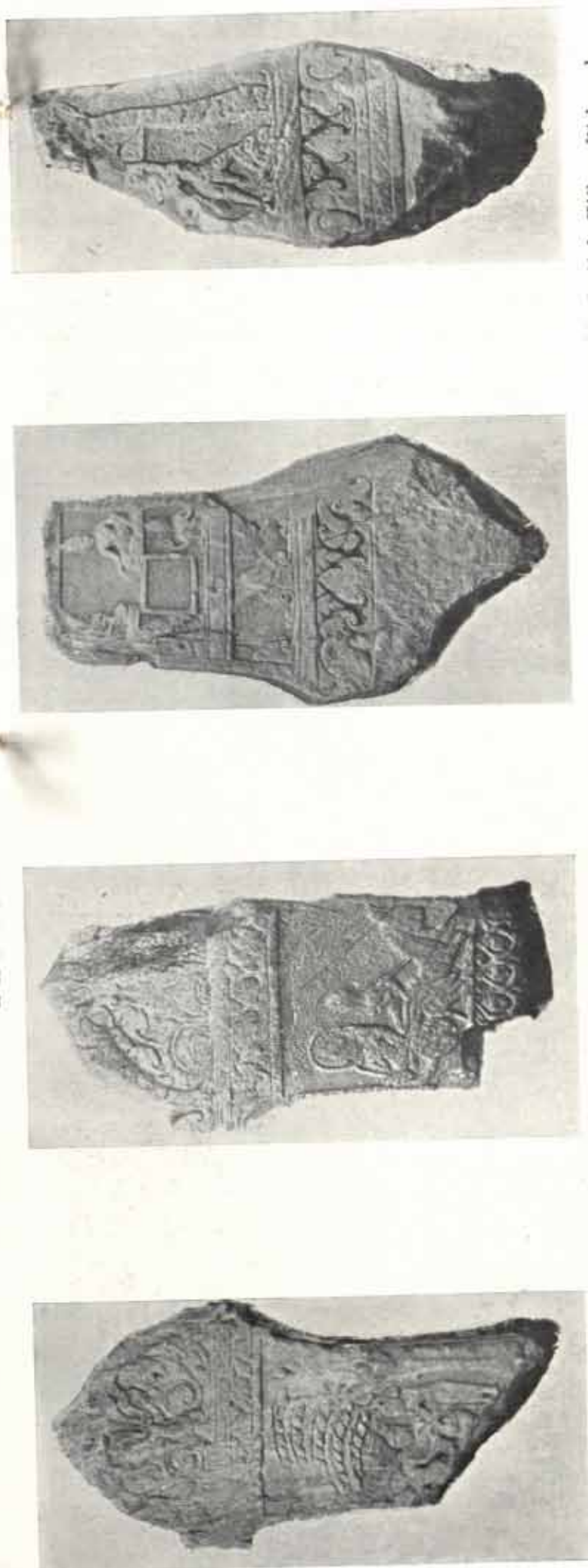
(b) Another Buddhist Birth Story illustrated on the Thagya-paya; A Scene from the *Mahā-Ummagga Jātaka*: The Story of the Four Nobles and Amarā, the faithful Wife of Mahosadha.



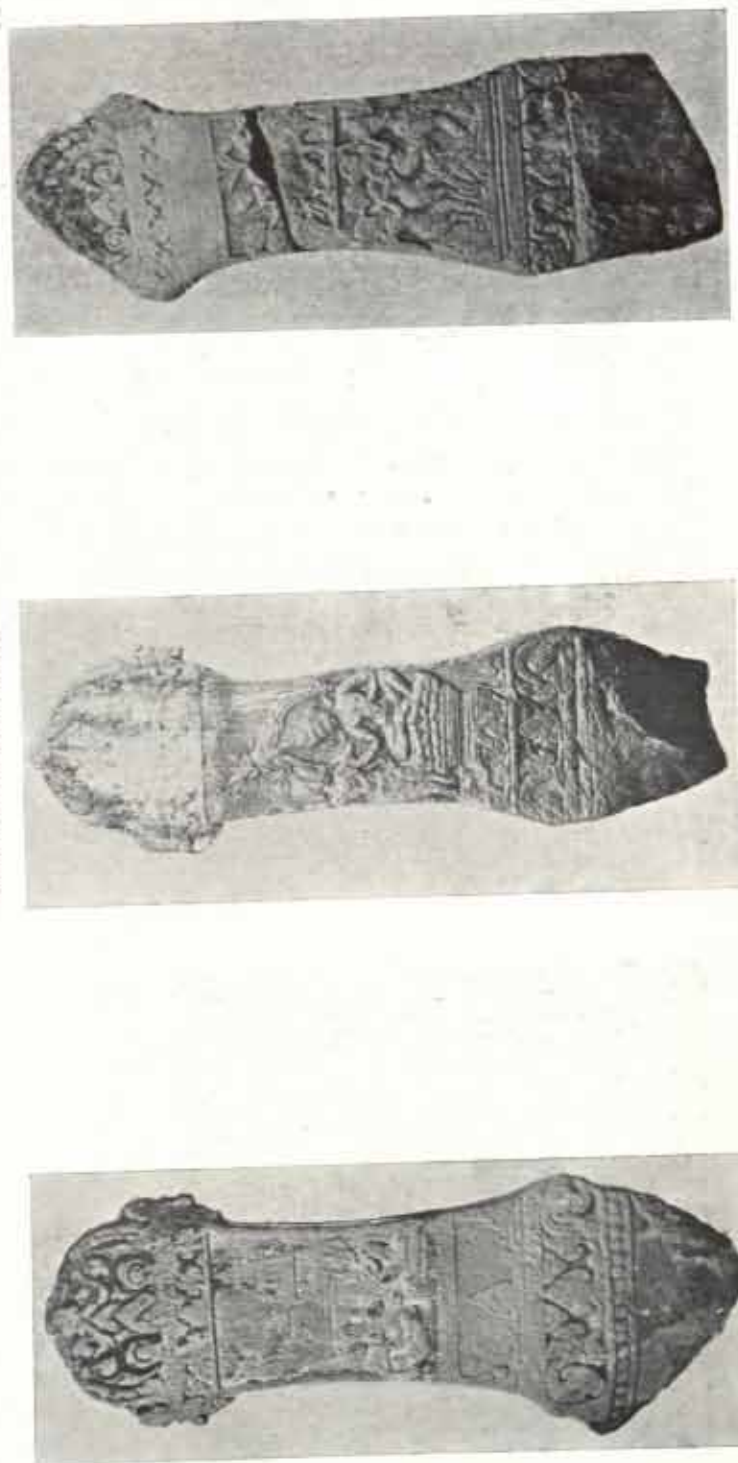
(c) King Mahosadha in Exile in the Potter's House; and his triumphal Return in a Chariot: Two Scenes from the *Mahā-Ummagga Jātaka*, in a Relief at Thaton.



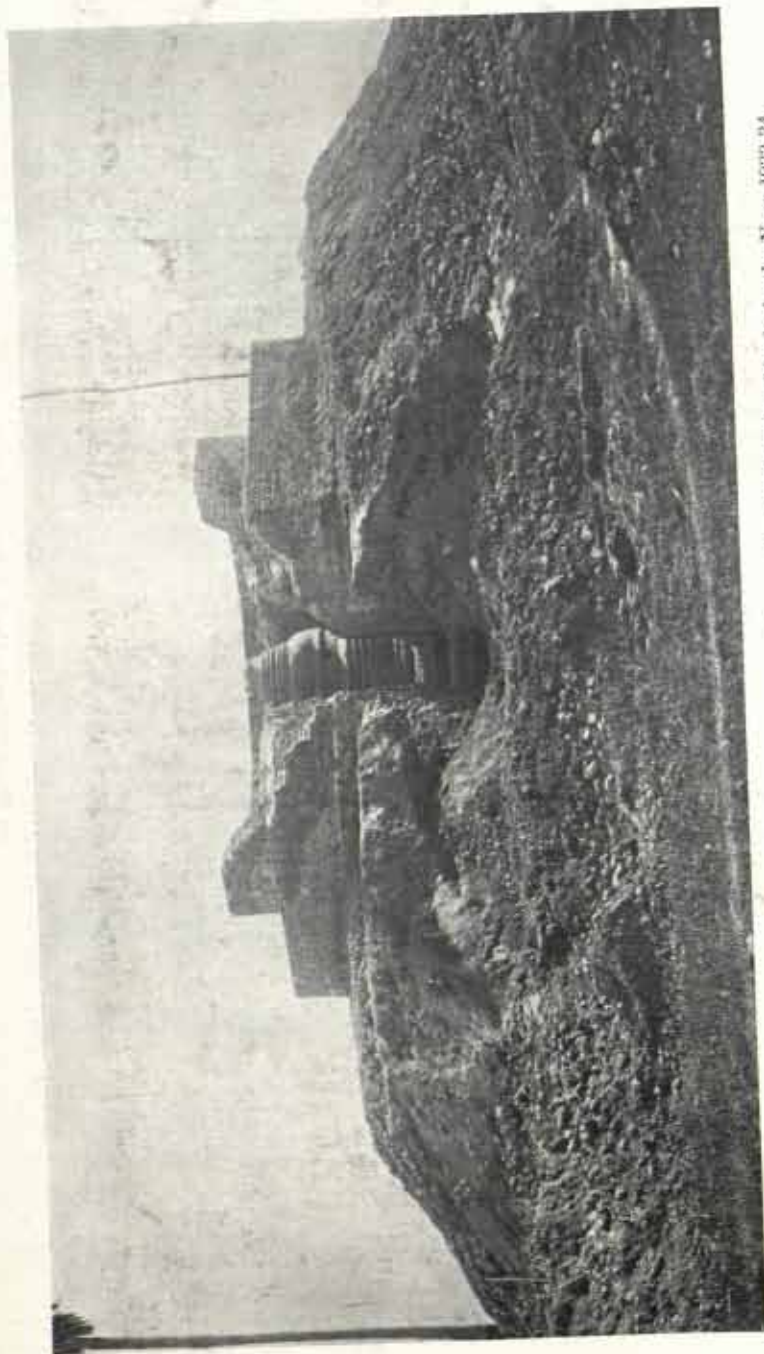
(d) A Plaque from the Thagya-paya, probably illustrating a Scene from the *Temiya Jātaka*: Prince Temiya talking to the Charioteer (?).



(a), (b), (c) and (d) Stone Pillars found in the Kalyāṇī Sīmā, Thuton, illustrating Scenes from the Mahānīpāta Jātaka: (a) the Sīma Jātaka, (b) the Nemi Jātaka, (c) the Vāḍhara Jātaka, and (d) the Vessantara Jātaka.



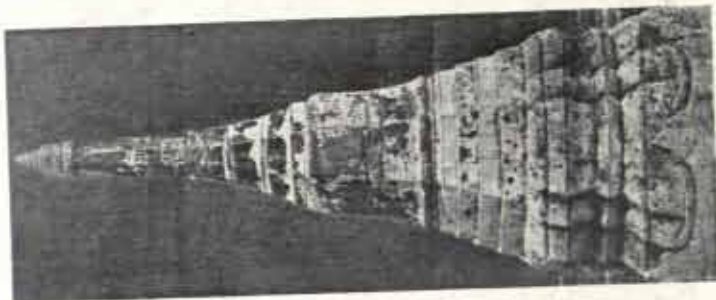
(e) The Mahā-Ummagga Jātaka, (f) the Vāḍhara Jātaka, and (g) the Vessantara Jātaka: Illustrations to the Mahānīpāta Jātaka in Relieves on Stone Pillars in the Kalyāṇī Sīmā at Thuton; probably of the 12th-13th Century A. D.



(a) The Yegyi Yonank Pagoda, Bassoin, after its illegitimate Excavation by Buddhist Monks in the Year 1933-34.



(b) A Stone Stūpa of Miniature Size found in one of the Relic Chambers of the Yegyi Yonank shown in fig. a.



