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ARCHÆOLOGICAL SURVEY OF INDIA



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ANNUAL REPORT

OF THE

ARCHÆOLOGICAL SURVEY OF INDIA

1936-37

EDITED BY

RAO BAHADUR K. N. DIKSHIT,

Director General of Archæology in India



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ANNUAL REPORT

OF THE

ARCHÆOLOGICAL SURVEY OF INDIA

FOR THE YEAR

1936-37.

INTRODUCTION.

During the year 1936-37 to which this Report pertains Archæology was fortunate in having a special grant for conservation work of about Rs. 2 lakhs. This enabled the Department to take up the huge undertaking in reconditioning the dome of the Gol Gumbaz at Bijapur. The Department was also able to take up such repairs as were postponed from year to year during the period of retrenchment.

This year being the last in which Burma continued to be a part of the Indian Empire, special attention has been given to the contributions relating to the antiquities of Burma which will henceforth not figure in this Report.

In the field of exploration little work was done in the area of the Indus civilization. The hope that the American Society which had commenced excavations in the previous season at Chanhudaro would continue it, was not fulfilled. Further work was done at Taxila, Nalanda and Rajgir, but the most important discovery relates to the work of the late Mr. N. G. Majumdar at Nandangarh where a colossal monument of the type of the Paharpur temple was brought to light. In Assam a large number of ruins of mediæval temples enveloped in the jungles of the Nowgong District were explored. Attention is invited to the interesting discussions on some sites in the extreme south by Mr. C. R. Krishnamacharlu. From Sanchi is reported the discovery of a *vihāra*, which its excavator, Mr. M. Hamid, attributes to the Mauryan period.

In the field of Epigraphy the earliest inscriptions found were three *Brāhmī* inscriptions from Kosam, one of which relates to the 2nd Century B. C. Important inscriptions were also unearthed in the excavations at Rajgir. The amount of research in this line will be evident from the Section relating to Epigraphy.

In the field of Museums much progress is recorded in the task of making the Indian Museum representative of all classes of antiquities from every Province. Some important antiquities were also added to the Delhi Fort Museum. The main work done at the Mohenjo-daro Museum was to prepare distribution lists of the duplicate antiquities, so that all the principal Provincial and State Museums in India would receive a share.

In view of the fact that the work of the Department has undergone thorough examination at the hand of an expert, it is likely that the present will be the last Report of the particular type in the present series. With the disappearance from the scene of a large number of well-known scholars by retirement and death it is natural that a certain amount of re-orientation should be necessary in the work of the Department. It is hoped that the Archæological Survey of India will have an even more successful and useful career in the service of the people of India in future.

SECTION I.—CONSERVATION.

UNITED PROVINCES.

By Khan Bahadur Maulvi Zafar Hasan.

An extra grant of Rs. 30,072 was made during the year under review for special repairs to (*a*) the Taj Mahal at Agra, (*b*) the Imambara of Asaf-ud-Daula at Lucknow and (*c*) the ancient Buddhist ruins at Sarnath near Benares. Out of this amount a sum of Rs. 10,285 was appropriated for repairs to the Taj, which is showing signs of decay, and a scheme for whose preservation has been recently initiated. The main mausoleum at the TAJ is constructed of marble, while the subsidiary buildings, *viz.*, the mosque, the *Jawab*, the entrance gateway, the high compound wall and the *Jilau Khana* or the fore-court are built of red sandstone. The inner core of the whole structure consists of brickwork in lime, and the marble or red sandstone forms the facing, which is set in lime mortar and is further strengthened with iron clamps and dowels. Unfortunately the texture of the red sandstone tends to be readily affected by atmospheric action and the facing stones have consequently much decayed at many places. Matters are even worse where the iron dowels have corroded and split up and displaced the stone slabs, which are thus in danger of falling. The marble facing also has not completely escaped this mischief, although it has more successfully resisted the atmospheric effects. Apart from several marble slabs which have been split up by corroded dowels, the exquisite inlay work has been badly affected: many of the inlaid marble pieces in red sandstone have become loose, while a few others have disappeared. The preservation of the building requires immediate attention and in pursuance of the scheme the works taken in hand during the year were (1) the restoration of the balcony of the *dalan* to the north of the *Jawab*, (2) the conservation of the river-side wall, (3) the construction of a retaining wall and dry pitching along the east wall, (4) the repairs to the underground drains in the courtyards of the mosque and the *Jawab*, and (5) the provision of dry pitching round the north-west bastion.

The mosque and the *Jawab* are flanked by arched *dalans*, which have balustraded balconies at their roof level on the east and west supported on deep stone brackets. During the rains one of the west balconies suddenly sagged, causing a wide crack at its junction with the roof. To save it from collapse scaffolding was erected for its support, and on dismantling the brackets it was discovered that the tails of most of them, which had been inserted under the roof slabs, were broken. The damaged brackets have been renewed, and the whole of the balcony rebuilt.

The compound wall of the Taj on the river-side which is really the plinth of the northern terrace, unlike other sides, is richly ornamented with carving and inlay of white marble in red sandstone (Plate II, *a*). Crowned by a balustrade, it is 36 feet high and a string course runs along its entire length about

the middle, marking the level of the underground chambers at the north terrace and the corner bastions. The surface above the string course is divided into panels, outlined by marble borders and beautifully carved with floral patterns while the lower portion has grooves cut horizontally at the joints at the regular courses of facing stones. Apparently these grooves were intended for inlay marble beadings, but the total absence of these leads one to think that they were never actually inserted. It may be noticed that the grooves continue on the west and east walls at the back of the mosque and the *Jawab* respectively, where they extend to the entire height of the walls and show no traces of marble inlay. Another interesting feature revealed in the river-side wall is a platform at the plinth level projecting 3′ 6″ beyond it, and running further to the east as far as the *mihrab* projection of the *Jawab*. This was hidden under the heaps of silt and debris, the accumulation of ages. until it was incidentally brought to notice this year in the course of repairs to the foundation wells under the north-west bastion (Plate 1, *a*). These unsightly heaps of debris, which were in some cases as deep as 16 feet, have been removed, and the river-side wall exposed to its entire height together with the platform mentioned and a flight of steps at the north-east bastion. A few stone rings built into the masonry under the platform apparently for the mooring of boats have also been discovered. It may be safely concluded that the platform was intended as a landing stage and this view receives support from the remains of an old *ghāt* where boats used to be kept. A staircase in each of the north-east and north-west bastions gives access to the river, and the indications detailed above together with the profuse decoration of the river-side wall tend to show that boating in the Jumna had been in view when the Taj was designed, that provision for it was made in the scheme and that it was a favourite pastime in the days of the Mughal Emperors. It is interesting to note that the coffin of Shahjahan was brought for interment to the Taj by boat. Necessary repairs have been carried out to the river-side wall, whose decayed stones have been renewed and the open joints treated with recessed cement pointing, while the removal of silt and debris accumulated against it has improved the appearance of the site (Plate 1, *b*).

To the east of the Taj enclosure a retaining wall has been constructed with dry pitching for certain length to protect it against a *nala* that flows on that side during the rainy season. At the same time the works of repairing the underground drains in the courtyards of the mosque and the *Jawab* and providing dry pitching round the north-west bastion which is exposed to the erosive action of the river have been taken in hand. The last two operations are still in progress and should be completed in the ensuing year.

An extensive scheme for the conservation of the IMAMBARA of ASAF-UD-DAULA at Lucknow was drawn up two years ago and the work of making the roofs of the main building watertight was actually undertaken this year. Fine cracks were visible in the ceilings, but on close examination it was found that all the roofs were badly shattered. The dismantling of the decayed concrete on the roof brought to light very wide and ominous cracks running in both directions. The lengthwise cracks at the springing of the vaults were most

dangerous, and it is surprising, indeed, how these vaulted roofs have survived the earthquake shocks, particularly the severe ones of the year 1934. One reason for this seems to be that the vaults run east to west, and the shocks having apparently been in the same direction did not seriously affect them. Perhaps a slight shaking crosswise from north to south or *vice versa* may have resulted in a disaster. All the same, it speaks volumes for the methods employed and the strength of material used in the original construction that the structure has escaped with minor injuries. Traces of previous repairs to some of the cracks were noticed, but they had been very carelessly done inasmuch as the wide cracks were only filled up with hemp and ashes and plastered over. The cracks have now been grouted under pressure with cement, and this treatment is expected to solidify the shattered portions. The main building of the Imambara is a big structure measuring 326′ by 156′ and 53′ high, and the task of closing the cracks in its ceilings and walls was a colossal one, requiring very high and heavy scaffoldings (Plate II, *b*). The laying of concrete on the roof and part of the grouting remain to be done and the work should be completed next year.

One of the gates of the RESIDENCY at LUCKNOW, which was damaged during the rains by the fall of a tree, has been reconstructed, and a building which is known as Treasury and had partly collapsed on the same occasion has been repaired. Measures were also adopted for the conservation of the dome of Kazmain in the same locality. It is covered with gilded copper plates, some of which have fallen down exposing the inner masonry to weather. A few other plates were also loose and in danger of falling down. They have been removed and the exposed masonry of the dome has been made thoroughly watertight.

Among the BUDDHIST RUINS at SARNATH the most outstanding monument is the Dhamekh stūpa. It is a stupendous and big building and has been badly damaged by the ravages of time and nature. The brickwork core, which was originally faced with sandstone richly ornamented with carving, has been mostly stripped of its facing, and having been exposed to weather it was fast decaying. The holes and crevices in the core have been filled in and open joints pointed. A few missing stones at the base have also been replaced by new ones, without, however, attempting to reproduce the carving. The measures adopted will arrest the further decay of the stūpa. A scheme for the drainage of rain water from the excavated area at Sarnath and for the preservation of other remains has also been drawn up, and it is under execution to be completed in the ensuing year.

Certain approach roads to the palaces at FATHPUR SIKRI were remetalled with a finishing coat of spramex. Running over a ridge, these roads have a rather steep slope, which exposes them to damage by the rush of rain water. Ordinary treatment proved ineffective to keep them in a decent state, and the painting of their surface with spramex, as it has now been done, is expected to prove more satisfactory. The road from the Agra Gate of the city to the Badshahi Darwaza of the Dargah of Sahikh Salim Chishti and the loop road passing through the Naqqar Khana, have been repaired. Two subsidiary roads leading to the Buland Darwaza still await treatment.

At the Hammam of the Turkish Sultana at Fathpur Sikri the clearance of earth and debris has revealed the original stone paved floor, a raised *chabutra* (platform) in the centre of the main compartment and a stove which was used for heating the bath. Of the two side chambers of the *hammam* one was intended for hot bath and the other for cold bath with the spacious compartment containing the raised *chabutra* serving as an antechamber to both. Each of the side chambers has separate reservoirs connected with earthen pipes to feed them with water, and there is a stove at the back of the chamber used as a hot bath. The raised *chabutra* in the antechamber, which was in a dilapidated state, has been restored, and missing pavement slabs in the various compartments have been replaced.

The dislodged facing stones of the southern jamb of the central arch in the west facade of Akbar's tomb at Sikandra together with the crowning minaret and battlements have been dismantled and rebuilt, while the north-west and north-east bastions of the compound wall have been reconstructed (Plate II, *c* and *d*). At the Agra Fort some of the decayed facing stones in the north-east wing of the Jahangiri Mahal were replaced, a compartment of the ruined *hammam* was re-roofed and the copper finials on the curvilinear roofs of the pavilions flanking the Khas Mahal were reset. The Bara Khamba at Kagarol in the District of Agra again received attention and the *chhatri* on its south-east corner, which was in a dangerous state, has been dismantled and rebuilt and the central dome has been made watertight and a few decayed stones in the plinth have been renewed. The western *dalan* in the inner court of the ancient fort at Jagner has been secured from collapse by rebuilding its broken roof and walls.

The domed roof of the shed over the ASOKAN ROCK EDICTS at KALSI, District Dehra Dun, has been made watertight, and the windows have been provided with expanded metal frames to prevent bats and birds from gaining access into the shed. At LAKHA MANDAL in the same district the old temple with the well-known 8th century stone inscription has been repaired, the open joints in the stone masonry of its *śikhara* being filled in with cement mortar and the roof of the *maṇḍapa* renewed.

The small temple in the village of SUDAR in Jhansi District ten miles from Lalitpur on the Chanderi road was for the first time visited and conserved. Facing west the temple must have been dedicated to Vishṇu, as appears from the images of that god in the two niches on the south and east respectively, the niche on the north containing a dancing Gaṇeśa. Both the Vishṇu images are standing and are flanked by female attendants, but it is noteworthy that in one case they are Lakshmī and Gaṅgā, as shown by their *Vāhanas* elephant and *makara* respectively. Inside the temple are to be found some fragments of sculptures and a modern Śiva *liṅga*. The temple was in a ruined state being enveloped by rank vegetation and with its roof slab cracked. It has now been cleared of all jungle and its roof restored.

The GARDENS attached to the ancient monuments in the United Provinces fared well throughout the year. Some difficulty was felt for want of an adequate

water supply for the irrigation of the Taj and Khan-i-Alam Gardens. The present arrangement is, that the supply received from canals is stored in a reservoir in the MacDonell Park, which has only capacity enough to hold the requirements of one week and has, therefore, to be fed periodically with water. During the hot weather, when the supply is most needed for keeping the lawns and shrubs green, it is not regularly obtained as almost all the canal water is at present utilized for the irrigation of sugarcane, the cultivation of which is being encouraged in the province. The lack of water also interfered with the working of fountains which are allowed to play on Sundays. If matters do not improve, the question of sinking a tube well and installing a powerful pumping plant will have to be considered, although this will prove very expensive.

DELHI PROVINCE.

By Khan Bahadur Maulvi Zafar Hasan.

A sum of Rs. 17,714 was available this year for special repairs to ancient monuments out of which Rs. 13,551 was spent on urgent projects for improvements to gardens and Rs. 4,163 for structural repairs. The most important of the six works executed was the conservation of SIKANDAR LODI'S TOMB. It stands on an elevated piece of ground and consists of a spacious walled enclosure with an octagonal domed chamber, surrounded with an arched verandah, in the centre. The enclosure walls are battlemented and relieved inside by arched recesses, which are repeated in the plinth of the enclosure externally. The central portion of the west wall is raised higher and is provided with flanking minarets and a big mihrab recess, which showing it to be a wall mosque, while to the east of the enclosure there was originally an entrance gateway which was blocked up. In the south wall there is another gateway, behind which projects a raised platform whose south-east and south-west corners are emphasized by domed *chhatris* adorned with tiles. This platform seems to have been a subsequent addition constructed for the burial of some distinguished persons, who could not be interred in the royal mausoleum. Originally access to the platform was from the tomb enclosure, but as the entrance to the latter had been blocked up, as already stated, modern steps were erected at the platform to provide an approach to the tomb of Sikandar Lodi through the southern gate. To restore the original feature of the building the old eastern gateway to the enclosure has been opened and conserved, and also provided with steps. The enclosure wall on the north and west has been repaired, while a few broken *chhajja* slabs of the tomb proper and the corner *chhatris* of the platform have been renewed.

Other notable improvements carried out were the provision of hand rails and railings at the staircases to the terrace of HUMAYUN'S TOMB for the convenience and safety of visitors, the rebuilding of the broken walls and arches of the Kashmiri Gate, and the reconstruction of the compound wall of the MUTINY MEMORIAL, which fell down during the rains.

A few fractured lintels in the southern colonnade of ALAUDDIN'S extension of the QUTB MOSQUE were renewed, the causeway between Tughlaq's tomb and the fort of Tughlaqabad was repaired, the gateway of ZAFAR MAHAL was provided with a new roof. The JAHAZ MAHAL at MEHRAULI which is really a mosque of the Pathan period as indicated by the *mihrab* recesses in the west wall was in hand for repairs this year. It stands on the east bank of the Shamsi Tank and has its high plinth pierced with cells, which form the ground storey. These cells were covered with earth, which was removed in 1929, when a trench was excavated on the north, south and west to expose the ground storey to view. A drain was dug for the discharge of rain water from the trench into the tank, but during the rainy season, when the water level in the tank rose, the trench instead of emptying itself into it was flooded by it, and the ground storey was submerged under water. To stop this mischief an earthen dam has now been erected across the drain, and a new drain constructed to carry off rain water from the trench into a neighbouring culvert, which crosses the Delhi-Gurgaon Road.

GARDENS.

Out of Rs. 13,551 spent on initial works at the Archæological Gardens in the Delhi Province, a special grant of Rs. 7,926 was utilized on the completion of the layout of the Lady Willingdon Park at the southern confines of New Delhi. The Park which is the latest addition to the amenities of the capital embraces a group of Lodi buildings, to which the well-planned terraces and gardens have provided a charming setting. The lawns at the Qutb Garden require special attention in the matter of adequate watering owing to shallow earth and to meet the requirement an additional pipe line of some 840′ in length has been laid, and the old and worn-out pumps have been replaced by new ones. Filtered water hydrants have been provided to the gardens at Safdarjang, Humayun's tomb, Purana Qila and Kotla Firoz Shah for the comfort of visitors who felt great inconvenience at these monuments for want of drinking water. Lawn and variety of shrubberies are the main features of the Archæological gardens, and the climatic conditions having proved favourable to both of these, the gardens remained attractive throughout the year.

THE PUNJAB AND NORTH-WEST FRONTIER PROVINCE.

By Mr. H. L. Srivastava.

The total amount of expenditure on conservation works during the year under report in the Punjab and North-West Frontier Province was Rs. 74,318 including Rs. 11,435 on the maintenance of water supply and pumping plant.

Special Repairs in the Lahore Fort were executed to the Octagonal Tower near the *Chhoti Khwabgah* known as Lal Burj, the building now used as the Archæological Rest House, and the roof of the upper storey *dálan* at the north-east corner of Shish Mahal.

The open square between the Kala Burj and Lal Burj was cleared, and a spacious tank with an iron fountain pipe in the centre was brought to light (Plate IV, *a*). Heaps of debris lying scattered in the moat and south-east corner of the Fort were also removed and the entire area made neat and tidy.

At the LAL BURJ the roof was renewed by putting reinforced brick lintels and cement concrete above it. At the Rest House the items of work consisted of edging the plaster with a neat fillet of lime mortar; providing a special cornice in the western *verandah* and the construction of multifoil arches after Shah Jahan's pattern (Plate III, *c* and *d*).

The old roof of the upper storey *dalan* at the north-east corner of the Shish Mahal having sunk at several places due to the breaking of the decayed battens below, special repairs were executed. In course of these the decayed pillars with their bases, capitals and brackets as also a few *chhajja* stones were replaced by finely dressed, smoothed and moulded Agra red stone work. The *Dasa* below the pillars was finely carved in best quality of Agra red stone and was made to fit with the old sound pieces. The red stone *jali* work was specially arranged in Agra and matched exactly with the old decayed pieces. The faces of the southern side walls were plastered in gutch depicting the original mouldings in stone work.

At the BADSHAHI MOSQUE some of the old stones in the prayer chamber were reset and finely dressed stone work provided for facings and floral *kanguras*.

At the HAZURI BAGH which is once said to have been a *serai* attached to Badshahi Mosque, the causeway and the marginal pathways around the Baradari were laid with tile paving in diaper pattern. The western facade of the southern wing of the ROSHNAI GATE was repaired with country bricks in lime (Plate III, *a* and *b*). Iron gratings to the archways were also provided.

The BARADARI attributed to MIRZA KAMRAN, second son of Babar, which stands on the right bank of the Ravi at a distance of about 2 miles from the Fort as the crow flies is one of the earliest Mughal edifices in Lahore. The area immediately to the west of the Baradari was cleared and revealed the sides of a large-sized tank (271′ long and 5′ deep), flower beds of geometrical pattern (Plate IV, *b*) and a series of pathways. The central channel, connected with the tank runs from east to west, measures 513′ long and 13½′ wide and contains fountains at intervals of 24′. The flower beds and brick-paved pathways run parallel to the channel the former being 7′ wide and the latter 9′. At the end there is a square platform measuring 97′ with a small octagonal tank 11¼′×9′ having a fountain in its centre. There are indications of a Persian-wheel being in use for the purpose of irrigating the garden and feeding the fountains on the north side of the platform. The Baradari and the attached garden is now properly maintained.

In the mosque of TAHAR KHAN NAHAR at Sitpur in Muzaffargarh District the work executed comprised repairs to the pavement of the courtyard, removing mud plaster from inside the mosque and replastering it with cement and lime. The inner floor has been renewed with cement conglomerate. The bulging fine masonry on the west side has been restored and wire netting provided inside the

mosque to prevent the pigeons from nesting. Cracks in the roof have been filled in and the ventilators have been provided with wooden crates (Plate IV, *c*).

Special Repairs to the BEGUM-KI-SARAI at Attock which were contemplated as long ago as 1929, have been mostly done this year. In the interior masonry of corner-bastions has been repaired. All the *verandah* pillars in blocks D and C were collapsing, since the core was built in mud and pointed with pinkish lime mortar. These have now been reconstructed in lime mortar strengthened with cement. The decayed masonry in the side walls supporting the *verandah* vaults has been made good. All the later additions in the west compound wall north to block II-C and the North-West staircase adjacent to it have been dismantled and reconstructed (Plate V, *a* and *b*). The existing staircases, five in number, have been fully repaired by fixing stone bed plates similar to the original. The roof has been made watertight and 48 water spouts have been reconstructed in their original places. The broken and uneven floor of bastion B A and of the mosque has been renewed by a layer of 4″ lime concrete.

The BRICK TEMPLE known as Sassi-da-Kalara near Shah Mohammad village in Attock District was protected under the Ancient Monuments Preservation Act in 1935. It belongs to the early Mediæval period, its rich brick ornamentations being comparable to the Laksmana Temple at Sirpur, Raipur District, C. P. Repairs to the temple consisted mainly of repairing the broken portions of the walls and restoring the missing masonry around the plinth about 5′ in height and 2½′ in depth and then giving a backing in the form of buttresses for the support of the tottering structure.

Special attention was given to JAHANGIR'S TOMB this year for which a provision of Rs. 10,000 was made. The decayed and loose white marble facing stones of the Cupola over the north-west minaret, were replaced. The dilapidated red sandstone slabs of the side walls of the staircases in the western and northern sides of the central mausoleum were reset. The brick pavement of the four causeways towards north and south of the central tank in front of the Mausoleum was relayed with new special size brick pavement in cement mortar to an extent of 80′ on either side of the tank.

At NUR JAHAN'S TOMB the diaper pattern brick pavement was laid with special size bricks and a thick cement concrete damp proof course was provided below. The decayed steps and the side walls of the staircases leading to the underground chamber and the steps towards north and south of the platform built by the Public Works Department with modern bricks some years back were restored with new special size brick work in cement mortar and an iron sliding door was fixed on the opening of the staircase.

The Annual Repair works in the Lahore Fort consisted chiefly of repairing the south-east corner of NAULAKHA in Shish Mahal, dismantling modern additions and restoring the eastern facade of SHAH JAHAN'S QUADRANGLE, dismantling the modern building to the south of Custodian quarters, reconstructing the dismantled portion of the gate opposite the stone gate near Moti Masjid; closing the door opening in *Hammam* building in front of the Moti Masjid; exposing

beautiful paintings of the Mughal period by scraping off thick coatings of white-wash and spreading and consolidating murram in JAHANGIR'S QUADRANGLE.

At AKBARI SARAI, Shahdara, 17 rooms to the north of the Mosque were repaired this year. The work executed consisted of underpinning the decayed old masonry and replacing the mud masonry by country bricks in lime and pointing the old brickwork. The eastern half of the southern enclosure wall of the *sarai* was also treated in the like manner. The wide crack in the back of the mosque in the Akbari Sarai was grouted with cement.

At ASAF KHAN'S TOMB the western half of the southern enclosure wall which at some places had fallen on account of overflooding was underpinned with country brick masonry in *kankar* lime.

At the SHALAMAR GARDEN the red sandstone brackets of the balcony in the north-west *burj* of the first terrace were replaced and the loose *dasa* and *jali* stones were reset with cement mortar. The outer faces of all the buildings were colour-washed and their interior whitewashed. The decayed concrete floors of the western pavilion near Sawan Bhadon in the second terrace and of the building to the south of the well in first terrace relaid. Some red sandstone slabs covering the sink underneath were found loose and were properly reset. Both faces of the southern half of the eastern enclosure wall in third terrace were repaired with country bricks in *kankar* lime.

At Harappa the annual repair work consisted of consolidating the concrete apron to the south of the museum building and treating with mud plaster the roofs of the antiquity rooms and servants quarters. An iron railing with barbed wire fence was fixed in front of the HARAPPA MUSEUM in order to prevent the ingress of stray cattle. It is proposed to have the entire area laid into suitable plots for flower beds.

Inside the KANGRA FORT jungle was cleared from the monuments and their precincts. The roof above the entrance gateway was rendered watertight by conglomerate concrete.

At the DAKHNI SARAI in Jullundur District the work done consisted of repairs to the room on north-west side with country bricks in *kankar* lime.