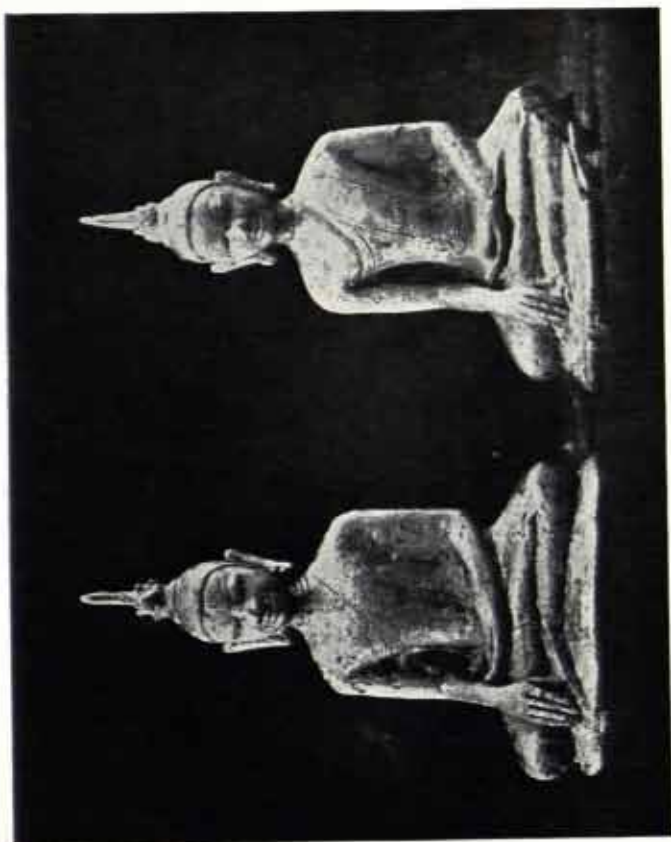
(c) Another Votive Stūpa in Stone found in the Relic Chamber of the Yegyi Yonank Stūpa.



(d) Terra-cotta Votive Tablets of the 12th—14th Century discovered in the Two Relic Chambers of the Stūpa illustrated in fig. a.



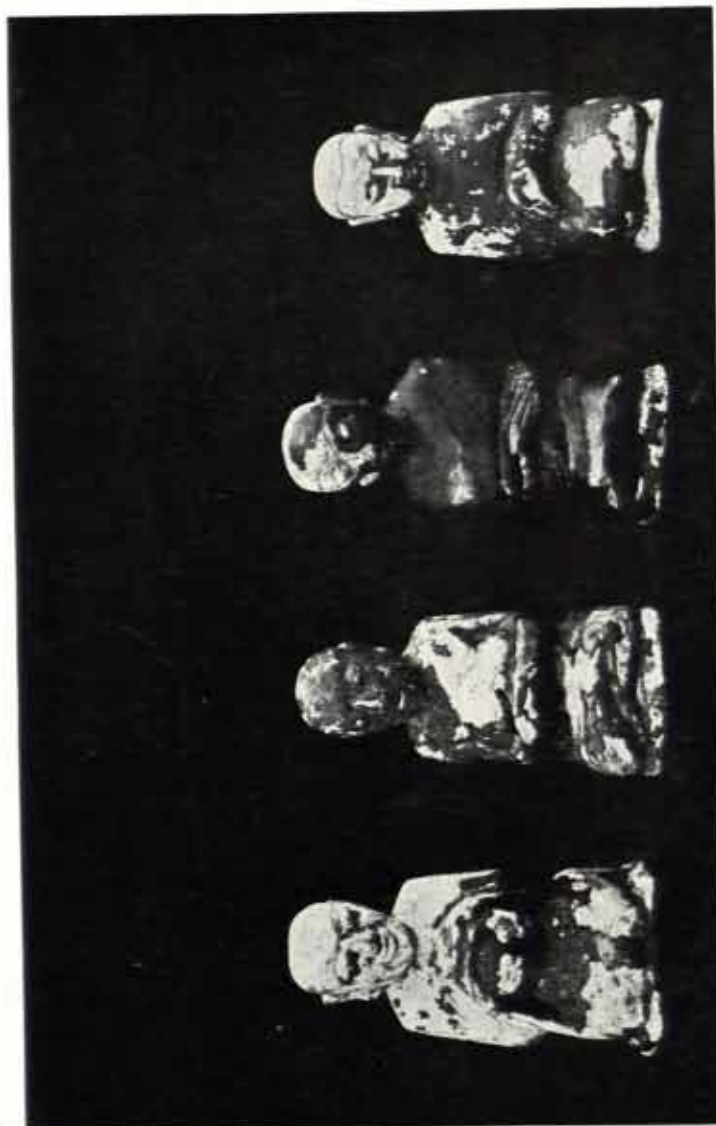
(a) A High Official and his Wife: Stone Images found in one of the Relic Chambers of the Yegyi Yanauk Pagoda shown in Plate CXVII, a.



(b) Further Finds in the Yegyi Yanauk Pagoda: Two Bronze Images of the Buddha with high Crowns, seated in the *bhinniparasa*-attitude (ht. 6").



(c) Another Stone Image found deposited in the Stāpa illustrated in the previous Plate: A Buddha in the Earth-touching Attitude.



(d) Four Figures of Buddhist Saints, found together with another Hundred Similar Images in the Relic Chambers of the Yegyi Yanauk Pagoda.



(a) The Vikramkhola "Inscription", (Report for 1932-33).



(b) Inscription of Dharmasrīpāla on an Image of Prajñāpāramitā, now in the Indian Museum, Calcutta. (1932-33).



(c) The Baligram Copper-plate Inscription of the Gupta Year 128 (Obverse and Reverse). (1932-33).

(This plate is from a negative impression of the original copper plate.)

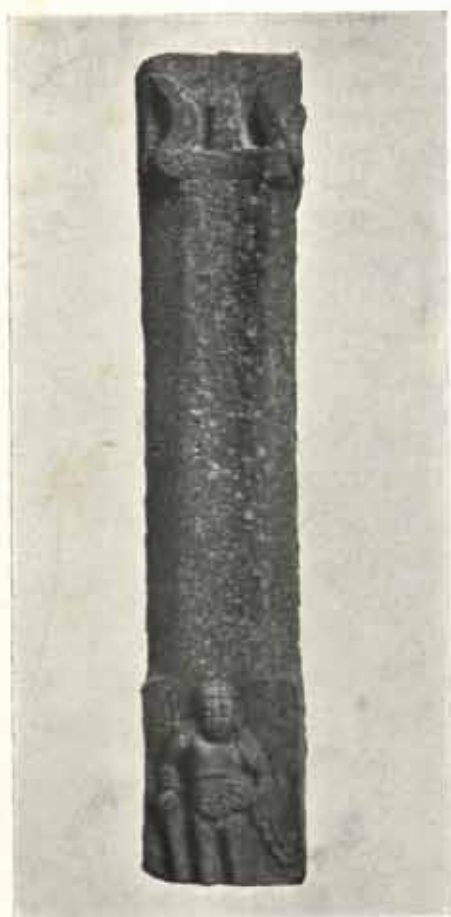
EPIGRAPHY.



(a) Specimen of a Terra-cotta Sealing from Nālandā, showing a Bull couchant, with a Sun and a Moon. (Report for 1932-33).



(b) Another Specimen of the numerous Clay Sealings discovered at Nālandā: An Elephant above a finely executed Inscription. (1932-33).



(c) Stone Pillar (ht. 4'2") with an Inscription in Brāhmī characters of Chandragupta II; now in the Mathurā Museum. (1930-31).



(d) Specimens of Seals from Nālandā, showing the elaborate Method by which Royal Seals were tied to Documents. (1932-33).



(a) Head of the Buddha in Mathurā Sandstone; Front View.



(b) Profile View of Buddha-head from Mathurā.



(c) Standing Male Figure in the Curzon Museum of Archaeology, Mathurā.



(d) Head supporting inscribed Bowl, now in the Mathurā Museum.



(a) Seated Buddha Image of the Year 51, in the Curzon Museum of Archaeology, Mathurā.



(b) Stele with Figures of the Jinās, of the Year 35, in the Mathurā Museum.



(c) Medieval Image of a seated Vishnu, now in the Mathurā Museum.



(a) Buddha Head in Mathurā Sandstone with Spiral Hair-curls.



(b) Buddha Head in Mathurā Sandstone with no Indication of Hair-curls. (Cp. fig. d).



(c) Another Mathurā School Sculpture, the Hair indicated by numerous incised Lines.



(d) A Head in the Mathurā Museum, with the same Treatment of the Mass of Hair as in fig. b.



(a) Sculptured Fragment of the Gupta Period: A Woman offering a Cup to a Man.



(b) Image of Hara-Gauri acquired from Lucknow.



(c) A Late Period Image of Hara-Gauri; from Benares.



(d) Image of a seated Vishnu; from Benares.



(a) The Buddha calling the Earth to Witness: One of the four Images from Virat Cuttack, Cuttack, illustrated in this Plate.



(b) *Tārā*, The Saviouress: A 10th Century Image from Virat Cuttack; Slightly later than the Images in figs. a and c.



(c) Another Buddha from Virat Cuttack, not later than the 8th-9th Century.



(d) Probably Part of a larger Composition: A *deārapāla* of about the 9th Century A.D.

INDIAN MUSEUM, CALCUTTA.



(a)



(b)



(c)



(d)



(e)



(f)

(a)–(e) Punch-marked Coins from Manda, Rajshahi District, acquired during 1932–33; and (f), A Cast Coin from the Midnapur District.



(g) Semi-precious Stone Beads acquired from Rajgir.



(h) Pottery Vessel with Inscription in unknown Script; and three Jar-covers; from Rajgir.



(a) Inscribed Stone Image of Prajñāpāramitā from the Neighbourhood of Nālandā.



(b) Fragment of an Image with lower Portion of a Deity seated on a Camel; from Kakdighi, Bairhatta, Dinajpur District.



(c) Inscribed Image of Sūrya from Bairhatta, Dinajpur District; probably 12th Century A. D.



(d) Hari-Hara, attended by the Buddha and Sūrya: a Stone Image from Bihar; c. 12th—13th Century A. D.



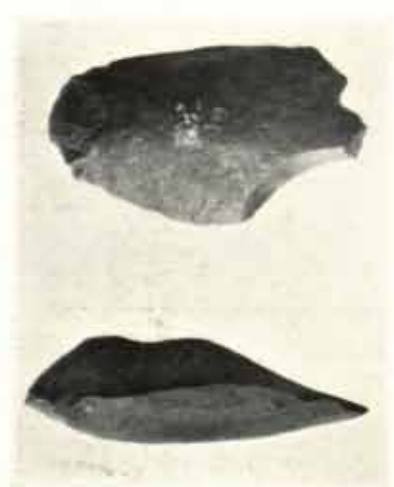
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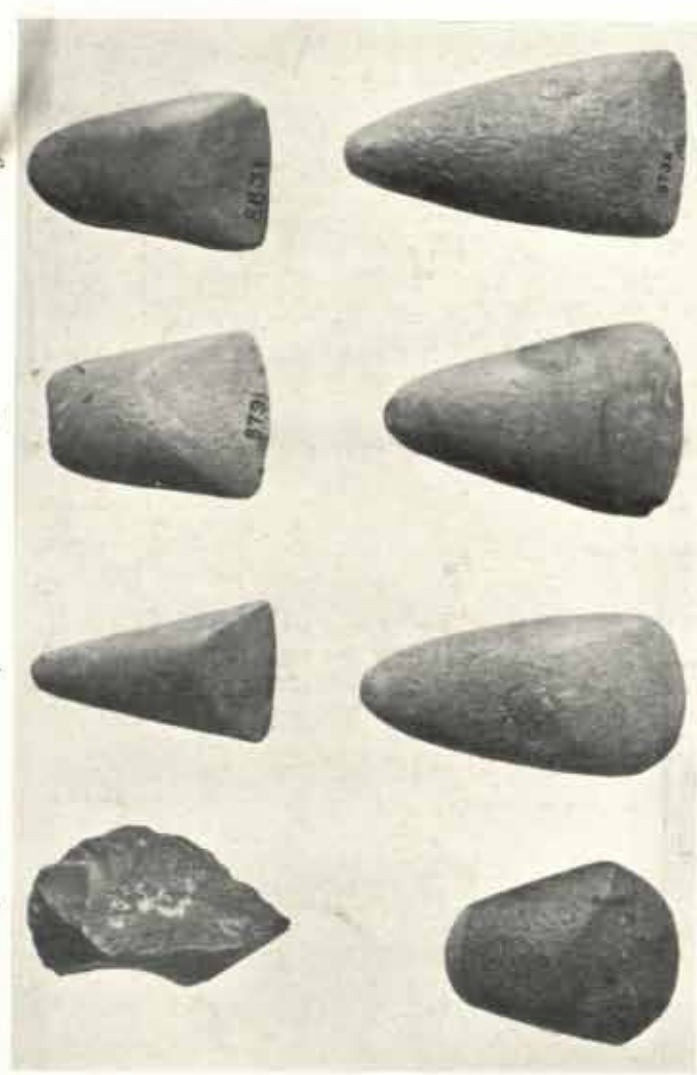
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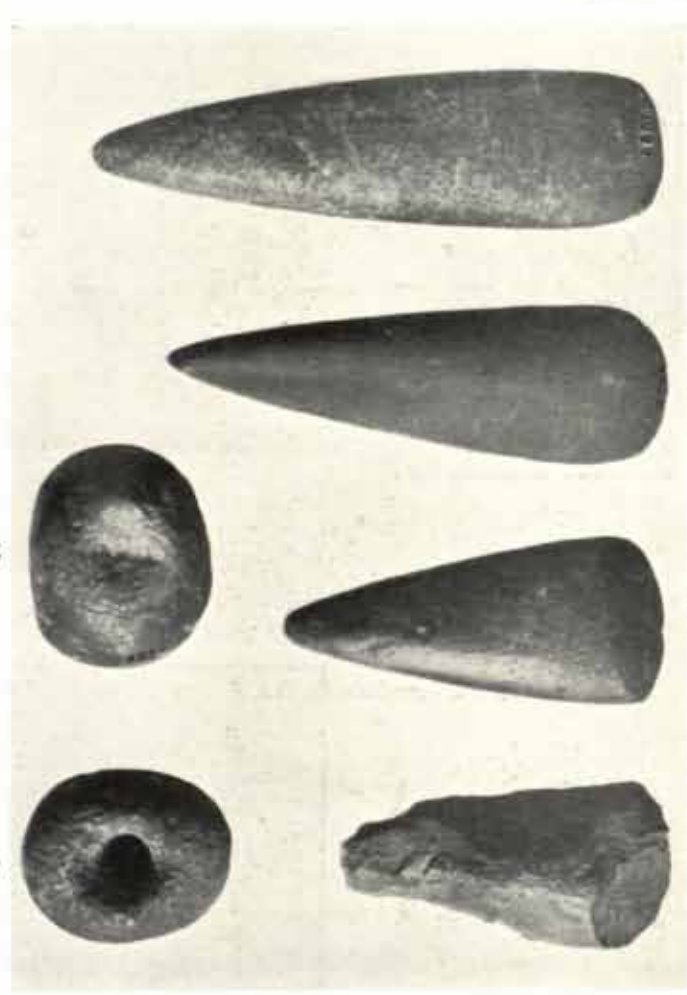
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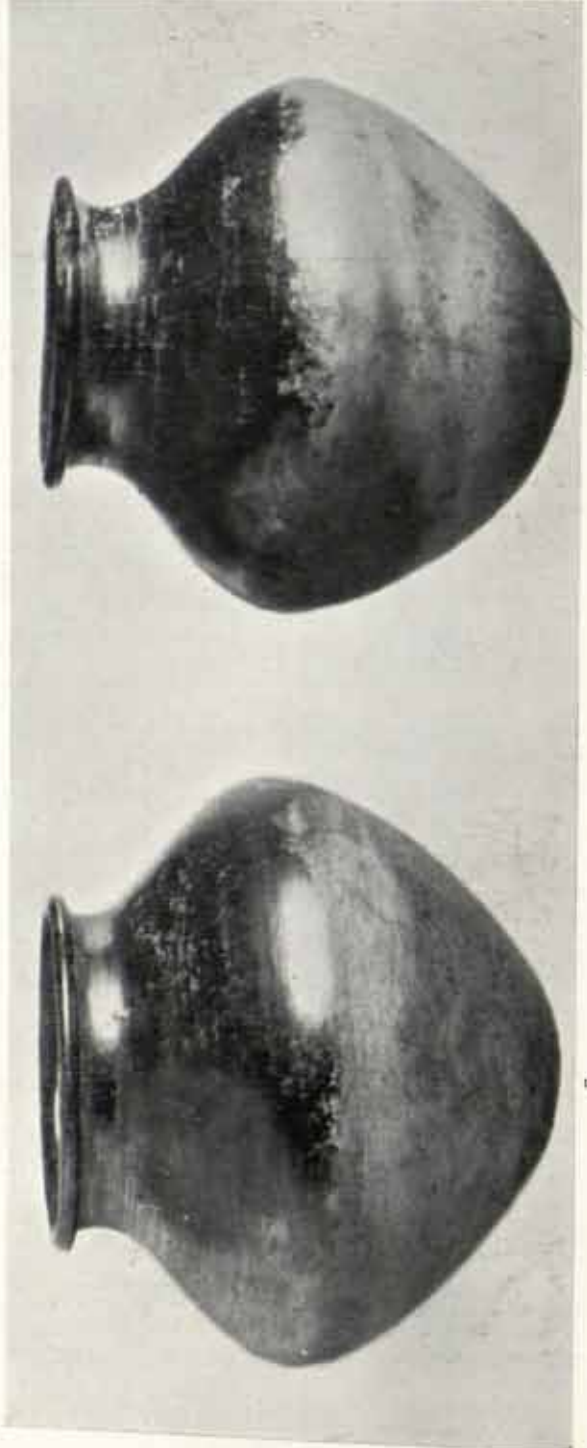
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Black Pottery, and (9) an Iron Celt from Huttanahalli, near Bangalore.



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Figs. 1—2: Ring-stones from Mathurā; figs. 3—7: Terra-cottas from Mathurā; fig. 8: The Embossed Gold-leaf from Lauriya Nandangarh (for comparison with figs. 1 and 2); and figs. 9—10: Two Terra-cotta Votive Tablets from Siam.



(a) The Birth of the Buddha: Stone Sculpture from Nālandā, Bihar; c. 10th Century A. D.



(b) The Bodhisattva Avalokiteśvara: Stone Sculpture from Chowrapara, Rajshahi District; c. 12th Century A. D.



(c) Stone Image of Vishnu, from Ganpur, Rajshahi District; about the 12th Century A. D.



(d) Stone Image of Sūrya, from Ganpur, Rajshahi District; from the 12th—13th Century A. D.



(a) Bronze Elephant from Mahasthan.
Bogra District.



(b) Stone Relievo representing the 'Mother-and-Child' Subject
from Chowra Kasba, Rajshahi District.



(c) Stone Image of Garuḍa, probably from the
Top of a Garuḍa-pillar; from Chowra Kasba,
Rajshahi District; c. 12th Century A. D.



(d) Stone Image of Śiva, from Chowra Kasba,
Rajshahi District; probably a work
of the 13th Century A. D.



(a) Front, and (b) Back of a Petition dated 1087 A. H. (= 1677 A. D.) from Āqā 'Abdu-r-Rashīd Dailmī to the Emperor Shāh Jahān ; with a Painting representing the Petitioner submitting his Request to the Emperor.



(c) A Specimen of Calligraphy in *shikasta*, alleged to have been written by Aurangzeb.



(d) A *firmān* of Maryam Zamānī, the Mother of the Emperor Jahāngīr, on Loan in the Delhi Fort Museum.



(a) The Bronze Find of 1932-33: The Buddha in the 'Attitude of Reassurance'; after Chemical Treatment.



(b) Another Bronze found in 1932-33: The Buddha in the *varada-mudrā*; a Masterpiece of Early Date (7th-8th Century A. D.).



(c) One of a Hoard of some 75 Images unearthed at Nālandā during 1932-33 and illustrated in this and the following Plates; A *varada*-Buddha of later Date.



(d) A standing Bronze Image of the Buddha in the 'Gift-bestowing Attitude'; assignable to the same Date as fig. *b* above (7th-8th Century A. D.).



(a) Trailokyavijaya trampling on Śiva and Pārvatī: Probably a symbolical Representation of Buddhism militant against Hinduism.



(b) A Masterpiece in a Hoard of mixed quality Images illustrated in Plates CXXXIV—CXXXVIII: Vajrapāṇi, or Mañjuērī.



(c) A four-faced Vajrapāṇi Image of late Date; Front view.



(d) Back view of the Vajrapāṇi shown in fig. c; an other Bronze of the Hoard discovered during 1932—33 at Nālandā.



(a) Bronze Image of a Seated Bodhisattva with Lotus and Thunderbolt; from the Hoard of 1932-33.



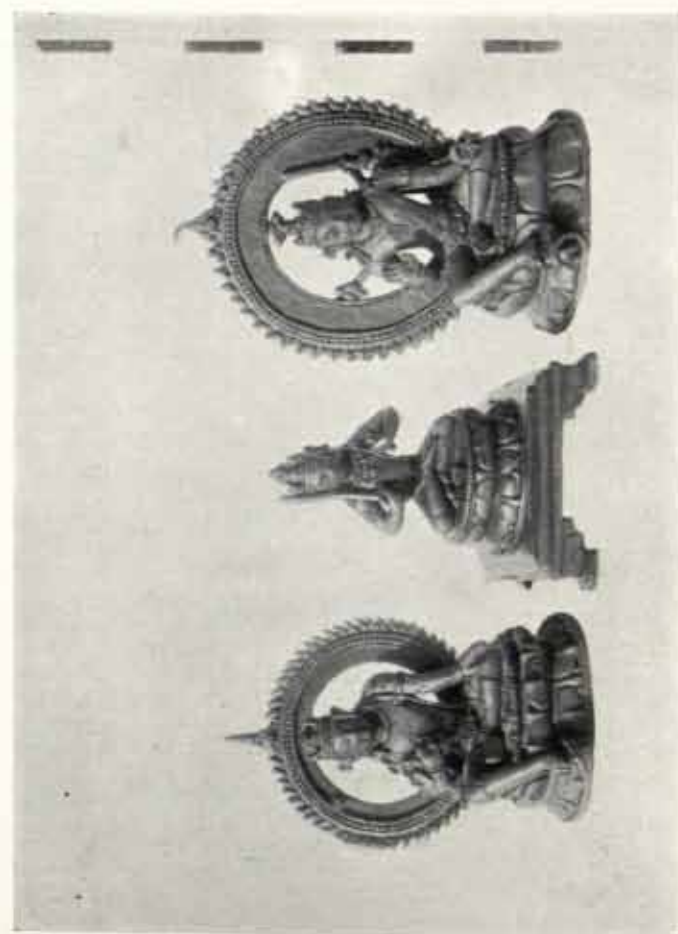
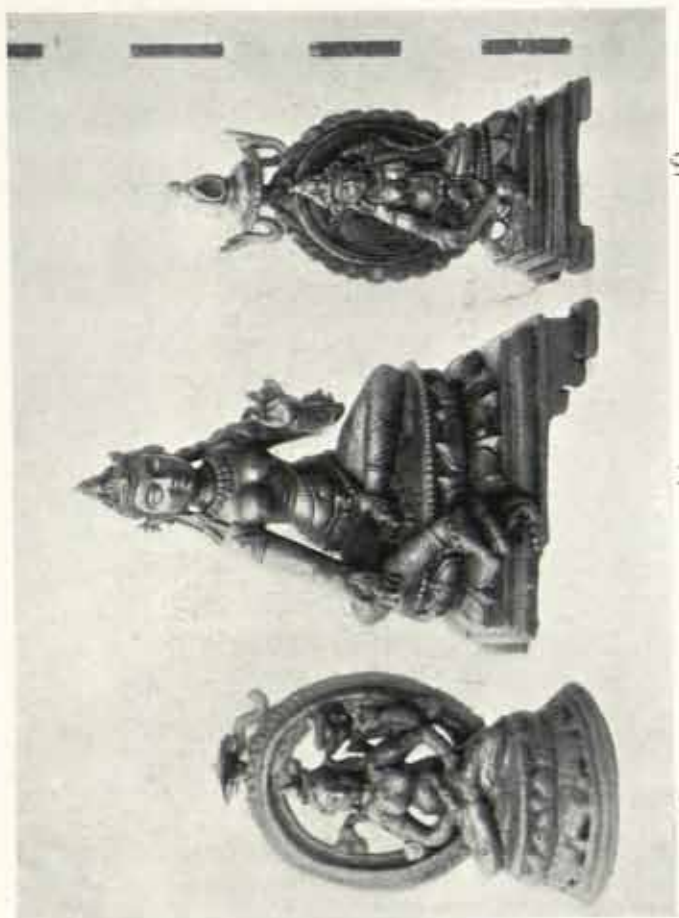
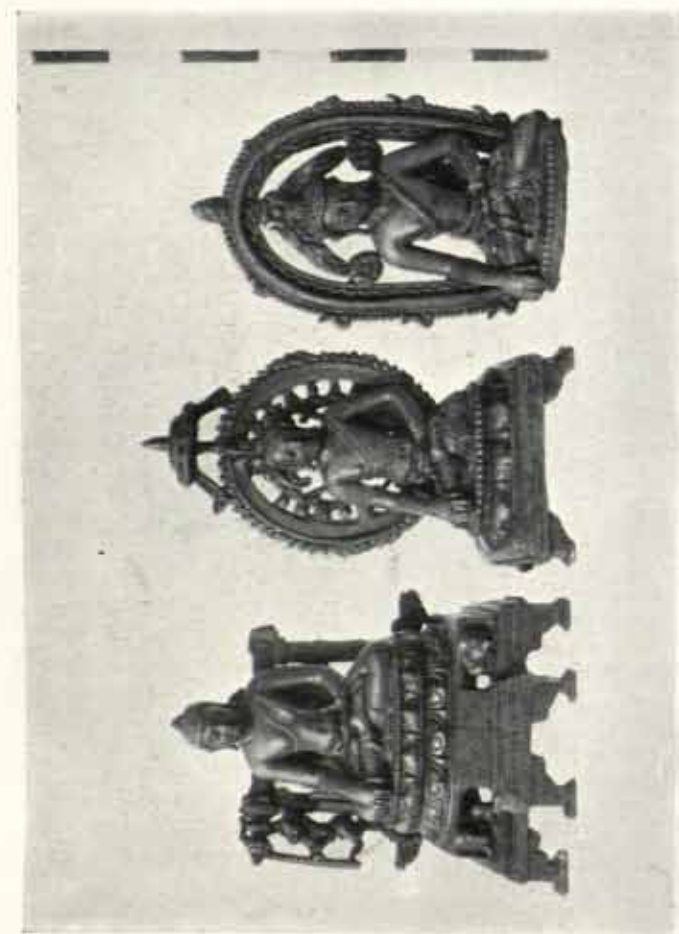
(b) The Buddha in the *dharmacakra-mudrā*; an almost intact Bronze of the 10th-11th Century A. D.