Two works executed by the Public Works Department, *viz.*, providing expanded metal covering at the storage tank at HAZURI BAGH, Lahore, and fixing new engine in pump zone at the Archæological Museum, Taxila.

The report on the gardens maintained at the protected monuments in the Circle is given below:—SHALAMAR GARDEN. Antirrhinums of different colours presented a very pleasant spectacle in the beds around the central tank during March-April 1937 and Balsam and Daisy in October-November 1936. Twelve rose beds were replanted this year. Four plants of Ghorisia Insignis were sent out in the third terrace. SHAHDARA GARDEN. A piece of alkali soil in the lawn in front of the tomb was reclaimed and grassed. This year, Gailardia on one side and wall flowers on the other side of the borders at the foot of the walls at the west end of the garden were set out. Yellow and blue pansies in beds of the two sandeels north and south of the tomb along with Phlox in sandeels in

front of the tomb made a good display during the season. Six plants of Ghorisia Insignis were planted this year.

The gardens attached to Nur Jahan's Tomb, Raj Ghat (Kamran's Baradari) and Hazuri Bagh were kept clean and tidy as before and the general routine was carried on as usual throughout this year.

North-west Frontier Province.

The Buddhist Stupa at Pipplan near Taxila which stands in a cell measuring about 13′ 6″×13′ 4″ was protected from the severities of weather by a shed supported on modern pillars built on the tops of old walls. Early in April 1936 it was found that the masonry of all the four walls to the extent of 10¾″ beneath the modern pillars supporting the roof was being washed away by the rains and the whole structure was in imminent danger of collapse. It was therefore decided to reconstruct all the four walls in lime mortar similar to the original. The different types of masonry used in these walls afforded considerable difficulty in reconstruction, particularly on the exterior of the north and south walls, where the masonry is of a peculiar type, conforming neither to the rough rubble nor the small diaper type. In order that the modern work may be distinguished from the old the new pillars on the tops of walls supporting the roof were built in stone with roughly dressed sides (Plate IV, *d*). The bulged-out south portion of the east compound wall has also been reconstructed.

The drainage of the monastery area has been improved by spreading fresh earth, thereby raising the floor levels of the rooms and by constructing proper drains in at least two of the side rooms which had no outlet for the water.

The high enclosure walls around the Mansehra inscribed rocks afforded privacy and encouraged the villagers to commit nuisance, with the result that the monument remained extremely dirty. The walls were therefore dismantled and rebuilt with slight alterations in the plan, so as to enclose the inscribed rocks as far as possible ranging in height from 2′ 4″ to 2′ 8″ with stones dressed similar to those used in the old walls. The inside has been paved with stone slabs laid on lime concrete. Access to the interior has been arranged by open steps both inside and outside. The cavity under the rock AB has been filled and faced with a dwarf wall on all the sides with the result that the whole area looks neat and tidy (Plate V, *b*). The level of the ground near the inscribed face B of the rock AB is higher than the rest of the enclosed area. Hard rock being found underneath, it could not be brought down to the level of the rest of the enclosed area without jeopardising the inscribed face B. Therefore it has been floored on a higher level connected by a flight of steps with the lower.

Rock D which is the lowermost rock, is surrounded by water channels on two sides. The level of the enclosed area being lower than some of the adjoining fields, the site always remained damp. To stop the seepage cement concrete *pushta* has been laid on the west, and the south-east of the enclosed area and the water channels of the cultivators on the east and north have been made *pucca*.

The Pindora Site at Tofkian has been enclosed by a barbed wire fencing four feet high with posts of reinforced cement concrete. The whole site now remains neat and tidy.

Heavy rains caused much damage to the walls of the SIRSUKH SITE and a long piece of walling between second and third bastions, and walls of the bastions on the south-east corner had nearly collapsed. The damage was all made good.

Special repairs to the monuments at TAKHT-I-BAHI district Peshawar were undertaken to strengthen the high walls of the south-west corner of the conference hall; the south-west corner of the monastery; the high wall in the Stūpa court; and to rebuild the bulging portion of the west wall of Hall No. IV and the collapsed chapel in court V; to raise the walls on the south-west corner of the main Stūpa court with a view to check visitors climbing over and finally to repair the walls of room No. XVII so that it may be used as a hut for chaukidars. All the repairs and improvements were satisfactorily carried out (Plate V, *a*). The roof of the hut for chaukidars is made of corrugated iron on deal rafters and a wooden door has been fitted to the old entrance on the south. The corbelled arch adjacent to this room has also been repaired exactly similar to the original work.

The modern sculpture shed has been made safe by erecting barbed wire above the old iron grated fencing. The portion towards the west of the shed has been paved to stop percolation of water. By far the most difficult and risky work was repairing the high walls of south-west corners of the Conference Hall and the monastery on account of the height, and high wind.

Hill roads in the north and south of the monument were properly repaired and six cross drains were also built in cement mortar.

Similarly the approach hill road to the monuments at Jamalgarhi was treated and the entire site was kept neat and tidy.

TAXILA.

By Khan Sahib A. D. Saddiqi.

The restoration of the north-west and north-east sides of the Main Stūpa terrace at Mohra Moradu which was commenced during 1935-36 was completed during the year under report (Plate V, *c*). The level of the body of the terrace was raised approximately to the base of the cornice at the top of the main terrace immediately below the base of the drum of the Stūpa. A part of this drum is still *in situ* on the east where a few sculptures are still intact under a modern shed. In addition to the masonry restored below the level of the cornice, some more has been renovated on the north side of the approach to the Stūpa and a good deal on its drum. Also some compact filling has been done all round the base of the drum to form the necessary core for the terrace, which with the cornice it may be possible to restore in Kanjur stone at some later date.

The ruined drum of the Stūpa had a huge cleft in its middle, made by some treasure seeker or antiquity-hunter in the past, which let the rain water accumulate and thereby assisted in the deterioration of the monument. This cleft,

has now been very carefully closed by successive layers of stone and mud in order to render it perfectly impermeable. The east side of the subsidiary Stūpa has also been renovated.

Near the fourth mile-stone on the main approach road the Stūpa may be seen (Plate V, *d*). The drawing of the restored Stūpa prepared under the expert supervision of Sir John Marshall is at Taxila, and should it one day become possible to carry out a complete reconstruction, it will not be difficult to do so. This drawing has already been published in the Annual Report for 1915-16, Plate XVII.

The buildings exposed in the deep excavations at Sirkap were falling into ruins and it was a matter of extreme urgency to preserve them. This could not be done effectively except by the partial refilling of the excavations in blocks 1′, A′, B′ and C′, so this work was started and continued during summer. At the same time a number of walls were restored in block D′ west and 1′. The refilling has been rather enormous in quantity, in all amounting to over 175,000 cubic feet.

A sustained and strenuous effort has been made to keep all the excavated sites looking neat and tidy and in a good state of preservation. This has been done by a small gang of 18 local labourers maintained on monthly wages system for only 6 months of the year. Usually a great deal of destruction is wrought every year on the excavated sites during the rainy season and this gang is engaged in restoring them to their normal condition. From experience it has been found that the enormous extent of the clearance and the restoration work which this gang has to do is beyond its scope and its strength could with advantage be increased.

BENGAL.

By Mr. T. N. Ramachandran.

The programme of conservation in Bengal during the year 1936-37 carried out at a cost of Rs. 20,412 embraced besides the usual works of annual repairs and maintenance, the conservation of the monuments at Paharpur executed directly by the Archæological Department and a few works of special repairs entrusted to the Public Works Department.

At PAHARPUR certain portions of walls in the eastern and western ante-chambers of the main temple as also the south-eastern and north-western corners in the second terrace and the south-western corner of the first terrace were taken up for special repairs because of the action of saltpetre. The old masonry affected was in each case carefully dismantled and rebuilt strictly in accordance with the old outlines, special care being taken to preserve the original appearance. Repairs to the central shaft of the Main Temple involved a careful reconstruction of the inner faces of the walls after dismantling bulged-out portions and removing debris after the work was completed. In the western section of the monastery area, the work of reconstruction of the outer facing of the walls of cells was completed and extended to the northern section.

During the year boundary pillars were erected at several monuments including the compound of the TOMBS OF SHER AFGAN, NAWAB QUTB-UD-DIN and BAHRAM SAKKA at Burdwan and the ROCK INSCRIPTION OF CHANDRAVARMAN in SUSUNIA HILL, Bankura District, a cattle-proof wire fencing with an iron gate being provided at the latter.

Special repairs to the QUTB MOSQUE at ASHTOGRAM, Mymensingh District, included removal of loose terracing of the roof, renewal of terracing and brick-work, and also that of damaged brickwork in foundation and plinth and renovation of the missing portion of the north-eastern turret and its ornamental mouldings. In the case of the TOMBS OF NAWAB ALIVARDI KHAN AND SIRAJ-UD-DOULA at KHUSHBAGH, Murshidabad District, the work done consisted of renovation of the platform of the mosque, repairs to the walls in the superstructure, renewal of the coping of the compound wall, changing of the rafters of the tomb and of the office, and half-terracing on floor including picking up the old loose floor in two of the Huzras. At GAUR, Malda District, the high wall known as BAISGAZI which was damaged by the earthquake of 1934 was rebuilt, a damaged wall in the DARASBARI MOSQUE was renovated, gauge concrete was provided and stones were reset in the southern, eastern and northern walls of the GUNMANT MOSQUE. AT PANDUA, Malda District, the main work at the ADINA MOSQUE consisted of the renewal of ornamental brickwork, repairs to the south-eastern walls and to the arch masonry of the western walls and resetting of fallen stones at the south-western corner. In the Bankura District the retaining wall on the southern bank of the tank to the north of the RADHA GOVIND temple at Vishnupur was reconstructed, while at MADANPUR in the same district the arch, ornamental brickwork, terraced roof and terraced floor of the SHYAMSUNDAR temple were renovated. Half terracing was provided to the roof of SHAH MAHMUD MOSQUE at AGARSINDUR in Mymensingh District while the terraced roof and cracks in walls of SADI MOSQUE of the same place were attended to. The protected MOUNDS at BANGARH in Dinajpur District were surveyed.

ASSAM.

By Mr. T. N. Ramachandran.

The total expenditure on conservation in Assam was Rs. 8,053, of which Rs. 3,662 was spent on annual repairs and Rs. 4,391 on special repairs. In the KAMAKHYA HILL, Kamrup District, ROCK-CUT FIGURES were cleaned and the western entrance pillars were repaired, while at JAYSAGAR in Sibsagar District were provided a wooden door and expanded metal windows in the temples and a concrete pipe culvert in the approach road. Other minor works such as provision of wire fencing round the DARABERA GROUP OF MONOLITHS at NORTH CACHAR HILLS, construction of an iron-grated door in the SIBDOLE TEMPLE at NIGRITING in Sibsagar District and the erection of reinforced concrete boundary pillars around SIVATILA at TULARGRAM in Cachar District were executed.

BOMBAY PRESIDENCY AND SIND.

By Mr. Q. M. Moneer.

In the Western Circle 736 ancient monuments were under protection for Archæological preservation. Of these 678 are in the Bombay Presidency and 58 in Sind. 482 of these in the former area belong to the Government and the remaining to private persons or trusts. In Sind the State owns 53 and only 5 are in private custody. Except for 21 in the Bombay Presidency and 1 in Sind which by reason of their purely local interest are looked after by the Provincial Governments concerned, all responsibility for preserving the remaining 714 monuments is borne by the Central Government. The greater proportion of these buildings in the charge of the Central Government is entrusted for conservation to the Public Works Department of the two Provincial Governments.

The total amount sanctioned for conservation works in this Circle was Rs. 1,35,638 out of which besides paying a sum of Rs. 15,785 to the Bombay Government on account of the pay, travelling allowance, leave and pensionary contribution for the Public Works Department subordinates lent for Archæological work, a sum of Rs. 27,051 was expended on ordinary current repairs to 248 monuments in the Bombay Presidency and 28 in Sind and Rs. 92,376 on special repairs to 33 buildings, 29 in the Bombay Presidency and 4 in Sind. Though relatively smaller in number, special repair works were fairly evenly spread over the Archæologically more important parts of the two provinces such as Bijapur and Dharwar in Bombay-Karnatak; Nasik, Ahmednagar, Khandesh and Poona in the Central Division; Thana, Kolaba and Ratnagiri in Konkan; Ahmedabad, Kaira and Panch Mahals in Gujarat and Tatta near Karachi, Hyderabad, Thar-Parkar and Larkana Districts in Sind.

Bijapur.