(c) A Miniature Bronze Stūpa with Four Niches in which the Buddha is shown in the *dhyāna*, *bhūmisparka*, *dharmacakra* and *abhaya mudrās*.



(d) An unidentified Goddess, and (e) A Standing Buddha in the *vara-mudrā*; both from the Find illustrated in Plates CXXXIV to CXXXVII in this Volume.



Eleven Bronzes from the Hoard of some 75 Images discovered at Nālandā during the Excavations of 1932-33; including Images of the Buddha in the 'Earth-touching Attitude' (a, b and c) ; three Figures of a Goddess, probably Tārā (d, e and f); and five Bodhisattvas (g, h, i, j and k.)



(a) Stone Image of the Bodhisattva Avalokiteśvara, recovered in the Chaitya Site No. 12 during 1930-31.



(b) From Monastery No. 9: Seated and Crowned Buddha Image in Stone. (1932-33).



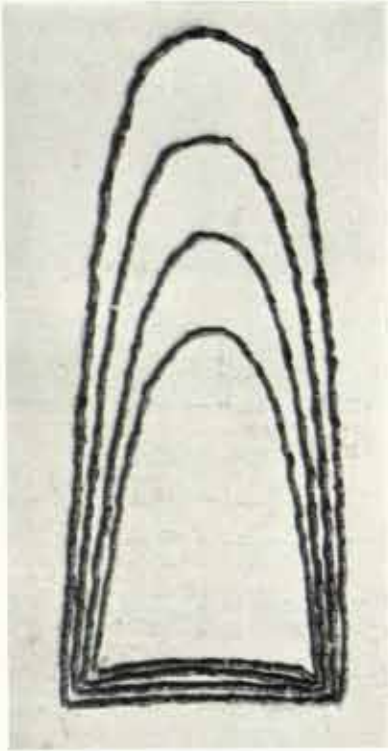
(c) Bronze Image of the Buddha in the *bhūmisparśa-mudrā*, from Monastery No. 9; before Chemical Treatment.



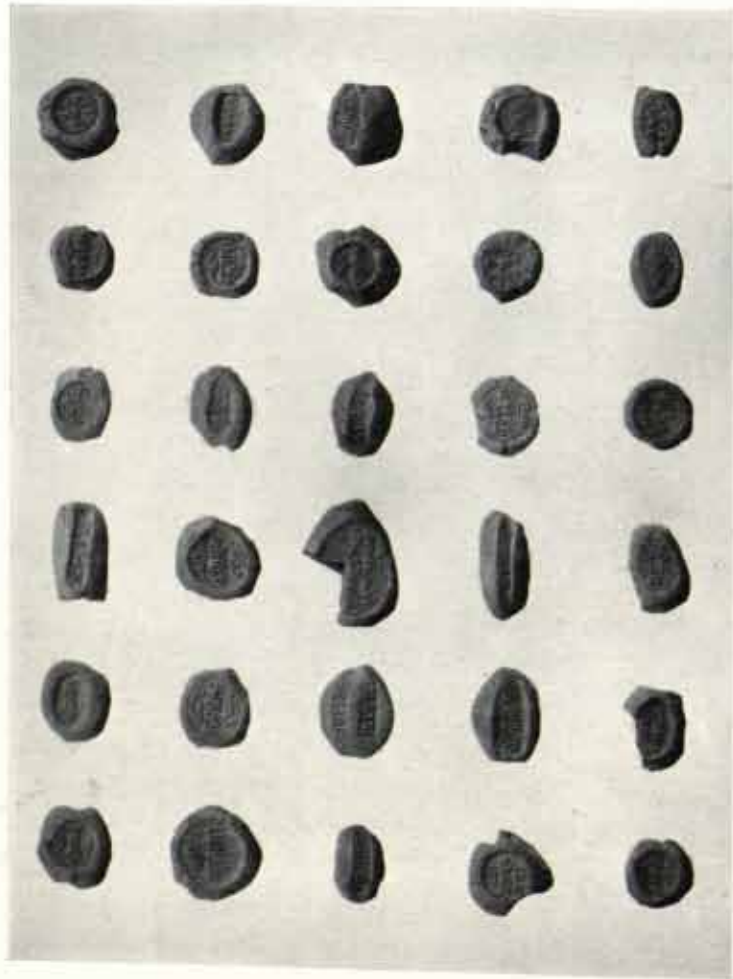
(d) Stone Image of the Buddha in Meditation in the Deer-Park; with Unseen Musicians playing Heavenly Instruments; from Monastery No. 9, Nālandā.



(a) An Ivory Sandal (probably kept as a Memorial to a Teacher) from Monastery No. 9; after Reconstruction.



(b) A Set of Tubular Beads of Glass, recovered from Monastery No. 9 during 1932-33.



(c) Specimens of Clay Sealings from a Collection of over 900 unearthed during 1932-33; with Names of Persons, and one with a Figure of the fasting Bodhisattva.



(d)



(e)



(f)



(g)

(d) A Mango-shaped Terra-cotta Pot; (e) An Oil-lamp on Stand in Terra-cotta; (f) A Burnt Clay Seal giving the Name of the Village *Harabandā*; and (g) A Stone Vajra: All from Monastery No. 9.

NĀLANDĀ MUSEUM.



(a) A Miniature Temple of the Bodhi-Gayā Type in Bronze, with an Inscription; from Monastery No. 11.



(b) Three Bronze Images of the Buddha, before Chemical Treatment, recovered from Monastery No. 11 during 1933-34.



(c) Bust of the Buddha in Terra-cotta, from Monastery No. 10; and a Terra-cotta Seal-mould with its Impression in Plasticine, from Monastery No. 11.

(d) Bronze Finial of a stupa, with a white Stone inlaid on Top; and Bronze Crown, originally set with Jewels;



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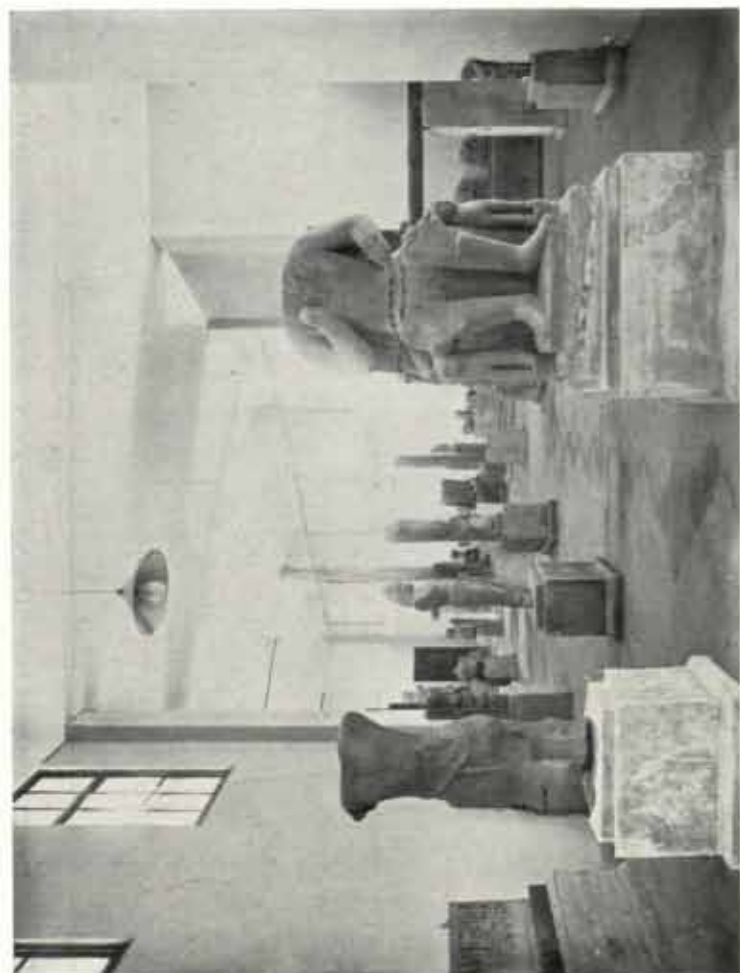
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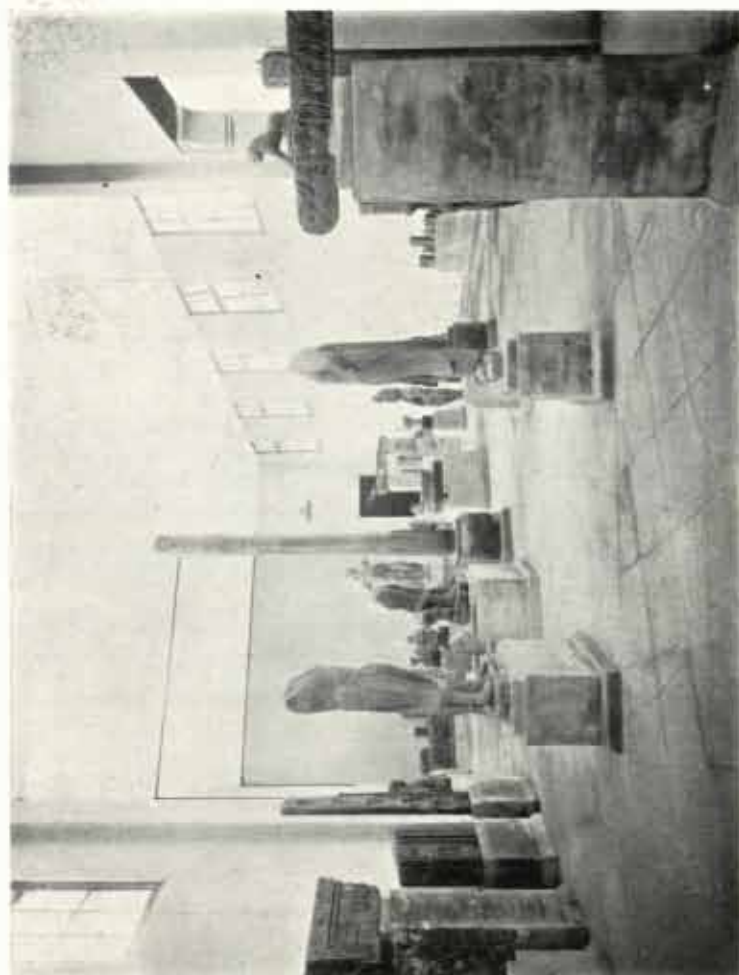
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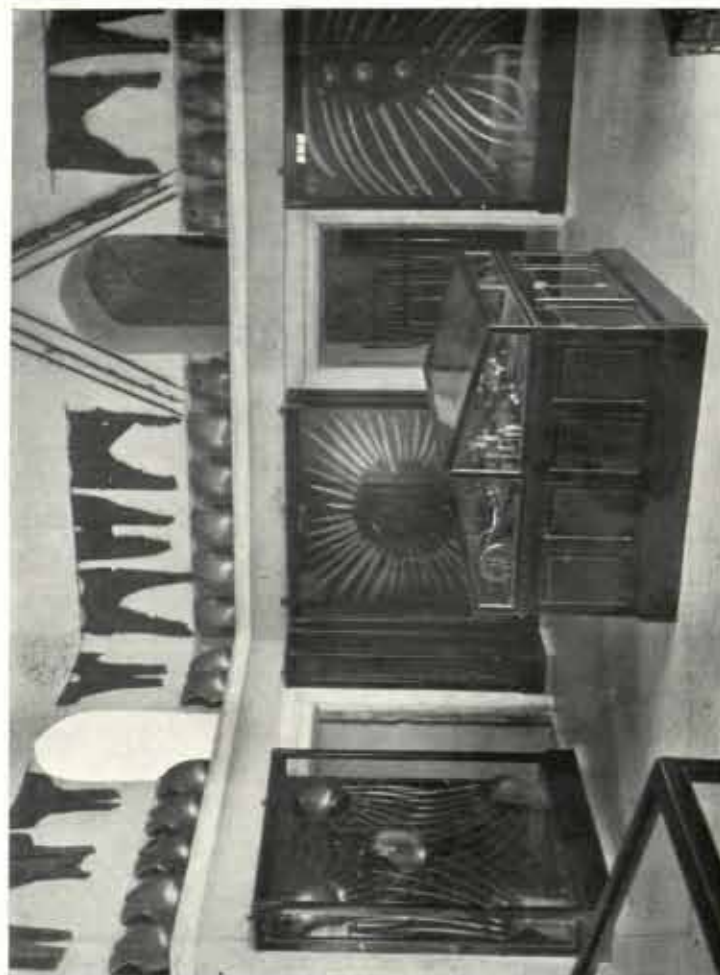
(a) Curzon Museum of Archaeology, Muttra; View of Court 'A'.