The most important repair work deserving prominent mention this year, relates to that example of unique architectural magnitude, the famous Gol Gumbad at Bijapur. Erected in his life time by the seventh Adil Shahi king, Sultan Muhammad (1627-1655 A. D.), to crown the mass of his mausoleum, this great dome in spite of periodical partial repairs was for some years past showing signs of persistent decay of the plaster of its outer surface (Plate VI, *a*). Percolation through the cracks of this decayed surface had begun to affect the shell of the dome through the stresses of thermal expansion and contraction. During the year under report this unhappy state of things was effectively remedied by overhauling the entire external dome surface by new methods. The whole of the plaster having first been removed, the masonry shell was encircled by two bands of steel reinforcement one at the neck and one at the point of greatest diameter. Each band consisted of four $1\frac{3}{4}''$ steel bars at 15″ centres. After this the entire surface of the shell was encased in welded steel mesh fabric and the whole 'gunited' with a mixture of cement and sand, shot at it through hose-nozzles to a thickness of two inches. To facilitate the aproach of working

parties to every part of the dome a forest of scaffolding had to be erected all over and around the dome (Plate VI, *c*). The guniting process employed in this treatment is so called from the Cement Gun, a mechanical device which working with strong air compression from a considerable distance shoots up a cement-sand mixture through hose pipe, the mixture being spread evenly over any extent of area (Plate VI, *d*). This reinforced cement-sand composition sets into a hard and dense mass which can well withstand the stresses set up by climatic conditions. Not only was the dome thus treated, but also the vertical face, the lotus-leaf ornament below it (Plate VI, *e*), the terrace in front of the base and the small domes at each of the four corners of the mausoleum (Plate VI, *b*).

The contractors responsible for carrying out these repairs were Messrs. John Fleming & Co., Ltd., of Bombay. During these repairs, the Gol Gumbad had to be declared out of bounds to visitors for a period of nearly three months.

Asar Mahal or the Palace of the Relic at Bijapur is a very sacred monument for Muslims on account of its being the depository of two hairs of the Prophet's beard since the time of its builder Sultan Muhammad who also erected the Gol Gumbad. The room at the north end of the first floor of this building containing the relic box is not allowed to be opened by its Custodians more than once in a year, with the result that the plaster on its walls had been decaying and falling unobserved for many years past. Opportunity was sought and found. During the year all the perished plaster of this important room was made good in harmony with the quality and colour of the original.

The open area around the small mosque locally known as Bhui Masjid at the western edge of Bijapur City has been fenced in with barbed wire and angle iron posts to keep out stray animals and irresponsible people who, it was reported, rendered these spaces filthy and insanitary. Such use of open areas round ancient monuments at Bijapur has been a long standing complaint and during the year sustained action was taken by the application of the law in this respect against offenders caught red-handed. These actions are being continued and in course of time the evil, it is hoped, will disappear.

In the District of Bijapur, the Narayandev Temple at Bevoor 12 miles east of Bagalkot, locally ascribed to Jakhanacharya of Chalukyan tradition, was provided with stone-in-lime masonry underpinning for the exposed portions of its foundation. A large number of open joints and gaps in the face of the plinth and the south and west walls of this temple have also been carefully pointed.

Nasik District.

The third and fourth caves of the famous Pandu Lena group dating from 150 B. C. have each been provided with substitute supports of which they were urgently in need. In Cave No. 3 for example two missing pillars at the west end of the verandah have been made good with new ones, of the same shape, size and mouldings as the other pillars still extant in this verandah ; the foliage ornament of the inverted pot motif of the latter has not, however, been copied in the new columns. (Plate VII, *a* and *b*). The verandah before Cave No. 4

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Nasik District.

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was disfigured by two damaged pillars hanging parlously in its front face. This has been remedied by supporting the hanging pillars on ashlar masonry shafts of plain octagonal design copied from the original pilaster still *in situ* at the right end of the verandah front (Plate VII, *c* and *d*).

Ahmednagar District.

Harishchandragarh, 63 miles from Ahmednagar, a hill fort commanding a beautiful situation on the borders of Ahmednagar, Nasik and Poona Districts, has a Siva Temple of about the 11th century, which came in for repairs this year. The cracked lintels in the east and south doors of the main shrine were supported on T-iron joists of suitable section. A missing slab in the centre of the ceiling of the *mandapa* and another wanting in the roof of the porch of the Taramati shrine attached to this temple have been replaced, while leakages from the *sikhara* and roofs are now stopped by grouting all open joints and crevices with coloured cement and by making the ceilings generally watertight.

Tavlai, now a small village 19 miles from Shahada in West Khandesh, is famous for a Stepped Well of considerable architectural pretensions, which tradition ascribes to one Maheshwar Bhat. Judging from the predominance of Islamic influence in its design and architectural details, this stepped well could not have been built earlier than the 15th century A. D. Local tradition relates that while grazing his cattle in this area Maheshwar once chanced to strike his sickle against a 'philosopher's stone', which turned that tool into gold and that he spent part of his fortune brought by this discovery on building this elaborate well. The steps and walls of this well are mostly of masonry while the domes above the landings of the staircase are built of small rubble and lime faced with lime plaster. Much of the missing part at the south-west corner of the wall under the second dome has been made good with material and masonry of the quality of the original fabric. Open joints in other parts of the walls as well as cracks and perished plaster on the domes have received cement grout and fresh lime plaster treatment as required. The east and west windows of the small room immediately beneath the second dome has been provided with expanded metal frames to prevent accidents.

Poona District.

At the Buddhist rock-cut shrines at Bedsa, 30 miles from Poona, the right side pillars and pilaster of the verandah in front of the main cave had some years ago been repaired with Khandki stone masonry which was found to be incongruous with the tone of the original monument. This defect has now been remedied by taking down the Khandki masonry and substituting ashlar work of fine finish, corresponding to that of the original verandah pillar still extant.

The condition of the Shanwar Wada at Poona, the famous palace of the Peshwas, is being steadily improved, with a view to preserve it as a public garden. During the year the process of replacing the lawns and beds of its terraced garden was carried out in the first court where a lot of hard stuff and debris filling

had to be dug out before preparing the ground with good river soil to take the grass seeds. The vast area of this garden and the large number of fragmentary structural remains brought to light in this palace, render it necessary to carry out a systematic campaign of well-thought-out special repairs for a number of years.

Thana District.

The temple at Ambernath, four miles from Kalyan, is architecturally one of the most important in the Deccan. It bears an inscription according to which it was built in the Saka year 982 (1060 A. D.) in the time of Śilāhā dynasty of Konkan by one Mammuni. The temple is conspicuous for the exceptionally rich quality of its sculptures and carvings. The *mandapa* has long lost its roof, and monsoon rains were damaging the floor. To remedy this, a corrugated iron sheet was erected over the *mandapa*. Another improvement effected this year was to substitute plain blocks (without any attempt to reproduce the carvings) in the mouldings on the south and east in place of cement concrete underpinning done several years ago. Broken lintels and loose roofing slabs of the south and north porches at this temple have also been provided with T angle supports of requisite size.

Kolaba District.

Rewadanda in the Kolaba District, though now an insignificant village, was once an important place, particularly during the Portuguese period. The existing ruins consisting mainly of churches and monasteries built in the 16th century A. D. were already in an advanced stage of decay when brought under archæological protection. The severe climatic conditions in the Konkan, which are responsible for their present condition, do not permit of any extensive measures of preservation except at an enormous cost and the monuments have, therefore, been relegated to class III of the monuments. During the year an overhanging wall of the Jesuit Monastery, which was reported by the local authorities to be a danger to passers-by, was taken down as an essential measure of public safety.

Ratnagiri District.

Further repairs were carried out at the small mosque in pure Adil Shahi style at Dabhol in the Ratnagiri District. This mosque built in 1659 A. D. by Aisha Bibi a daughter of the seventh Adil Shahi king, Sultan Muhammad (1627-1655 A. D.), is in a very fair state of preservation and periodical special repairs provided to it during recent years have tended vastly to improve its condition. During the present year all the loose lime plaster from the north-east corner of its terrace was removed and replaced by a 4" thick layer of cement concrete comprising 5 parts of laterite, 2 parts of fine sand and 1 part of Portland cement. The parapet wall of the *dalan* attached to the mosque which had developed a series of wide open joints in its north side, has been grouted with cement.

Ahmedabad District.

The well-known Bhadar Gate, once the main entrance of the citadel of the Sultans of Gujarat (1411-1572 A. D.) at Ahmedabad, is a monument of some historical importance. Its terraced roof which was reported to be in danger of imminent collapse, together with the wooden frame supporting it from below, was taken down, to prevent accidents.

At Prantij 33 miles north-east of Ahmedabad, a rectangular building, exemplifying a style of Muslim sepulchres in the days of the Gujarat Sultans, is locally known as Sikandar Shah's Rauza. This Sikandar Shah is not to be confused with the sultan of that name (1526 A. D.) who lies buried at Halol. The original name of the former was Sikandar Mian, a soldier in the army of Sultan Ahmad Shah of Gujarat (1411-1441 A. D.) who died after a valiant fight against the Raja of Dhrangadhra at Halvad in Kathiawar. As he was a native of Prantij his body was brought to this place for burial. In course of time, his memory came to be sanctified by the use of word 'Shah' instead of 'Mian' after his name. His sepulchre is now without its original dome. The terraced roof of its south corridor being in a delapidated condition, it has been taken down, without causing any damage to the pillars and pilasters on which it stood. A number of hollows and cracks in the other portion of the terrace as also those in the arches and walls have also been filled with cement concrete and grout to prolong the stability of the monument.

Kaira and Panch Mahals District.

One of the rare examples of the Solanki style of temple architecture now extant in the British District of Gujarat, is the Mahadev Temple at Bawka 11 miles from Dohad. This monument envelopped in thick jungle and debris was cleared this year and the plinth ornamented with beautiful sculptures on the surface brought into view. A large number of carved images and decorative architectural stones have been picked up from the ruined materials of the temple, and are now stacked in groups near the spots where they were found, so as to facilitate restoration at a later date.

Makai-Kothar or Maize Granary at Pawagadh hill is a monument which was the reserve supply depot of the Kings of Pawagadh. Double door openings in each of the south and west sides of the southern dome were structurally unsound and stones were in some places missing. These were made good in rubble masonry and this part of the building was underpinned where necessary. Patches of old lime plaster wherever they survive on the walls here have also been preserved against further disintegration by neat filleting of their edges.

Panch Mahuda ki Masjid. This mosque, so called from the five *mahuda* trees which once stood here, was built under the auspices of the Sultans of Gujarat, after they made Champaner the second capital of their kingdom (1484 A. D.). A huge vertical crack that had developed from top to bottom of its south-east minaret was treated with cement grout. Repairs to the tomb attached to this mosque consisted of refacing the spandrils of the arch at the north-east corner and grouting open joints in the outer surface of its dome with cement concrete.

SIND.

Karachi District.

One of the few imposing monuments now extant at Makli in the suburbs of Tatta, the Mausoleum of Nawab Isa Khan (Jr.) (1627-1644 A. D.), had long needed a masonry compound wall for its better preservation. The construction of this wall, started some years ago, was completed this year and open joints and cracks in the original building have been treated with cement grout.

The only Mughal monument of note in Sind is the great Jami Masjid at Tatta built between the years 1644-47 A. D. by order of Shah Jahan. The brickwork of this mosque is a constant prey to the destructive action of saltpetre or *kalar* which is so common throughout Sind. A large portion of brickwork in the walls outside the terraced hall has been renovated during the year. All dead plaster has been replaced by a fresh 1" thick layer of lime plaster and disintegrated bricks substituted by specially manufactured new bricks of the same size and texture as the old. Certain cracks in the domes above the terraced prayer chamber were re-opened and properly grouted with cement, suitably coloured to match the weathered appearance of the monument.

Hyderabad District.

The Harem or ladies' apartment of the Talpur Mirs the last Muslim rulers of this province (1787-1844 A. D.) at the Hyderabad Fort a structure of no great architectural merit is noted for the remains of a few amorous paintings executed in tempera on the inner face of the walls. A number of cracks which had developed in the exterior face of these walls have been treated by replacing the old dead plaster and the disintegrated bricks.

Thar Parkar District.

The face masonry of the circular tower of the castle at Umarkot the famous birth place of the Mughal Emperor Akbar (born November 23, 1542 A. D.), has been made good with brick-in-mud and the pits and ruts occurring in the ramp all round the tower were filled, to secure a smooth surface to the ramp.

MOHENJO-DARO.

For the conservation of the excavated monuments at Mohenjodaro a sum of Rs. 4,368 has been expended during the year under report. Hitherto repairs to the excavated monuments have been carried out with ancient bricks collected during the course of excavations but this source having been exhausted one lac of bricks of the commonest size used in the ancient buildings, *viz.*, 11"×5·5"×2·25", were specially manufactured.

The most urgent problem before the conservator here is the destructive action of the saltpetre (Sindhi *Kallar*) which permeates the soil and is the deadliest enemy of the brickwork. The exposed walls are gradually being reduced to powder on account of the action of salt except where overburnt bricks were

used in the original walls which were the least affected. Gaining by this knowledge, the new bricks were manufactured slightly over-burnt in the kiln, as these are expected to resist the action of salts more than the average brick.

The excavation at DK area being deeper than elsewhere at Mohenjo-daro, the high standing walls with their lower courses badly worn were in urgent need of repair and underpinning. This area has therefore been selected for thorough repairs and a great deal of underpinning has been done during the current year. In repairing the buildings ordinary bricks have been replaced by slightly over-burnt bricks. Sun-dried bricks have been used for underpinning walls resting on debris or sun-dried brick foundations and for the construction of 3 dwarf walls at a distance of 3′ from the walls to which they give much needed support, the intervening space being filled in with sweet earth, well rammed. Drains which are a conspicuous feature of the Mohenjo-daro excavations have also been attended to.

BIHAR AND ORISSA.

By Dr. M. Nazim.

Rs. 4,000 were spent on the conservation of the excavated remains at *Nalanda*. The works carried out are detailed below.

General clearance of the site and running repairs to the monuments. All jungle and vegetation which had grown up round the exposed remains and on the monuments themselves was cleared. Running repairs to the monuments in general were also undertaken, the cracks, holes, etc., damage to the walls of the buildings, and cracks in the concrete works were made good as far as practicable. All drains were maintained in proper order. The broken and damaged plaster edges of stucco images and other objects were made watertight. This treatment was concentrated mostly at the Chaitya Site Nos. 12 and 13 (Plate VIII, *d*) and also at the Stūpa Site No. 3.

The repair work in Monasteries 9 and 10 was continued from last year. The cells in the west row were completely conserved and about half the number of cells in the east row of Monastery No. 9 were repaired. In Monastery No. 10 the north and east rows of cells were repaired. In carrying out repairs the bulged-out and cracked portions of the original walls were dismantled, the plinth and the foundations of the cells were examined, and the walls rebuilt in accordance with the ancient methods of construction, and up to the height of the original walls. Tail bonds at regular intervals of 5′ or so were provided wherever necessary. The superstructure was built up alternately with brick in lime or mud, and a few top courses were laid in lime to make the wall-tops watertight. In Monastery No. 9 the walls of the east row of cells were in a very poor state of preservation. The original masonry being found to be missing portions were built up matching the old methods. After the walls were properly conserved, rough brick heartings were laid on them.

The external wall at the south-west corner of the *stūpa* of the latest period at Site No. 3; the top of the south-west corner cell of the upper Monastery at

Site No. 1; and the upper portion of two cells situated at the south-east corner of Monastery Annexe 5, were in hand for repair. The original door-jamb at Monastery No. 4 was made good entirely with lime mortar without disturbing the original position of the socket on the west face of the wall intended for the reception of an upright stone or wooden pillar. It was built up to a height of about 6′ and subsequently brick heartings were laid on its top.

At Monastery No. 4, there are evidences of at least two periods of occupation, traces of a later shrine being still extant over the ruins of the earlier one. The north half of the floor of the upper shrine chamber was cut away in the year 1927 in order to differentiate between the upper and the lower shrines, and the cut edge of the upper shrine thus obtained was retained with a lime concrete wall 12″ thick. At Site No. 4, the north half of the east verandah of the upper Monastery was also cut away in the year 1926-27 with a view to exposing the lower level monastery. The cut edge thus obtained was also retained with a 12″ thick lime concrete wall.

At Monastery No. 6, the parapet of the later wall, on being exposed, was found to project on the earlier wall. The projections thus exposed were supported with concrete lintels to prevent the overhanging portions from collapsing. Similarly the projecting walls of the two cells at the north-east corner of this Monastery were supported with a suitable number of concrete lintels, to prevent their collapsing.

At Monastery No. 7, remains of the construction of three different periods had already been exposed in previous years. The south-west corner of the parapet wall, between the courtyard and the verandah of the 2nd Monastery, which overhung that of the lowest Monastery, was supported by a suitable number of concrete lintels, in order to prevent it from collapsing.

A damaged brick shrine stands in the courtyard of the lowest Monastery with its staircase facing west. The south external wall and the staircase of the shrine were conserved; the large number of stone blocks strewn over the layer of debris deposited on the top of the damaged shrine, were properly arranged; and the south and west sides of the layer of debris were cut into proper slopes and retained with mud and lime concrete as a protection against rains.

On the surface of the top layer of the debris referred to above two ruined brick *chulhas* or ovens, evidently constructed after the brick shrine fell into ruin, were repaired.

With a view to maintain a portion of each of the three shrines built one over the other in this Monastery, the damaged walls of the exposed structures were properly built up, and new concrete was laid on the exposed portions of the damaged *Pradakshinapatha* (circumambulation passage) around the structure at the different levels. It may be mentioned, however, that at the lowest level shrine, traces of the enclosure walls were not found and only the concreted passage serves to identify it.

At Monastery No. 9, the octagonal wall was repaired with new bricks cut according to the size and shape of the original ones. The subsidiary drain at

the north-east corner of the courtyard with its corbelling was made good and a few openings were left on its top to facilitate periodical inspection.

In laying new concrete on the damaged floors of the cells situated on the north, east and west sides of this Monastery and also the floor of the entrance gate and antechamber, lime concrete mortar mixed with a proportion of charcoal was rammed over a course of brick soling to obtain a solid flooring 6″ thick. The entrance of each of the cells was similarly treated. In the chases which run parallel with the sides of the entrance, remains of burnt wood were found which proves that these chases were intended for the reception of wooden beams at the two sides of the entrance through its length. Both the chases have been conserved, and one of them is now being utilised as an outlet for water from the floor of the cells into the *verandah* in their front. The damaged staircase at the south-west corner of this Monastery was repaired with lime mortar in accordance with old method and left *in situ*. The burnt pieces of wood adhering to the treads and risers of the steps, have been preserved in the Museum. The damaged floor of the landing of this staircase was also made good by laying new concrete on it.

The damaged floor of the latest *Pradakshinapatha* on the north front of Chaitya Site No. 12, was repaired in the same way as the floors of the cells in Monastery No. 9 and sloped towards the north. A portion of the west end of the path on the north front is still buried beneath debris and spoil earth, which will be removed in due course.

The sunken patches of the damaged floors on all the four sides of the upper level *Pradakshinapatha*, corresponding with the level of the four corner-shrines at Chaitya Site No. 12, were taken out, the entire pavement was made good, and proper slope was given to it for the easy discharge of rain water, through the stone lips of the original drains existing on all the four sides at regular intervals. The conserved passage now has already assumed a weathered appearance and is expected to last for many years to come.

At the Chaitya Site No. 13 the back wall of the main shrine was built up sufficiently high to match the remains of the colossal seated image of Buddha, which measures nearly 14′ from knee to knee. The entrance facing the east, was built up to a height of about 10′ and the side walls were also raised to a suitable height. The outer walls of the 21′ square chamber were not, however, restored to their full thickness, which is as much as 21′ from the inner face of the *garbhagriha* to the exterior walls. The inner section of the *garbhagriha* was built with rough brick heartings and the top of the conserved wall was given sufficient slope towards the base on all the sides. The exposed joints of the bricks heartings thus laid were treated with lime pointing for protection against rain. The shrine chamber was then provided with a corrugated iron roof with a country tile covering. The roof now slopes towards the east and extends over the entrance so as to prevent rain water from dashing against the seated colossal image of Buddha.

Conservation works relating to the north external wall and portions of the east and west external walls at the northern extremity of the Chaitya structure at the lower level at Site No. 13 were also carried out. It was necessary in the

first instance to open up trenches with a view to expose the solid portions of the plinth and the foundation over the area where constructions below the superstructure were missing. The foundation and the plinth were then made good wherever necessary, according to old evidence left *in situ*, at the adjacent walls. At the projections, at the north-east and north-west corners of the external walls of the Chaitya, the later walls on the ruins of the earlier ones were found to have been erected over a few courses of the earlier structure and were almost hanging over the plinth area; while the later walls over the earlier north wall between these two projections are constructed sufficiently high up, without disturbing the lower mouldings of the earlier wall. The later wall between the north-east and north-west projections was allowed to stand undisturbed, but those constructed over other projections were pulled down, after being photographed. After this the earlier superstructure at these areas were repaired, and the walls were built up to a height of about 3′ resting at the same the beautiful brick mouldings, strictly according to old evidences. Measures were also adopted for the preservation of the damaged portions of the smelting furnace (Plate VIII, *e*) discovered at the north front of the Chaitya structure; and of the shrine at the west front of the passage between Monasteries 6 and 7. The outer walls of the furnace, portions of the flues, and the projecting course of brick on the surface which were in tottering condition were properly conserved. The damaged outer walls of the shrine adjacent to Monastery No. 6 were also built up, but the moulding works of which evidences are left *in situ* on the west external wall remain to be completed during the next year.

At Rajgir in the Patna District an approximate sum of Rs. 1,500 was spent on conservation works.

At the *Maniyar Matha area* the following important conservation works were carried out in continuation of the previous work:—

(1) The west half of the main cylindrical structure was repaired and new concrete was laid on the landing and the adjacent floors, on the top of the existing staircase. (2) The later wall over the door in front of the main cylindrical structure was repaired and new concrete was laid on the floor in front of the door. A modern staircase was constructed at the north west-corner of the floor to give access to this floor and the main structure situated on its front. A concrete lintel was also provided at the north-east corner for supporting a later *mandapa*-like structure standing on the north of the temple. (3) The later external wall all round the cylindrical structure including the damaged cornices, etc., appearing on the top, was repaired, and the top of the cylindrical structure itself was made watertight with new concrete. (4) Preliminary repairs were carried out to almost all the brick shrines, pedestals, etc., discovered during the year under report.

Jain shrine on Vaibhara Hill.—Conservation of the main Jain shrine exposed in previous years, was continued from last year and the remaining damaged cells, verandah, etc., were repaired according to old methods (Plate VIII, *a*, *b*, c). A proper slope was given for easy discharge of rain water from the shrine structure, and all the walls, tops of the cells, etc., were made watertight with new concrete.

Shell inscription area near Banganga.—As the stone inscription discovered in previous years, on the north front of the shell inscription area, required some protection against the encroachment of the public thoroughfare, two short brick walls were erected on its north and south fronts.

Gridhrakuta Hill.—During the year jungle was cleared from the entire area surrounding the caves and the brick shrine situated on the summit of the hill. The uneven tread of the steps to the Bimbisara road was dressed up with properly arranged stones topped with earth, up to some distance from the foot of the hill and near the top where the road connects the caves. The barrier wall of the north front of the *chabutra*, situated on the adjacent side of the caves, was also repaired.

Old and New Forts at Palamau.—The pathways both inside and outside the Forts, which were blocked with debris and overgrown with trees, were cleared to enable visitors to go round the monuments. The work of clearance was facilitated by the co-operation of the Divisional Forest Officer who readily consented to cut down the trees which belonged to the Forest Department.

Barabar and Nagarjuni caves in the Gaya District.—Extensive clearance of jungle and debris carried out in the Barabar group of caves have opened out these very ancient remains to view. The area in front of the Lomas Rishi and Sudama caves was further cleared, the finds, mostly broken pottery and small vessels, comparing very favourably with similar finds recovered from Kumrahar and Rajgir. Clearance of jungle has also revealed traces of a broad rampart wall enclosing the four caves and a brick-built monastery and well in front of the Nagarjuni caves.

Chaurasi Muni sculptures and caves at Patherghata in the Bhagalpur District.—The work of erecting a buttress, and re-inforced concrete roof over the caves was carried out. General clearance of the site just underneath the rock-cut sculptures depicting scenes from the life of Krishna revealed a rectangular cave which had a coffered ceiling with bracketed human figures around the walls. From the existence in it of small Siva-lingas, it appears that this cave was subsequently appropriated by the Saivites. It is evident from the ancient traces that in the front of the cave there was a long verandah with inscriptions in Brahmi and shell characters. One masonry and two rock-cut flights of steps were also brought to light in the course of clearance work. All carved stones recovered from the cave area were stacked in regular heaps.

Statue shed at Guneri, District Gaya.—The stone sculptures stored in the shed were arranged mostly on a wide platform for proper exhibition.

Mounds at Lauriya Nandangarh, District Champaran.—A sum of Rs. 520 was spent in demarcating the site with boundary pillars and fixing notice boards to the 17 protected ancient mounds there.