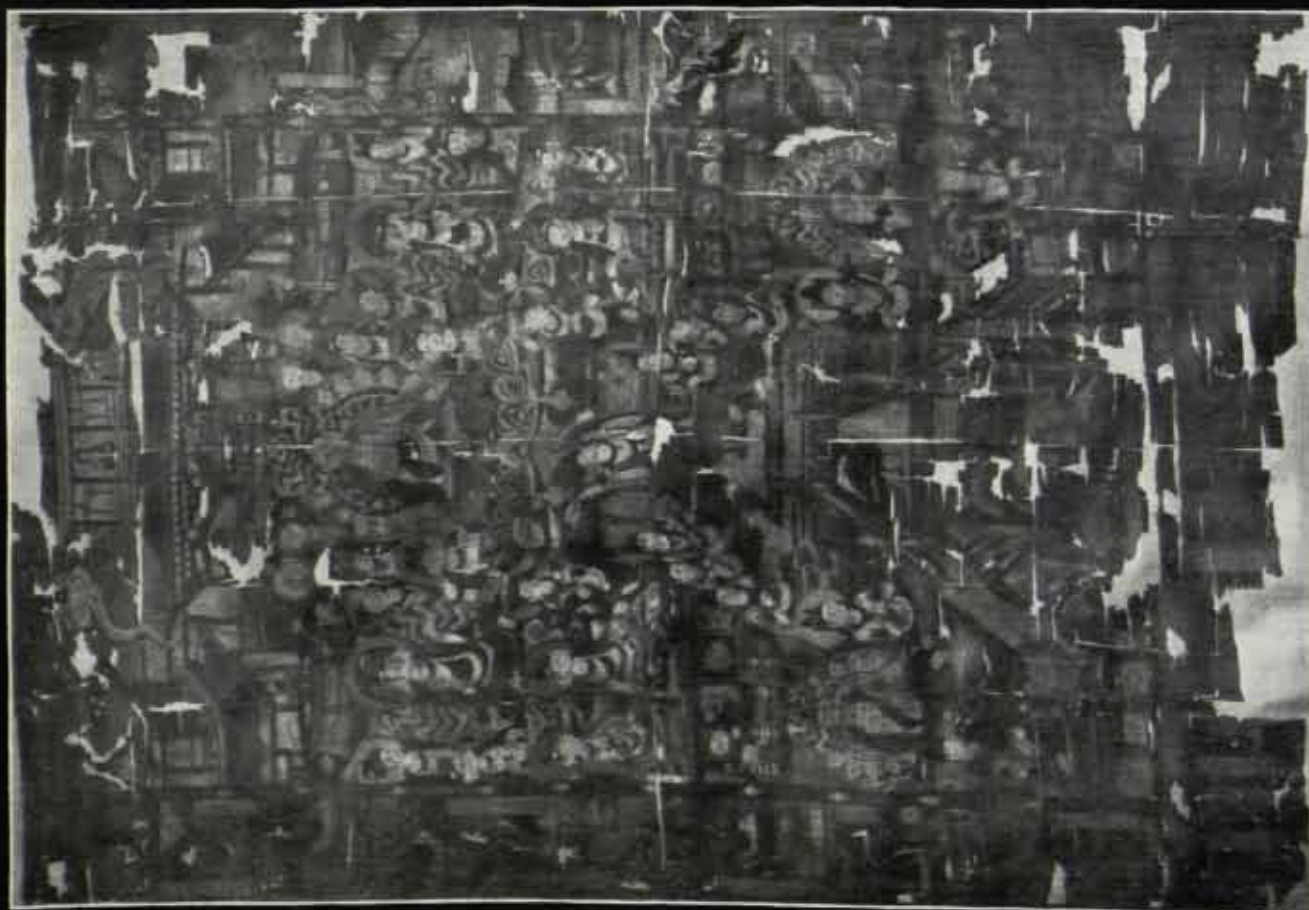
(e) Curzon Museum of Archaeology, Muttra; View of Court 'C'.



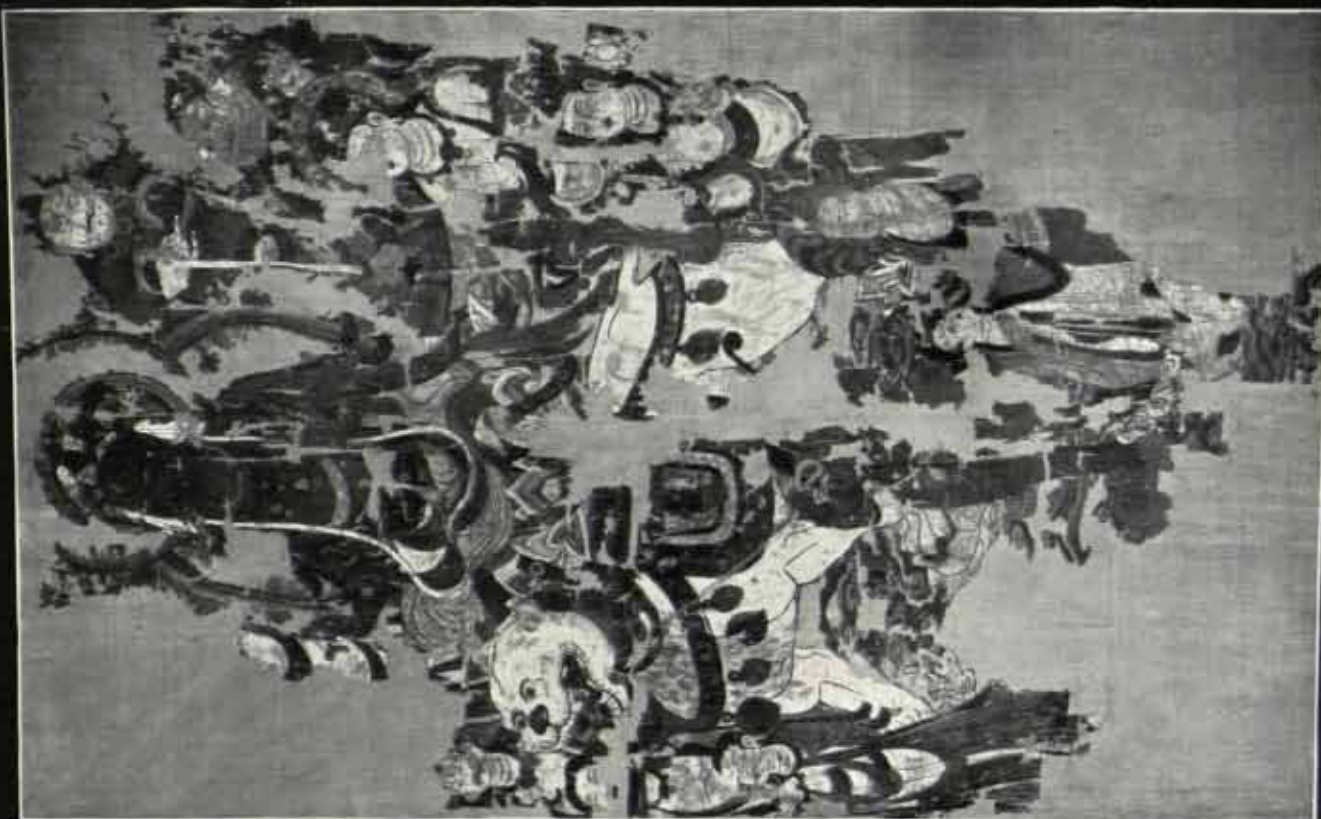
(b) Curzon Museum of Archaeology, Muttra; The Entrance Hall (Court 'B').



(d) The Museum in the Old Fort, Lahore; View of New Arrangement.

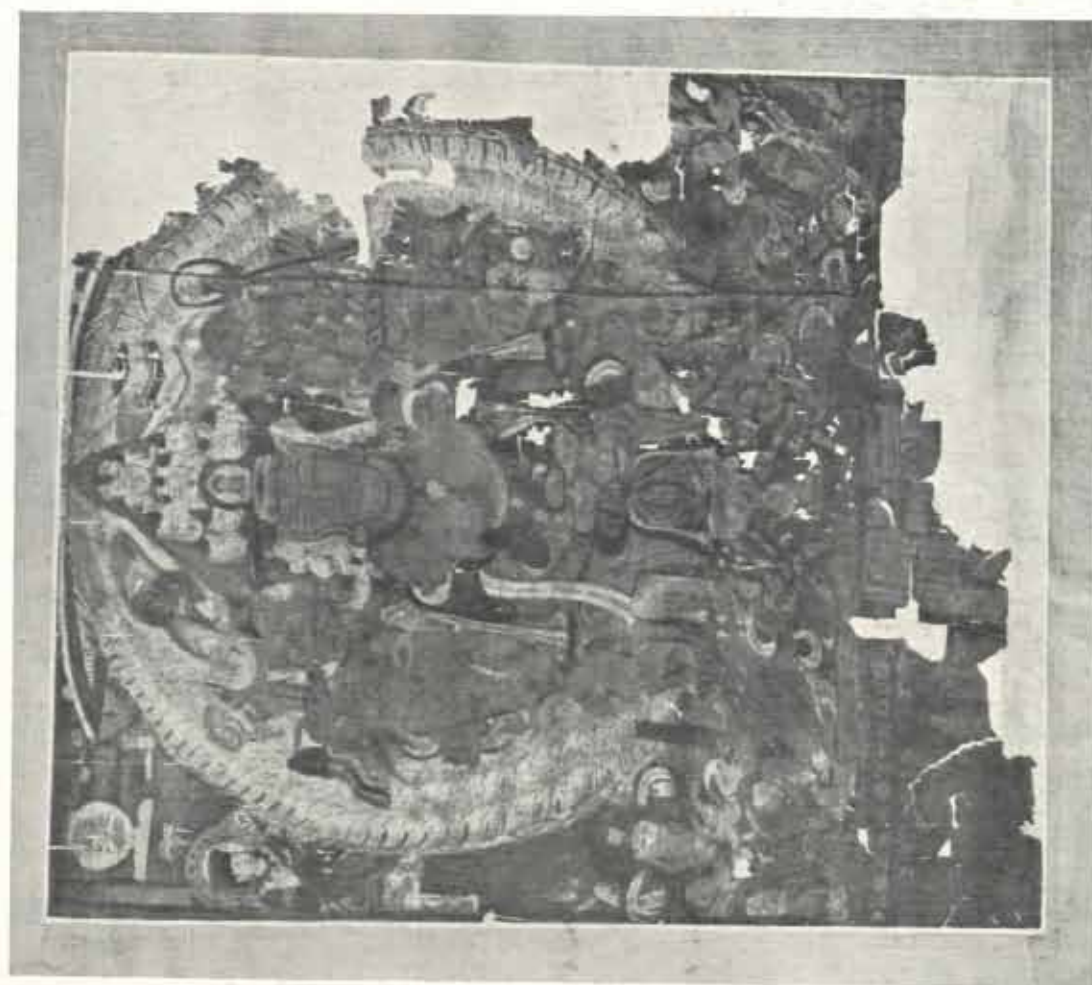


(a)



(b)