Mukhdum Shah's tomb at Maner, District Patna.—The earthquake damage repair work to the Mukhdum Shah's tomb at Maner, which had been in progress in previous years, was completed during the year. The cracks in the dome and *verandah* roofs were repaired with *surkhi*-beaten plaster. The fallen ornamental tops of *Minars* were refixed and a few *chhajja* stones were replaced. Plaster

on the roofs of the south-east and south-west minarets which had become loose was taken off and renewed. The cracks in the roofs of the west rooms and in the dome of the main gate were grouted with cement. The ornamental parapet stones which had fallen down were refixed with long bolts. The steps round the tank in front of the tomb which were in a dilapidated condition were cleared of silt.

Fort at Rohtas, Shahabad District.—Much attention was paid during the year under review to the palace buildings on the top of the Rohtas fort. The areas inside the different courtyards were cleared of accumulation of debris, so as to expose the original outlets for the disposal of rain water. A neat pathway outside the palace building was made for the convenience of visitors.

Excavated Site of Mauryan Palace at Kumrahar near Patna.—The site of the Mauryan pillared hall at Kumrahar on which one pillar is still to be seen, received attention during the year. The spoil earth at the north-east corner was removed and utilised in making pathways on three sides of the excavated area. Among the antiquities recovered in course of removing the spoil earth, may be mentioned terracottas, roofing tiles with holes, cups and dishes. The terracotta tiles with holes recovered from the top layer of the spoil mound, which apparently came from the lower levels of the original excavations, compare very favourably with similar tiles recovered from Sanchi, Rajgir and Sisupalgarh.

Fort at Monghyr.—The collapsed sides of the south-west bastion were rebuilt up to 3′ above the highest flood level of the Ganges. The work was done with bricks in cement, and the outside face was cement-plastered and finished to match the existing surface.

A portion of the rampart wall of the Monghyr Fort on the river-side collapsed in July, 1936, owing to excessive rains. This was repaired in order to avoid further damage to the wall, as well as to the compound of the residence of the Superintendent of Police.

Ruined fortress at Chankigarh, District Champaran.—With a view to clearing the way for regular repairs of this monument, big trees were cut down and their roots which had penetrated the brick masonry all around the monument were killed. The damaged portion of the masonry was made good.

In Orissa, the groups of caves at *Khandagiri and Udayagiri* continued to receive attention during the year under report. With a view to examining the nature and extent of the different caves and their courtyards, the original levels of the floors and courtyards of some of the caves were brought to light. Further clearance will have to be done before the proper conservation of the caves can be attempted.

CENTRAL PROVINCES AND BERAR.

By Dr. M. Nazim.

Madan Mahal at Garha, District Jubbulpore.—Preliminary special repairs were undertaken to the ancient arcaded *dalans* connected with the three-storied

palace known as Madan Mahal at Garha. The remains of an arcaded *dalan*, one tank for the *Zenana* bath, and other remains of adjacent structures were exposed to view. There were two balconies (*Jharokas*) on either side of the *dalan*, and their broken stone brackets are still *in situ*. A long stone pillar is used for supporting the load of the balcony.

Fort at Joga, District Hoshangabad.—The Mosque in the fort at Joga in the Hoshangabad District was repaired and the old concrete on the roof of the bastion which forms the floor of the Mosque was picked up wherever it was cracked and relaid with lime concrete. The gaps between the concrete terrace and the parapets were filled in with cement concrete and the roof was made perfectly watertight. The south pier of the arched entrance to the hollow Mosque bastion which had fallen away was restored.

The fallen portion of the gun-tower in the north-west corner of the inner fort was rebuilt. A large root embedded in the masonry near the east gate flanking the original outer gate of the fort was taken out and the masonry dismantled during the operation was re-built.

The two caves at Patur, District Akola.—These ancient caves have suffered much from the ravages of time, their front portion having almost entirely fallen down due to rain water. To stop further damage a bund of earth was made on the top of the caves. About 40′ away from the cave front, a dry stone wall 3′ 6″ in height was erected and its top was made watertight. Debris which had accumulated in the courtyard in the long rock-cut openings of the *verandah* on the right side and around the broken monolithic pillars was completely removed. A direction notice board was provided by the road.

Fort at Balapur, District Akola.—The broken walls in front of the main or north gate of the Balapur fort were repaired and the rampart walls of the citadel were made watertight. The unsightly old repairs to the cracked bastions were removed and the cracks refilled with special lime mortar. Jungle was removed from the top of the bastions and from the compound of the fort.

Chhatri at Balapur, District Akola.—The umbrella shaped pavilion, locally known as the Chhatri and supposed to have been built by Raja Jai Singh II in the time of Aurangzeb, is situated on the bank of the river Man to the south of the town of Balapur. To prevent rain water from scoring away the plinth of the pavilion, two thick, dry stone retaining walls were constructed, and the area within was properly dressed so as to drain away rain water. The new pathway immediately in front of the steps leading to the Chhatri was cut away to reduce the gradient ; and the ancient gangway leading down to the Man river was improved.

During the year under report notice boards were fixed to the protected monuments at Ellichpur, Fort at Chikalda, Fort at Narnalla, Vishnu Varaha temple at Panagarh, Kankali Devi temple, Kasha and Masha, in the Jubbulpur District and to six monuments in the Bilaspur District.

MADRAS PRESIDENCY AND COORG.

By Mr. H. H. Khan.

During the year under report the grants sanctioned for conservation works in the Madras Presidency and the Province of Coorg amounted respectively to Rs. 36,433 and Rs. 298. Against these grants, a sum of Rs. 35,532 and Rs. 302 were expended in the two Provinces by the Public Works Department. Besides, a sum of Rs. 300 was allotted to the Archæological Superintendent for carrying out departmental works, out of which Rs. 289 were utilised on Special Works.

All the conservation works to the protected ancient monuments in the Southern Circle were carried out through the Agency of the Public Works Department of the Government of Madras. But the work of preservation of the Buddhist Remains at Nagarjunakonda, with the numerous interesting sculptures and carved stone objects, was taken up departmentally.

No less than 50 different works of special repairs were undertaken by the Madras Public Works Department, of which 44 were executed completely during the year under report. These works were carried out in 19 out of 26 districts of the Presidency. Some of the most important special repairs are detailed below :—

At Tranquebar in the Tanjore District, repairs to the Dansborg Castle were executed to the fallen portion of the wall, the main entrance gateway, the old ornamental dome on top, the floor behind the battlement including a pipe for draining rain water and the exposed brick panels of the parapet walls. The granary in the fort at Attur in the Salem District underwent special repairs, such as replastering the portions of brick masonry walls that were subjected to saline action on the exterior, hollows in the floor filled up with lime concrete and plastered over with lime mortar, the crack in the centre of the arched roof of brick masonry treated with cement mortar and the exposed joints in the brick and rough stone masonry suitably pointed. The granary was kept neat and tidy by removing the huge accumulation of rubbish from its floor and destroying the growth of vegetation by " Atlas Tree Killer ". To prevent damage to the important Asoka Rock Edicts at Nellakonda hill in the Kurnool District a barbed wire fencing was provided all round the hill. Temporary sheds were erected over the edicts as an experimental measure before the construction of suitable permanent ones over them. The Mosque and two ponds in the west of the Citadel and adjoining buildings, etc., at Arcot in North Arcot District, underwent thorough special repair, such as plastering, making up cracked and damaged portions of brickwork wherever necessary. The hollow in the pond opposite to the mosque was filled up with sand, and cement plaster. The flooring of the mosque together with a small height of the walls all round was plastered over with cement. Other disintegrated portion of masonry including the steps were touched up and plastered over with lime mortar. In the famous historical fortress of Gingee in the South Arcot District, many monuments were taken up for repairs. In Krishnagiri hill, the fort wall and the bastions were repaired completely. At Rajagiri hill in the Anaikula tank south of the Kalyan Mahal, the fallen portions of the walls were built up ; walls of the *maṇḍapam* were

pointed with cement mortar; the flight of steps was set right in the south-east corner of the tank; the wide gaps in the lintel and *chajja* were filled in with small brick aggregate in cement mortar; and an iron-grated door was provided at the entrance to prevent the misuse of the Kalyan Mahal; the weathered wooden beams in the terrace of the Kalyan Mahal were painted; and locking arrangements were made for the gate at the entrance to the Gymnasium hall. Notice boards were put up wherever necessary and repaired, and drains along the approach roads were excavated for the easy disposal of rain water. The rampart wall of the Sivaganga Little Fort at Tanjore had fallen down in many places. These were built up properly with lime mortar after effectively uprooting the plants grown in the open joints of the walls; the undermined portions in the battlement walls were underpinned and the cracks grouted wherever necessary. The work at Gurramkonda Mahal in the Chittoor District which had been in progress last year was resumed during the year. The rotten wooden beams and 'bargas' of the roof and the deeply projecting ornamental *chajja* were renewed. The doors and windows of the Mahal were painted, the cracks in the terrace attended to, and the floor repaired with cement plaster. The unprecedented floods of 1930 brought down a length of about 70′ of the outer moat wall to the south side of the Fort at Vellore, North Arcot district. This was thoroughly repaired. Of the eight ancient Hindu temples at Pushpagiri in Cuddapah District, the Indranathesvara, Siva and Kesavesvara and Raghavesvara temples were repaired during the year under report. Kesavesvara temple situated on the north bank of the river, is picturesquely located on the slope of a rocky hillock and is approached from the river by a long flight of stone steps. It has three sanctums enshrining images of Vishṇu, Śiva (in the form of a linga) and Pārvatī respectively, all being connected together by a common closed maṇḍapa or hall in front. There are two small subsidiary temples one on the north, and the other on the south side of the main temple. The whole group of buildings is enclosed by a masonry wall with modern mandapa and out-houses on the south side of the enclosure. The most remarkable and interesting portions of these temples are the profusely carved mouldings of the base and the sculptured figures adorning the exterior walls of the shrine chambers. The upper portion of the building was built up of bricks and plastered over in the usual South Indian style. The lime plastering over the front and side walls which was missing here and there presented an ugly appearance. These patches were completely repaired and the colour toned down to match the existing surface. Teakwood shutters were provided in place of the rotten ones. A neat support pillar was provided under the cracked stone beam in front of the *garbhagriham* of the Śiva temple. Three big cracked stone slabs (span 9′-10′) of the terraced roof over the main entrance to the Śiva temple were supported, as a temporary measure, by wooden posts and beams. The following special repairs to the Raghavesvara temple were also carried out. To prevent the growth of vegetation the open joints of brick walls were properly pointed. The disintegrated terraced roof was made good by laying a fresh layer of concrete and finished over with little admixture of cement mortar. The steps leading to Indranathesvara

temple from the river and the retaining wall beyond which were constantly subjected to erosion by floods in the river and had fallen down at places were built up of dry packed cut stones available at the site.

The extensive repairs to the Valisvara temple at Tiruvalisvaram in Ambasamudram Taluk, Tinnevelly District, declared protected on account of its historical importance and series of inscriptions which were in progress for many years, were resumed during the year under report. The collapsed colonnaded *dalan* to the south side of the *maṇḍapam* was built up on the lines of old construction. The area which was almost covered up with heaps of various wrought stones. now presents a good view (Plate IX, *c* and *d*).

The Fort at Bellary which had been in possession of the Military Authorities has recently been transferred to the Archæological Department for maintenance. Originally it was a small hill fortress, the residence of Hanumappa Naick, the Paligar Chief whose family held it under the kings of Vijayanagar, the Sultans of Bijapur and the Mahratha rulers, in succession until Haider Ali seized it in 1775 A.D. This ruler added the lower rampart around the foot of the hill which is an immense rock rising to a height of about 480′ above the surrounding plain and extending over a mile and a half in circumference, with hardly any vegetation on it. Through south-east face which is split into innumerable boulders lies the approach. The lower rampart surrounded by a deep ditch and glacis has two entrance gateways and is strengthened by numerous semi-circular bastions. The upper fort contains a group of substantial buildings intended for residential purposes and an ample water supply from reservoirs constructed into the clefts of the rocks. The lower fort contains a number of buildings, all in use, of which the magazines, the quarters of the guard, the arsenal and a large *maṇḍapam* are fairly old and the rest are public offices, private houses and shops and a few churches and temples of recent date. The approach to the hill is strongly defended by rampart walls and bastions and has three entrances at different stages. At one place it passes under huge boulders as if through a tunnel which is an interesting feature. The battlements of the fort are of the type generally seen throughout South India. Each of the five entrance gateways contains a four pillared hall, with the usual pointed arch openings of the Muhammadan architecture.

Coorg Province.—The protected ancient monuments *viz.*, the fort, the large masonry elephant and the Raja's seat at Mercara and the three Jain temples at Mullur were suitably treated during the year under review. The dilapidated portions of masonry, here and there, were repaired after clearing the rank vegetation grown in their open joints. Attention was also directed to improve the approach roads and the drains. The above repairs were carried out at a total cost of Rs. 302.

RAJPUTANA AND CENTRAL INDIA.

By Mr. H. L. Srivastava.

The State Engineer, Dhar State, has kindly supplied me with a note on the conservation work on the monuments at Mandu and elsewhere in the Dhar State, on which the following account is based.

The total expenditure on the anciant monuments in the State was as much as Rs. 8,629. The bulk of the 83 monuments protected in the Dhar State are at Mandu, only 4 being in Dhar and 3 at other places. The JAHAZ MAHAL, beautifully situated between the two tanks, one of which still preserves the memory of Munja, the Paramara scholar-prince, came in for special repairs. The platform to the south of the Jahaz Mahal used for raising water from the Munj Tank was thoroughly repaired, the broken masonry of the walls being made good and the core rendered watertight. Much of the accumulated silt and debris of the south reservoir was cleared and the north wall was repaired. The undermined foundation of the grand stair-way in front of the palace was underpinned and the gap was closed. The choked water channel of the reservoir along the plinth on the east side was exposed and the compound made tidy. The broken masonry of the entrance to the circular tank on north-east was repaired, the debris inside cleared out, and the *jali* covers of both the tanks were repaired and strengthened with thick iron bars.

In the PALACE BUILDING, the floor on the north was levelled up with perished lime and a missing red stone pillar restored up to the springing of the arches, with dressed ashlar masonry of similar material. The west edge of the ornamental bath was restored in conformity with its old style. All the tops of fallen pillars of the north-west wing were rendered watertight, the west wall of the north wing was restored, of the rear stair-way the side walls were rebuilt and the stair-way itself was repaired with red and yellow stone ashlar masonry. All the cracks in the north-west room were filled up with cement grouting. On the whole the condition of the monument has improved considerably.

Repairs were executed to the wall and steps on the north-east side of the pavilion on the KAPOOR TANK—reputed to be the place where the Moghal Emperor Jahangir was weighed against gold and silver on his birth-day.

At the NAHAR JHAROKA PALACE, which was on the brink of becoming a total wreck, timely repairs have saved the historical monument. The most urgent though rather dangerous work of replacing the missing stone lintels and underpinning the gap over the stepped opening at the north-east end of the palace, have been satisfactorily carried out. The overhanging roof below the passage to the first floor was supported with wooden rafters covered with plaster in conformity with its old style and the missing red stone steps leading to the first floor were restored. In the western hall a broken arch was rebuilt and its jamb repaired.

The LOHANI CAVES are among the few relics of the pre-Muhammadan period at Mandu. The soft texture of the rock of the caves which has weathered badly especially on the west side, has admitted moisture in the interior, which is further heightened by inadequate drainage. As a first step, the silt and debris accumulated in the *Kund* in front of the caves was removed and dry stone pitching was erected to support the dump. The big wall on north side which was badly undermined has been underpinned. On the top of the big wall the battlements were restored and the exposed foundations strengthened.

The most important antiquity found in course of clearance was of an elegantly carved black basalt image of *Lakshmīnārāyaṇa* (ht. 2′). Vishṇu is shown as riding on flying Garuḍa with Lakhmī on his left thigh. The lower part of Garuḍa is badly mutilated as also the pedestal on which there is a badly damaged inscription of the 10th-11th Century A.D. Other antiquities included an image of the goddess in local stone, heads, various architectural fragments, such as lintels, door jambs, *śikharas* and capitals. These indicate a considerable Brahmanical establishment at the site. The finds have for the present been removed to Hoshang's tomb. Another important collection at Mandu is that of three guns, recovered from the deep forest-clad ravine of Bandhao to the south of Songarh hill fort.

This year one more monument has been added on to the list of the protected monuments. This is DHARMYA KA MAHAL at JAMNIA in Mandu, situated on a commanding place and in a good state of preservation, except for the growth of jungle over the dome.

BURMA.

By M. Charles Duroiselle.

This was the last year before the separation of Burma from India, and it was considered necessary to hand over the monuments of Burma in as sound a condition as can be managed from the limited conservation budget. A more liberal grant of Rs. 58,701 for conservation in Burma during the year as against Rs. 30,414 granted in the previous year enabled the Department to complete the special repairs to the EAST AUDIENCE HALL of the PALACE at MANDALAY and undertake other very urgent special repairs to Palace buildings and to start the reconstruction of PYATTHAT No. 48 over the SOUTH MAIN GATE of the FORT WALLS. Actually Rs. 53,947 was spent during the year. The East Audience Hall of the Palace, a grand and imposing building, was in imminent danger of collapsing any moment owing to the bases of many of its wooden posts having completely rotted. The work of eliminating these rotten bases and substituting for them masonry footings and of jacking the posts up was taken in hand in 1935-36 and completed during the year at a cost of Rs. 1,935. Besides this, extensive renewals of the corrugated iron roof, unsound roof timbers and ceiling planks have also been carried out and the building may now be considered quite safe for years to come. The rotten pillar-bases in the HALL of the LILY THRONE ROOM were treated in the same manner as in the East Audience Hall, extensive repairs were carried out to the plank flooring of the *verandas* on the north and south sides of the LION THRONE ROOM and the corrugated iron roof and roof-timbers of the WEST AUDIENCE HALL were renewed.

The Pyatthat (No. 48) over the South Main Gate of the Fort Walls at Mandalay was one of the four principal Pyatthats over the four Main Central Gates of the Fort Walls, all built in an identical style, each having seven receding tiers of roofs profusely ornamented with wood carving and supported on wooden posts.[1]

[1] *Ann. Rep., Archl. Survey,* for 1903-04, Part II, Cf. Pl. XXVIII, where Pyatthat No. 24 is illustrated.

The bases of the wooden posts were found to be completely rotten, several of the posts themselves being hollow. This was thus a source of great danger to the traffic passing through the gate. The Pyatthat liable to be damaged by a strong gust of wind and even by the vibrations caused by passing motor lorries was pulled down in 1931 and its re-building was started in February 1937. In the course of reconstruction, the weakness of the masonry of the old gateway was revealed and the estimate for the work had to be revised. The principal source of weakness was the wooden posts, of which a length of about 20′ which was embedded in earth, had rotted in the course of time and it was decided to replace the old foundation by one of a heavily reinforced concrete-grillage resting on concrete columns in the old post holes. This new foundation has since been completed and the re-building of the superstructure is proceeding. In the course of the excavations undertaken for the new foundation, four small images of hermits in alabaster were found buried under the feet of the four old western posts of the Pyatthat. The images are seated cross-legged with the right foot over the left. The right hand holds a rosery, while the left rests on the left knee palm outwards. The hair is arranged so as to form a small cone on the top of the head. This description agrees with that given in a Burmese Manuscript entitled "Mandalay-Myoti-Nanti-Sadan" (Treatise on the foundation of the Palace and City of Mandalay). The only difference being in the height of the images: those found in excavating are 4½″, while their height as given in the treatise is nearly 6″. The purpose for which they were thus buried is not mentioned in the Manuscript, but the probability is that they were placed there for the purpose of affording protection to the gate.

The Watch Tower of the Palace (always an interesting feature of most palaces in the Far East) had been in a very dangerous condition for some time past owing to its timbers having rotted. During the year under report a joint inspection was made by the Archæological Superintendent and the Executive Engineer, and it was decided that the renewal of most of its timbers should be carried out without delay. A sum of Rs. 1,500 was spent during the year. This has made the structure reasonably safe, but before it can be opened to the public the remaining timbers must also be renewed and the staircase repaired. This further work is estimated to cost another Rs. 6,000. The main reason why the Tower is so faulty in its construction is that it was hastily planned and constructed within 20 days under the orders of the queen, who wanted it on a given date.

The following works of annual repairs carried out at Mandalay, Pagan and Hmawza may be briefly noticed:—

At Mandalay the monuments which have always required much attention are the Palace and the Pyatthats on the Fort Walls. The material of these buildings is almost entirely wood and much of it having been brought over from the dismantled palace at Amarapura was already old when the palace was built in 1856-7. The work undertaken at the palace consisted of opening out the rotten bases of some of the posts in the Central Queen's Apartments and providing masonry footings to them and repairing the sunken plank floor; re-building the collapsed brick enclosure wall north of the Morning Levee Room; repairing

the steps leading to the NANTHA SAUNG and GLASS PALACE and the hand-rail of these buildings: and whitewashing and earthoiling wherever these were necessary. The stone floor of the shed containing the Mandalay PALACE MODEL which had been in need of repair was also attended to.

Of the existing Pyatthats on the Fort Walls, masonry footings were constructed to the posts of Pyatthats Nos. 24, 30 and 42. The carvings on Pyatthats Nos. 1, 3, 14, 26, 28, 29 and 43 were repaired and some planking and joists were renewed on Pyatthats Nos. 1, 3 and 43. All these Pyatthats except Nos. 3, 6 and 8 were treated with earthoil.

At PAGAN the DAMAYANGYI PAGODA received further attention during the year. The base of the *śikhara* was repaired with brick in lime, the small stūpas on the east and south of the first terrace were strengthened by underpinning and grouting and the steps leading to the *śikhara* on the four faces were repaired.

Owing to heavy rains in 1936, the arch in front of the eastern cave of the THAMI-HWET ONHMIN crumbled down and the lettering of the notice-board was washed out. The fallen arch was rebuilt with Burmese brickwork in lime mortar and the notice repainted.

The SAPADA PAGODA is a stūpa of the Sinhalese type built in the 12th century A.D. Grouting with cement, surki and stone powder was done to the weak joints found in the pagoda.

The MANUHA TEMPLE at MYINPAGAN is a protected monument and is still in use for religious observances. It enshrines four colossal images of the Buddha, one of which is recumbent and the rest seated. Treasure-hunters having dug under one of these images, collapsible doors were provided to the openings, three on the east and three on the west side of the temple.

The expanded metal doors in the PATOTHAMYA, KUBYAUKKYI, ABEYADANA, NAGAYON and NANPAYA temples were painted with red oxide paint.

At HMAWZA the vegetation growing on the BAWBAWGYI PAGODA, the LEMYETHNA and BEBE temples was uprooted and the joints of the brickwork were filled in with cement grout pointed in lime mortar. Some defects due to the lime mortar not being properly toned down were noticed in this work and the Public Works Department have now been instructed to make them good.

The Department maintains a staff of durwans, sweepers and caretakers to look after the monuments at Mandalay, Hmawza, Amarapura, Ava, Sagaing and Mingun. It is hoped that separated Burma will look after its monuments with the care and assiduity that they deserve.

SECTION II.—EXPLORATION AND RESEARCH.

EXCAVATIONS AT TAXILA.

By Khan Sahib A. D. Siddiqi.

Bhir Mound.

About 50,000 sq. ft. of the acquired area at this site was available for excavations which has been examined during the period under report. Over 35,000 sq. ft. out of it lies on the east, while the rest on the west verging on street No. 1. A very huge dump of spoil earth estimated roughly at about 60,000 cu. ft. stood on the former and a uniform depth of about 3′ measuring about 40,000 cu. ft. was lying on the latter, making a consolidated total of about one lakh cu. ft. of spoil earth dumped from the previous digging. It was urgent therefore to relieve both the sites of this superincumbent spoil earth preparatory to the commencement of the necessary digging operations. This work of the removal of spoil earth was more or less conducted simultaneously with the actual digging, undertaking it on such areas only as were ready for it from time to time.

The work of the removal of spoil earth was greatly expedited by employing the departmental track and the tipping trucks. A great bulk thereof was dumped on the low-lying Government area on the south-east of the excavated site. Very nearly the whole earth from the fresh digging has been deposited along the east boundary line of the acquired area, in order to keep animals from entering the site as it is done on the north, south and the west. In the eastern area the digging has been confined mostly to bring to light the structures belonging to the top stratum only (Plate X, *a* and *b*) leaving the excavation of the deep digging, which yields a rich harvest of antiquities, to a subsequent date, and where for one or the other reason necessity arose of going deeper, a few walls only of the stratum immediately below it have also been exposed, for instance in square Nos. $\frac{26\text{-}20}{18'\text{-}20'}$ and $\frac{14\text{-}16}{19'\text{-}20'}$.

Evidence of pavements and plinth offsets, of storage jars and drains, of bases of pillars and the like has been preserved *in situ*. Potsherds, too, were collected with great care to pick out rare types, but with the exception of a few specimens little of any outstanding importance was found and the whole lot had to be dumped in a pit north of the peons' quarters.