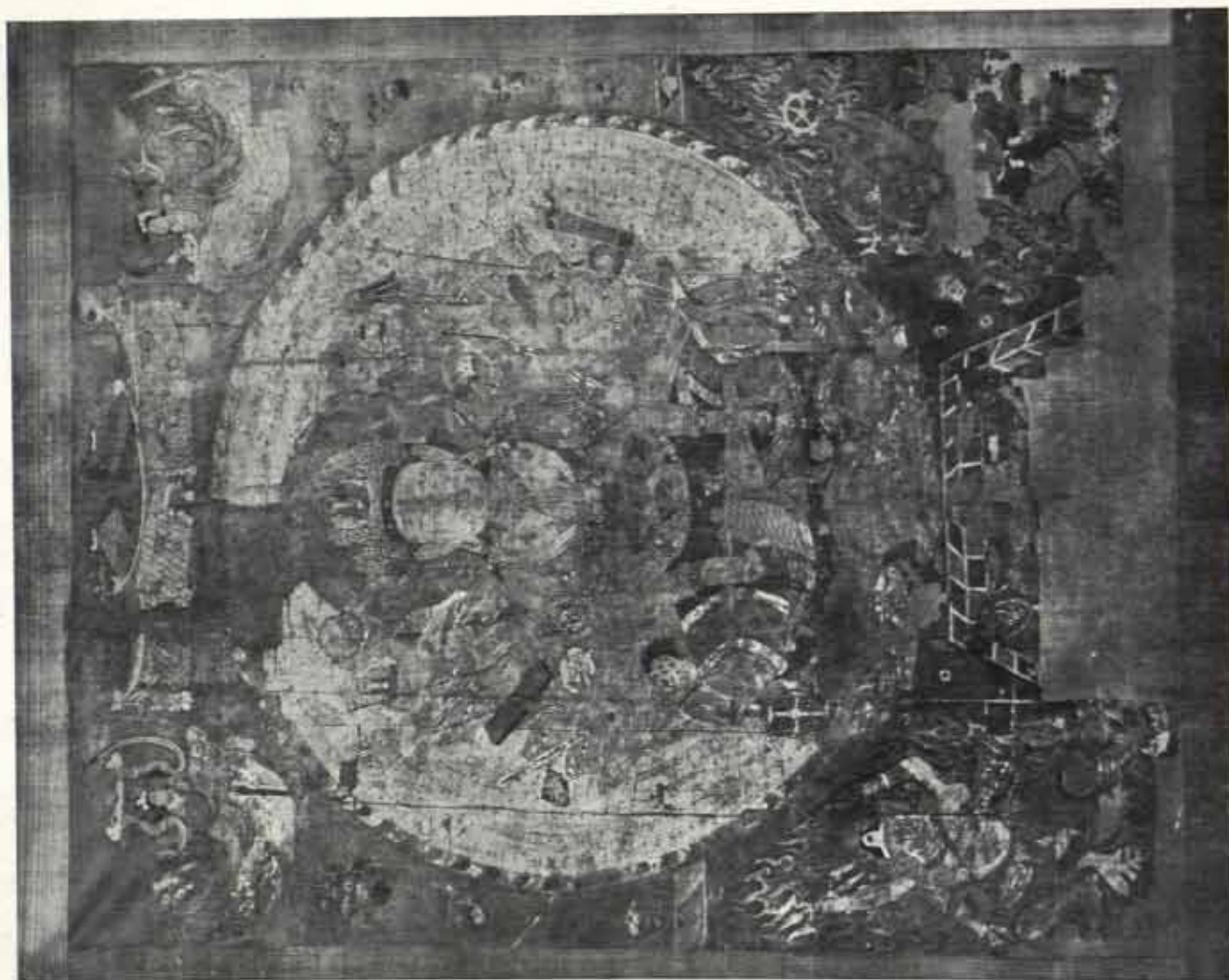
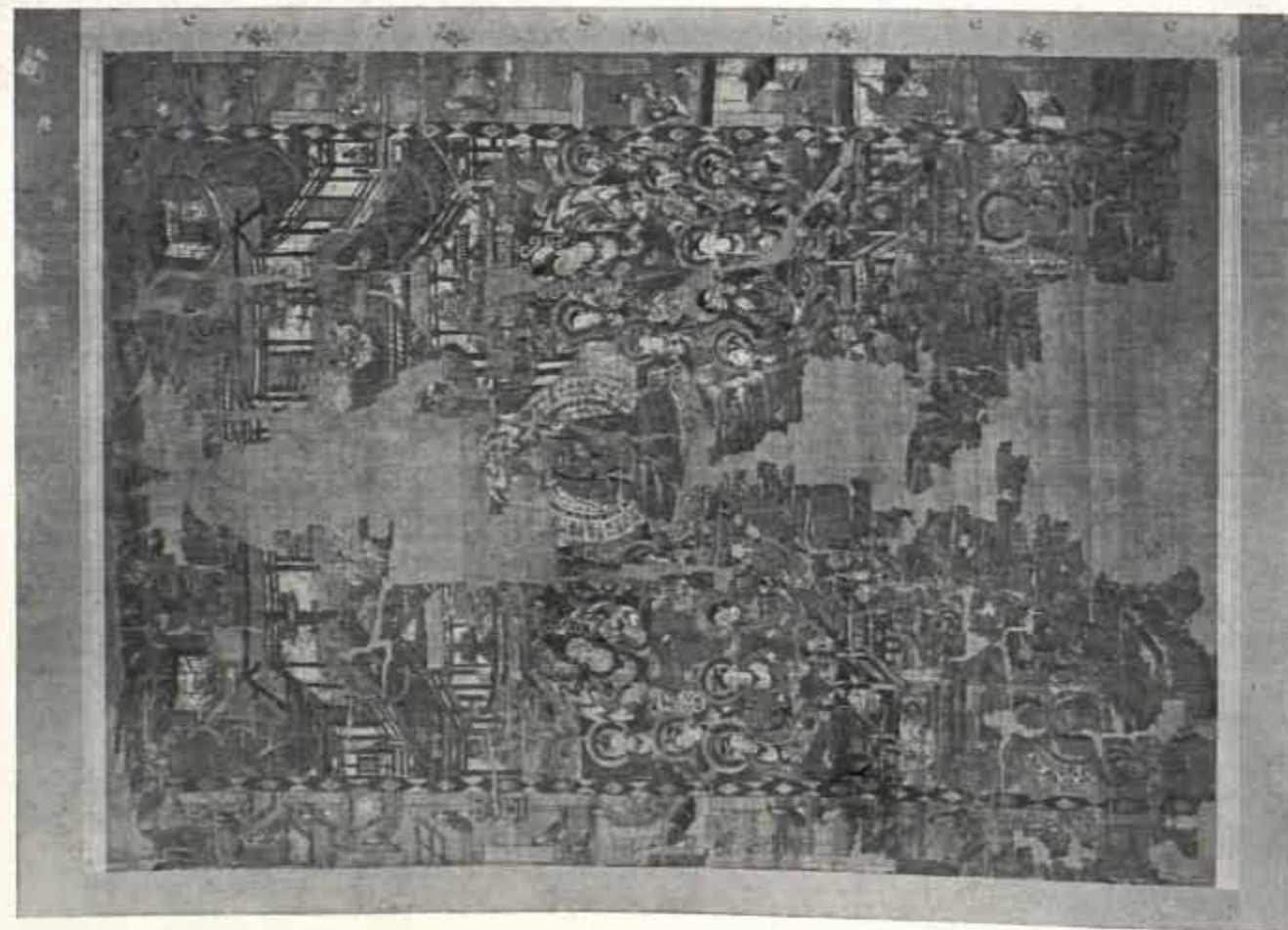
Two Silk Paintings brought back by Sir Aurel Stein from the 'Caves of the Thousand Buddhas', Tun-huang, Chinese Turkistan, pieced together and mounted by the Archaeological Commission during 1930-31; (a) A Scene in Amitābha's Heaven; and (b) The Bodhisattva Mañjuśrī seated on a Lion and surrounded by his Suite.



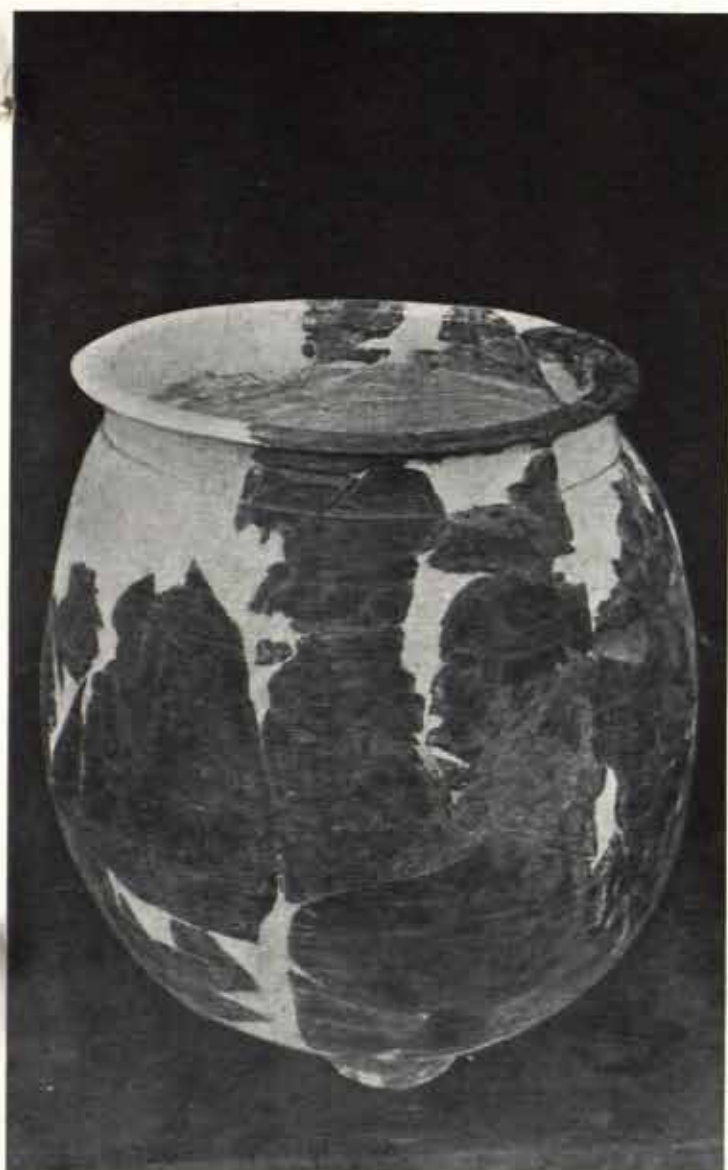
(a)

Two Fragmentary Silk Paintings from 'The Caves of the Thousand Buddhas', Tun-huang, Chinese Turkistan, acquired by Sir Aurel Stein, and now mounted by the Archaeological Chemist: (a) Incomplete Scene in Paradise; and (b) A Thousand-armed Avalokitesvara.

CENTRAL ASIAN ANTIQUITIES MUSEUM, NEW DELHI.



(a) Two Large Silk Paintings (3' and 5'2" in height) from Sir Aurel Stein's Collection of Central Asian Buddhist Antiquities; now Chemically treated and mounted by the Archaeological Chemist and first published here along with the other restored Paintings in the Preceding Plates: (a) The Paradise of Amittabha; and (b) A Thousand-armed Bodhisattva Avalokitesvara.



(a)



(b)



(c)

Three Pottery Vessels from the Trial Excavations at Chāñhu-daro, Sind, by Mr. N. G. MAJUMDAR, now restored to their original Shapes from Hundreds of Fragments. (Heights: a, 2'2"; b, 2'3"; and c, 11").



(a)



(b)

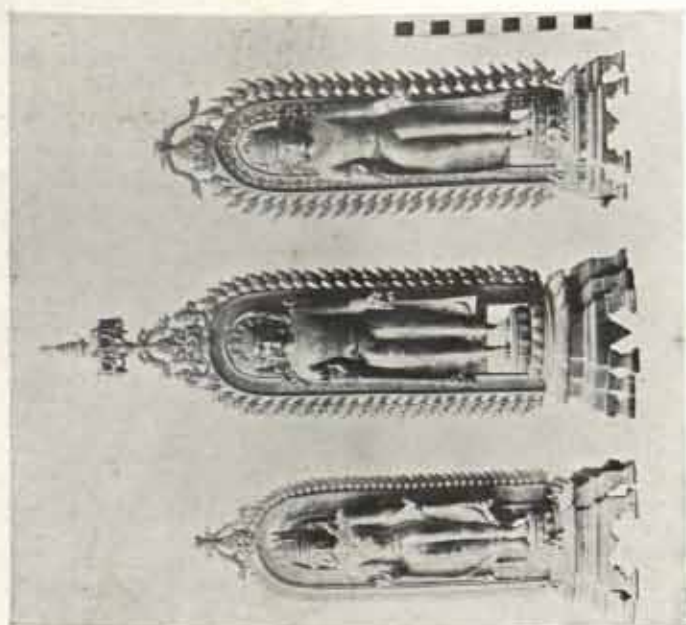


(c)



(d)

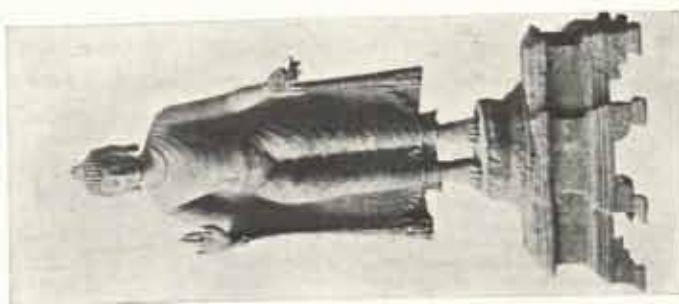
From a Find of 223 Bronze and other Metal Images *etc.* made at Kurkihar, near Gaya, now deposited in the Patna Museum: (a) The Bodhisattva Avalokiteśvara; (b) A Crowned Buddha; (c) A two-armed Tārā; and (d) Lokanātha (?). (Reproduced by kind permission of Mr. K. P. JAYASWAL). 7th—10th Century A.D.



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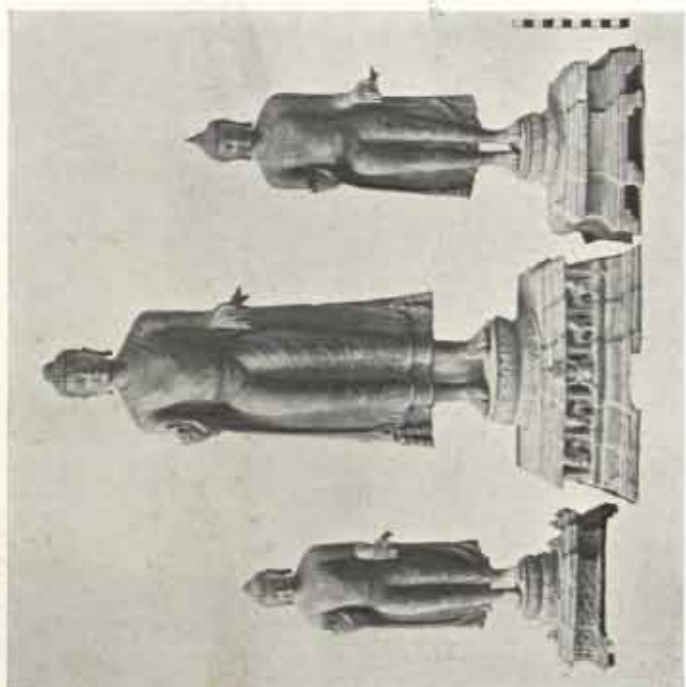
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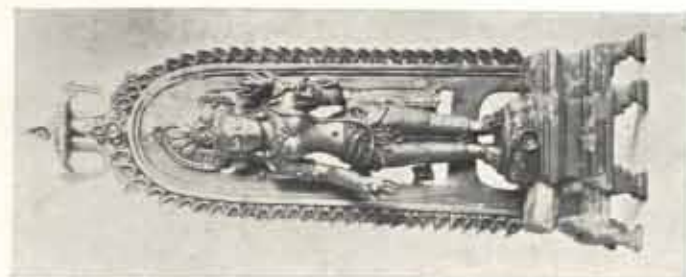
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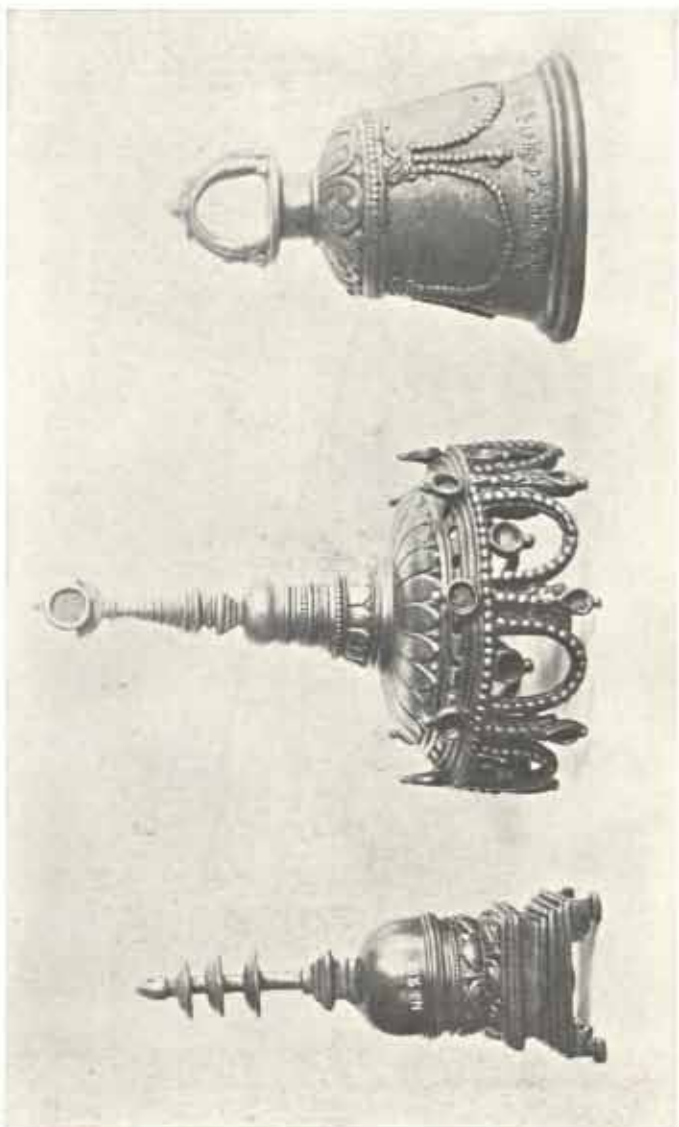
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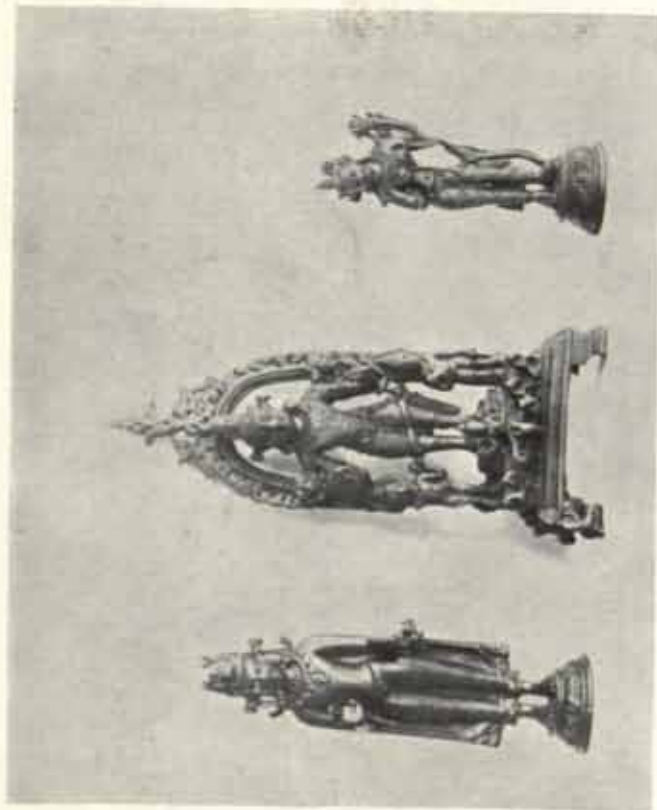


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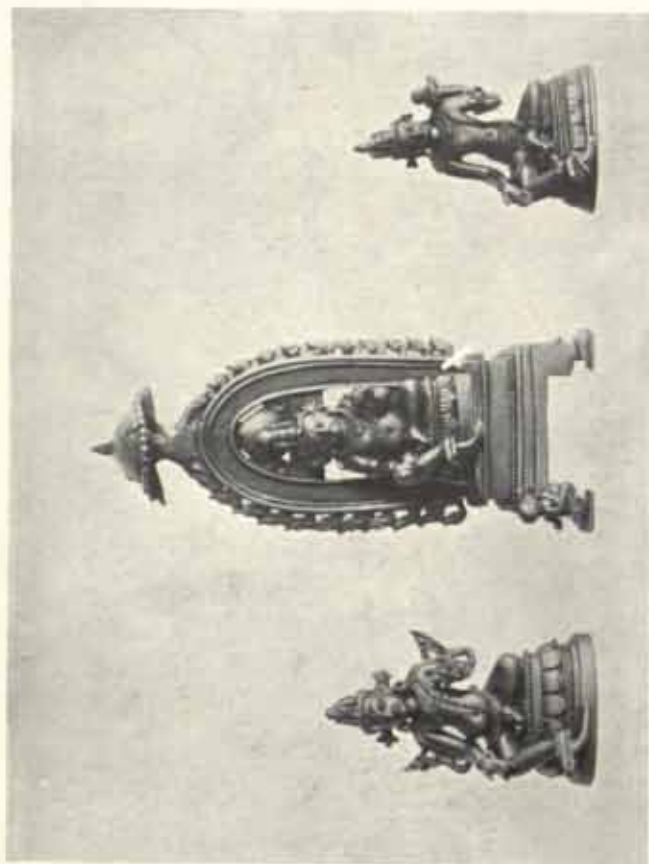
The Kurkihar Treasure-trove: Buddhist Bronzes of the 7th to the 12th Century A.D., including Crowned Buddhas, Buddhas in the *abhaya-mudra*, a Goddess, and Votive Objects; after Treatment by the Archaeological Chemist. Now in the Patna Museum.



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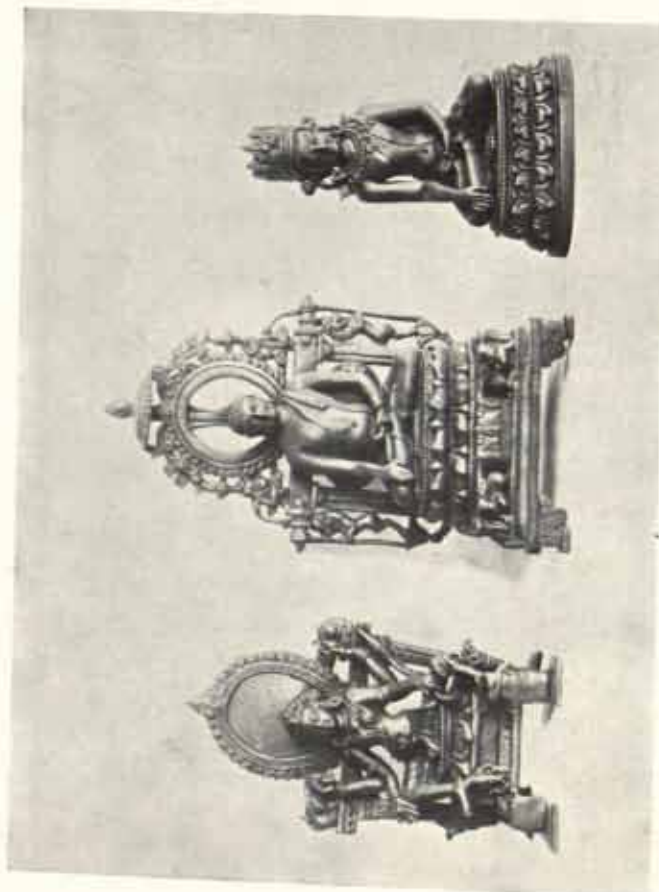
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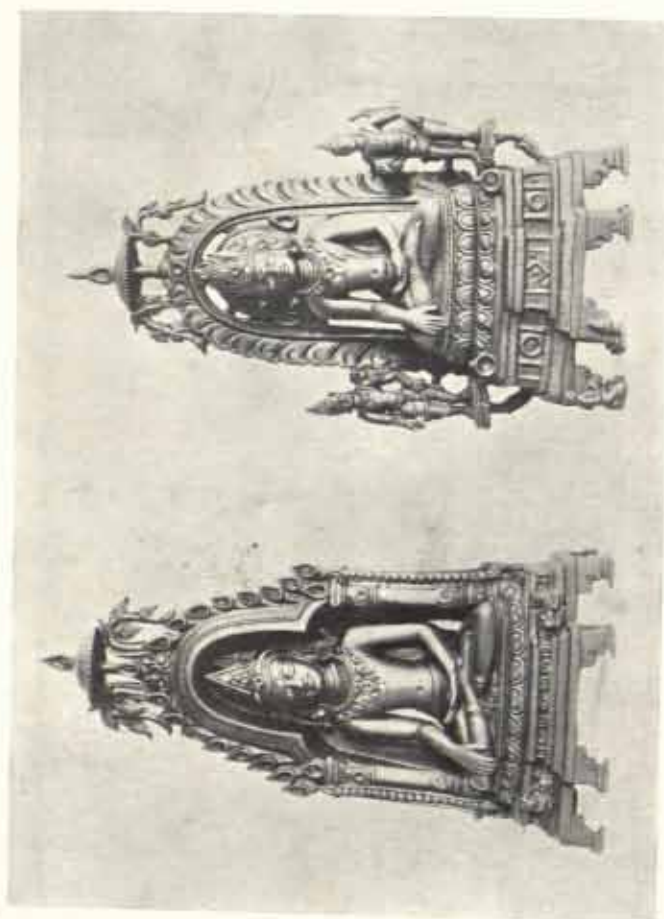
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Further Specimens of the Kurkihar Bronze Find: This and the preceding Plate showing unpublished Buddhist Images from the 7th to the 12th Century A.D., and of a very varied Quality, including a seated Buddha-figure of great Beauty (8), and a 'barbarous' Tāra (7). Now in the Patna Museum.

TREASURE-TROVE.



(a) One of Two Fragmentary Images of Sūrya (c. 11th Century A.D.), found at Jora, near Bogra Town.



(b) The Boar *avatāra* of Vishnu; a Stone Sculpture found together with the Sūrya Image shown in fig. a.



(c) Natarāja: A Stone Sculpture of c. the 11th Century A.D., found at Govindpur in the Sundarbans, 24 Parganas.



(d) Colossal Vishnu Image in Black Basalt from Itahar, Dinajpur, now in the Indian Museum, Calcutta; about 11th Century A.D. (Height: 7').



(a)



(b)



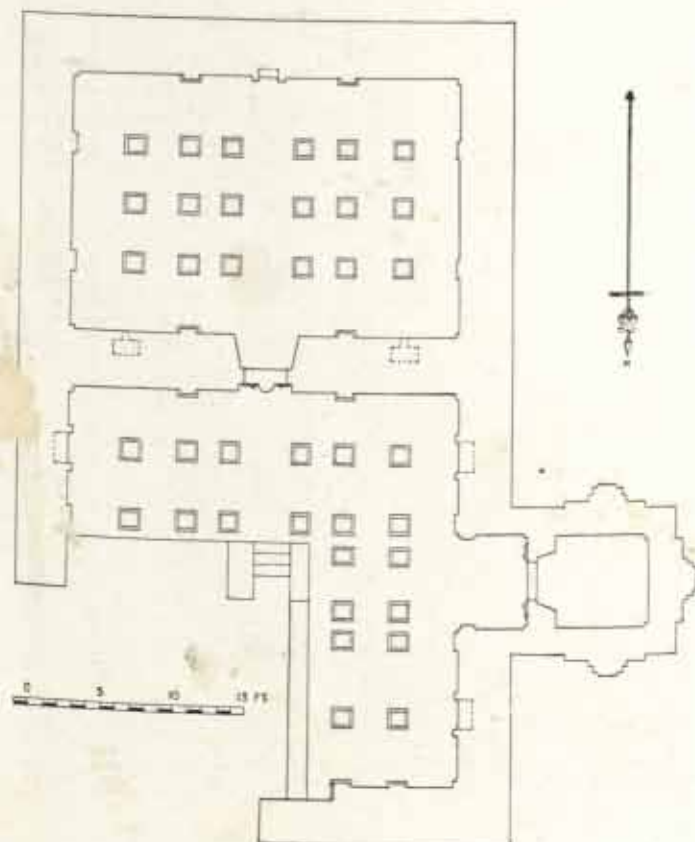
(c)



(d)

From a Find in Deulberia Village, District Bankura: (a) and (b) Front and Back Side of a Circular Stone Relief with a Dancing Figure on both Sides; (c) A Pot-bellied Deity; and (d) Kṛishṇa-Balarāma, Vishṇu's Eighth Incarnation; all Works of the 14th-15th Century A.D.

TEMPLE AT DEOTHAN



(a) Ground Plan of Double Brāhmanical Shrine at Deothan.



(b) General View of Temple.



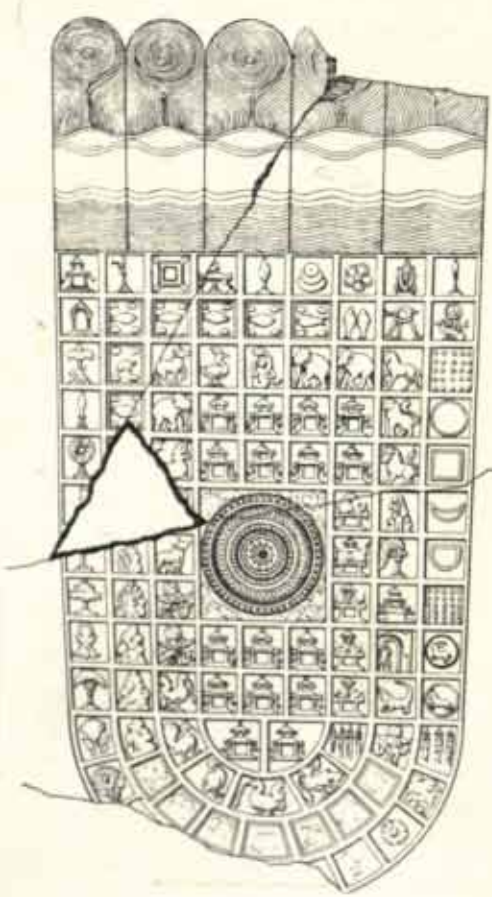
(c) The Entrance to the Pillared Hall, showing finely carved Door-jambes, and a Pillar of the Verandah.



(d) The Carving above the Entrance leading to the Pillared Hall.



(a) Outline Drawing after a "Foot-print of the Buddha" on a Stone Slab from the Shwazigun Pagoda.



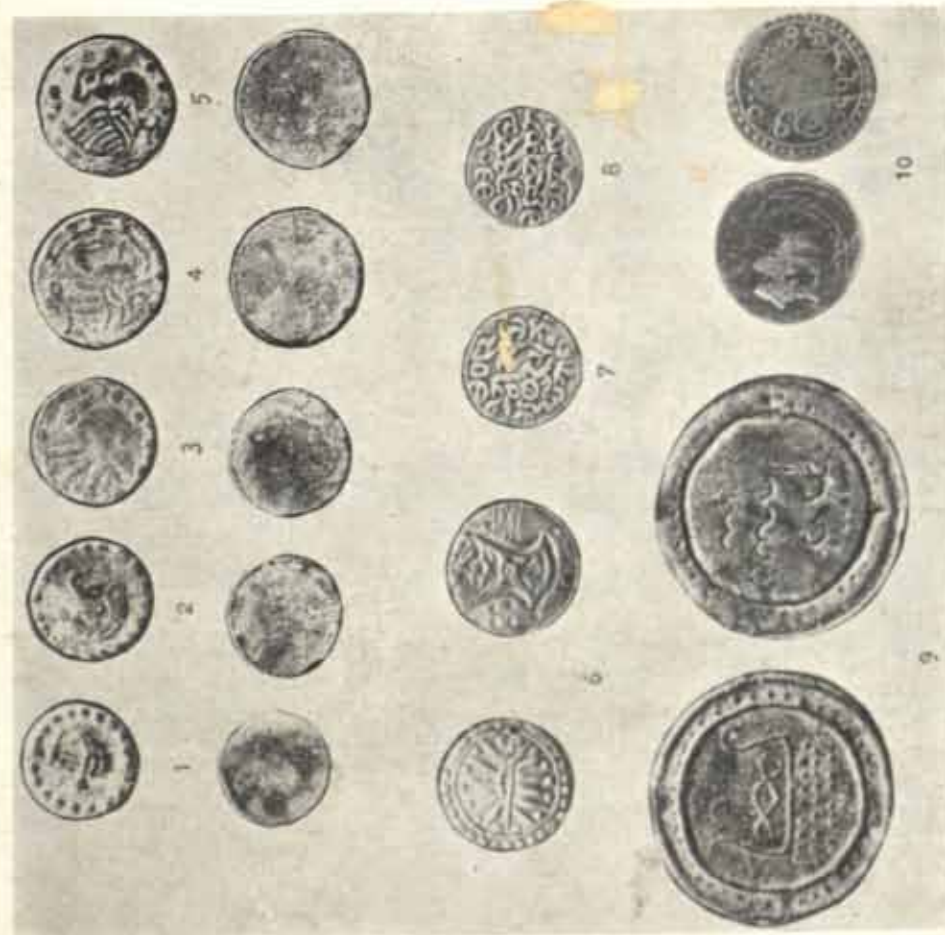
(b) Outline Drawing after a "Foot-print of the Buddha" from the Lokananda, now in Pagan, slightly damaged.



(c) and (d) Two Rock-cut Reliefs at Kālaljar, near the Nilakaptha Temple, with Śivaite Subjects.



(e) Brass Statue of a Bodhisattva from Tibet or Nepal, presented by Sir John Marshall to the Taxila Museum.



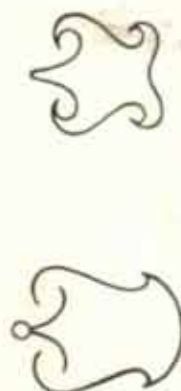
(a) Some hitherto Unknown Burmese Coins.



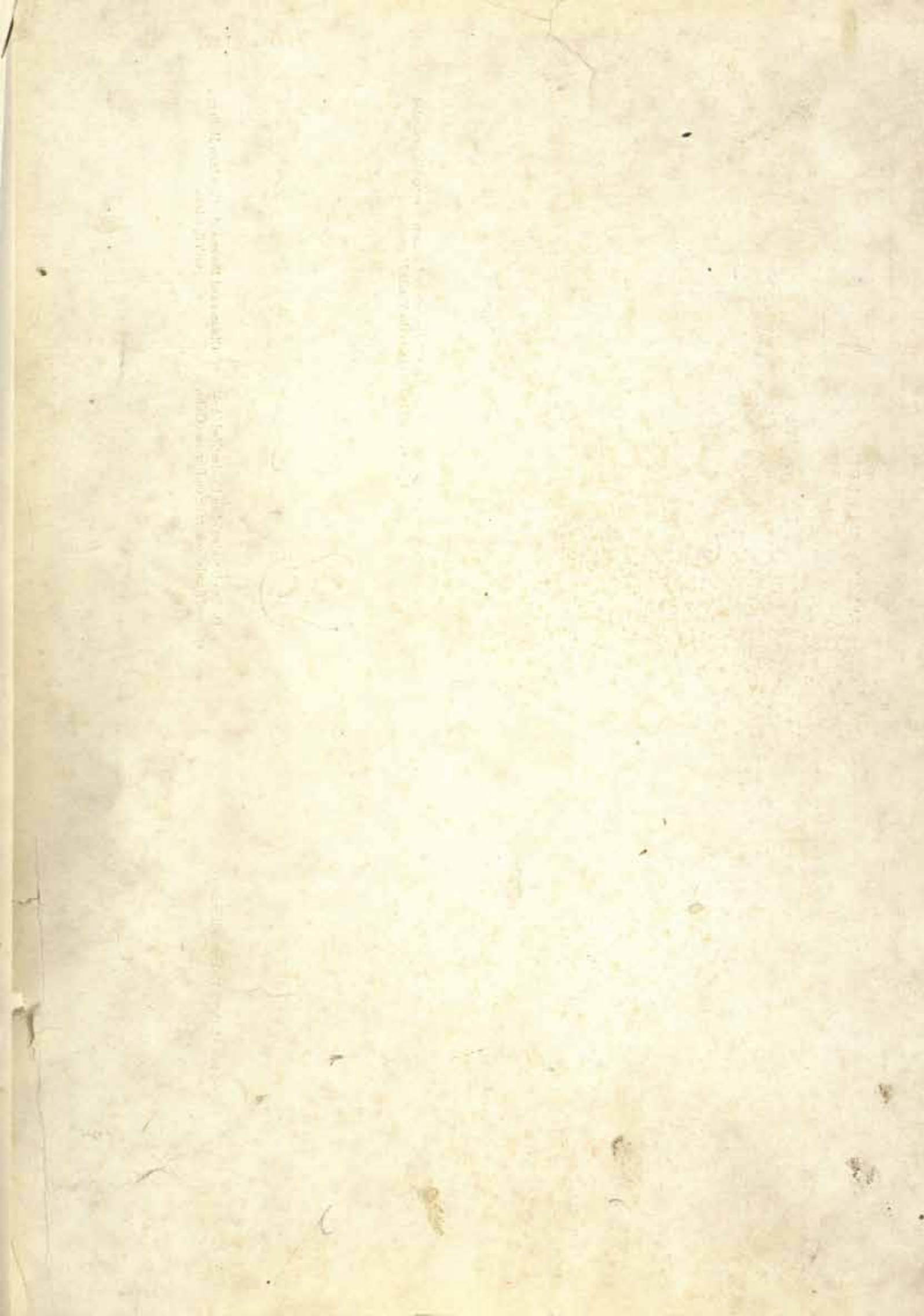
(b) Statuette from Gandhara, in the Style of Hellenistic and Roman River-gods, presented by Sir John MARSHALL to the Taxila Museum.



(c) Obverse and Reverse of a Coin from Halingyi, with Symbols.



(d) Outline Drawing of an Unidentified (Auspicious) Symbol occurring on Burmese Coins.



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