The plan of buildings now disclosed, exhibits the same irregular and haphazard layout as before, the same poor style of construction in which *Kanjur* stone is used freely, the same pavements of slate and rough stone flagging and the same roofing pillars, drains and soak-wells. At two spots in squares 37·16′and 33·16′ were found a number of water coolers of the ordinary type deposited one on another presumably for storage purposes. That these were not soak-wells is apparent from the fact that one deposit lay in a small oblong chamber, while the other was in no way associated with any kind of pit, circular or square.

The buildings exposed in the eastern part of the site may be divided roughly into 7 groups of rooms of different sizes which must have accommodated 7 families of varying numerical strength. Each house has an open courtyard with residential apartments arranged all round. For a detailed description of their plan I have selected house Nos. 3, 4, 6 and 7 which will give an idea about the plans of individual houses.

House No. 3 enclosed by squares 34 to 37 and 13′ to 17′ has a spacious courtyard (No. 1), which is entered from the lane on its east. On the south preceded by *verandah* No. 2 is a large oblong room No. 3 which communicates on the north with the court and with room No. 4 west of the *verandah*. The two rooms behind it, *i.e.*, Nos. 5 and 6, served as back rooms designed for storage purposes. The two compartments Nos. 7 and 8 are too narrow to serve any really useful purpose and may have been mere light wells. The spacious compartment No. 9 lying immediately west of No. 4 contained some water coolers and the short wall inside the court served merely to screen the entrance. Among others a draped terracotta figurine (No. 11) carrying a child was found in this house.

The complex of 10 rooms on the north of the above house arranged in two rows and forming either two houses or mere shops was entered from the street whence the front row was lit, while the range of rear rooms appears to have been lighted from the oblong space at its back.

Immediately to the south of house No. 3 is house No. 4 enclosed by squares $\frac{28\text{-}34}{13'\text{-}16'}$. It consists of an open court (No. 1) flanked on the north and south by two oblong compartments of which No. 2 owing to its large span, was supported on two wooden pillars which rested on rough spur bases. The open courtyard was entered both from the east and west and was paved with rough stones of which the remnants are preserved *in situ*. The patch on the north had a soak-well of which the ring is discernible on the surface. That there was a *verandah* which occupied the south or north side of the court in front of one or the other compartment is proved by the existence of a semi-column against the west wall but the corresponding pilaster and the pillar in their centre have disappeared. The oblong compartment No. 3 served mainly as a store room since several water coolers were found resting against its west wall. Rooms Nos. 4 and 5 served as necessary adjuncts to the house. On the east outside of this house was picked up a gold ear-pendant (Pl. X, *f*) of elaborate workmanship and 2 bits of some gold ornament No. 335.

House No. 6 lying in Squares $\frac{18\text{-}23}{12'\text{-}16'}$, has an open court of abnormally large proportions, which was paved with slate stones of which patches are extant. Access to this court was gained from north and between it and house No. 5 is a lane which is blocked by a later wall. It consists of a spacious room No. 2 of which the roof was presumably supported on two columns and two rooms each on its west and east (*i.e.*, Nos. 3 and 4 and 5 and 6) which served as bed and store rooms with No. 2 as a common sitting room. A crystal gem No. 395 of excellent workmanship and a decorated bit of some glass object No. 405 were found in this house.

House No. 7 is situated in squares $\frac{19\text{-}24}{17\text{-}20}$. This too has a spacious courtyard (No. 1) with 7 rooms ranged round it. Of these Nos. 2 and 3 lie on the south, Nos. 4 to 7 on the west, and No. 8 on the north. The last-named—now fragmentary—was the entrance room as it abuts on the north lane. The antiquities picked up from this house include a nice terracotta foot-scraper.

Houses Nos. 6 and 7 constitute a block which is enclosed by lanes on all the four sides, though at this place the alignment of the broad street on the west has disappeared.

The newly excavated area enclosed by squares $\frac{5\text{-}21}{42\text{-}52}$ is bounded on the east by street No. 1 (Plate X, *c*) on the west by the deep diggings conducted some time ago and on the north by a narrow street with a properly constructed drain of which the bed is covered with slate stones.

House No. 1.—From the plan of the excavated remains in this area it is apparent that in the north there is a self-contained block of buildings belonging to a house of no mean proportions. To its north is the narrow lane No. 1, to west previously excavated houses abutting on street No. 2, to east what looks like the main street, while on the south its limit is demarcated by a drain that flows in what appears to be too narrow for a lane. This block of buildings has a big central court with some entire and some fragmentary rooms arranged all-round it. Some walls of the earlier period are discernible in it. The floor level is indicated by a plinth offset along its south outer wall, by a door opening in the front wall of room No. 6, which is narrow at its outer and broader at its inner end, and by the drain on the south. Remnants of a pillar base are also extant in room No. 7. The purpose of the long and narrow oblong room No. 9 is not clear. As its length is quite out of proportion to its width, it was either a *verandah* overlooking lane No. 1 or a sitting room furnished with doorways for communicating with the interior of the house. Its narrow width appears to have been purposely designed for the stability of its short roofing timber necessitated by the span which is manifestly very short as compared with its length. The rooms outside it which abut on lane No. 1 were built as an after thought, to occupy the oblong space available after allowing a uniform narrow space for the lane. This explains the strange orientation of these rooms. The buildings between this house and street No. 1 are all missing. Three copper coins and some terracotta objects were recovered in this house.

House No. 2 has a courtyard (No. 1) with rooms all-round it. Nos. 2 to 7 are entire and the rest fragmentary. Some earlier remains are exposed in Nos. 5 and 6. The remnants of some rooms to the east of this house, that verge on street No. 1, were obviously shops.

Dharmarājika Stupa.

Some walls of very poor and later construction in the main court of cells on the extreme north of this site, and those of a later superimposed monastery at the south west corner of the same were removed.

A list of selected antiquities from the Bhir Mound.

1. Bronze, holed die showing in two panels a human couple standing side by side and two lions facing each other and in the remaining two panels the inscription *Sidhathasa* (of Siddhārtha) in Brāhmī and Kharoshthī characters. Length ·65″. (Plate X, *f* and *g*). Bm' 36-488. Sq. 15·51′ 2′ 6″ b. s.
2. Potsherd of buff colour with a crude standing elephant. Coarse clay, mixed with a large percentage of sand and *bajri*. Length 5·2″. Bm' 36-621. Sq. 31·25′; 5′ b. s.
3. Double convex, earthen jar with narrow mouth and base. Grey burnt clay. Rim missing. Ht. 14·75″. Bm' 36-548. Sq. 17·47′; 4′ 9″ b. s.
4. Highly polished crystal cylinder. Length 75″. Bm' 36-249. Sq. 32·18′; 5′ 6″ b. s.
5. Earliest type of earthen offering tank in the form of a bowl. Six out of seven shallow cup-shaped lamps on its vertical rim have survived. Diam. 7″. Bm' 36-254. Sq. 36·16′; 2′ 6″ b. s.
6. Hemispherical earthen object with a tiny hole about ·15″ through the top. The diameter of the inner cavity is ·7″. Damaged. Diam. 2·5″. Bm' 36-76. Sq. 31·14′; 2′ 3″ b. s.
7. Pottery object, oval in plan and section. Holed through the top, its ridge is stamped with an inscription and other decoration. Purpose uncertain. Several specimens have been found before from this very site. Buff colour. Length 2′ 2″. Ht. 2·1″. Bm' 36-561. Sq. 35·38′; 3′ b. s.
8. Crescent shaped ear-pendant of gold consisting of two rows of hemispherical beadings separated by double rows of granulations. There is a ring at the end of each crescent and another ring at the bottom of the pendant for attachment. It has a wavy border with granular ornamentation. Diam. 1·15″. Weight 47 grains. Bm' 36-328. Sq. 29·12′; 1′ 9″ b. s. (Pl. X, *f*).
9. Highly polished cylindrical, black glass ear-plug with slightly concave sides. One end decorated with 10 flutes radiating from the centre but the other end is slightly convex. Diam. 1·75″. Length 1″. (Plate X, *d*) Bm' 36-116. Sq. 25·19′; 4′ 6″ b. s.
10. Fragment of a double-edged iron spear-head. Length 8·75″. Bm' 36-4. Sq. 36·16′; 1′ b. s.
11. Iron axe-head with socket hole for handle. Length 7·5″. Bm' 36-482. Sq. 10·50′; 3′ b. s.
12. Iron axe-head with socket hole for handle. Length 5·75″. Bm' 36-556. Sq. 35·4′; 2′ b. s.
13. Square stool of iron with four pointed legs. Several similar specimens have been found in the Bhir Mound and Sirkap. Size 2·9″×2·9″×2·1″. (Plate X, *e*) Bm' 36-560. Sq. 9·52′; 2′ 6″ b. s.
14. Copper finger-ring with almond-shaped bezel studded with a shell (?) Diam. Bm' 36-15. Sq. 36·15′; 1′ b. s.
15. 16 coins of which 6 are punch-marked and 10 local Taxilan coins.

EXCAVATIONS AT HARAPPA.

By Mr. H. L. Srivastava.

During the year, the excavation was continued in the eastern extension of trench I (Plate XI, *b*) on mound D measuring 143′ long from north to south and 65′ across with an average depth of 7′ below the surface of the mound. A 5′ wide longitudinal *gangway left unexcavated divides it into two unequal parts, designated the eastern and western sections.

The structures brought to light in the WESTERN SECTION comprise the remains of a small drain near the north with a well-marked slope, two corners of rooms, two or three pavements and several unconnected bits of walls.

This section has yielded quite a good number of finds (Plate XI, *c-i*) among the noteworthy ones being a group of copper objects (13303) comprising (1) a tanged oval copper mirror (2) two carinated jars (*degchas*) of unequal size and (3) two short-rimmed plain dishes jammed together. Of the two copper jars the larger one contained a small copper vase, a spiral bangle and two uncertain objects looking like handled lids. A solid copper bangle (13322) may also be mentioned among the finds.

Among stone seals may be mentioned two tiny ones of burnt steatite, and eight large stamping matrices. Of the latter, five show the unicorn, one elephant, one bison, while the last one is a plano-convex rectangular seal with pictograms only. The most remarkable among the unicorn seals is No. 13341 which, besides being inscribed on the obverse, is unique in having two pictograms on the reverse as well.

The stone objects include two cuboid chert weights, a chessman painted with trefoil motif, a steatite nose disc, a well-preserved ball of alabaster, an elliptical etched carnelian bead and a concavo-convex ornament.

Among the important faience objects brought to light mention may be made of a fragmentary miniature bird with sockets for inlay (13265), a button bearing a lozenge motif, a chessman and a miniature couchant ram.

A standing terracotta female figure (Plate XI, *g*) which retains patches of the original green and red paint on headdress and necklaces etc., a hat shaped object of uncertain nature (13360), one oval plano-convex pendant, a painted round jar typical of the cemetery ware and a trough shaped vase are other mentionable antiquities.

The EASTERN SECTION is 143′ long and 20′ wide. The buildings uncovered in this area are few, fragmentary and of extremely poor construction. (Plate XI, *a*).

The important finds recovered from this section include a well-preserved unicorn seal (13443), two tiny steatite seals, one rectangular and the other prismatic, a terracotta cylindrical sealing embossed with a gavial and pictographs (13429), and three faience seals, one of them being wedge-shaped (13425). The stone objects recovered consisted of two double convex mace-heads, two celts of which one is made of a fine polished bluish stone, two cubical chert weights, a miniature ringstand and a chessman-shaped pendant.

Noteworthy faience objects comprise a miniature squirrel, a couchant ram, an extremely well-modelled finial (13450), a funnel-shaped fluted ornament (13452), a prismatic pendant with knobbed head and a tiny nose or ear-pin of paste (13467).

Trench II in mound D, previously excavated by Mr. Vats, was this year extended further south by 20′ and dug to an average depth of 9′ below the ground level. The only structures revealed here were two walls of a spacious room (14′ 5″×14′ 3″) and another room on the north both apparently forming part of a large house. The important finds comprise three cuboid chert weights one

of which (13496) is perhaps the tiniest hitherto found, each side measuring only ·27", a stone pendant with grooved neck (13510), two large-sized terracotta cones with hollow bases (13495), a star-shaped faience disc and a triangular copper piece.

Partial refilling of the deep digging in trench I on mound F up to a height of 8 ft. from the bottom has also been done during the year under review.

EXCAVATIONS AT MOHENJODARO.

By Mr. K. N. Puri.

Mohenjodaro.—An area of 150 ft. by 120 ft. was excavated in Dk. site, Section (I) where some excavation work had been previously done in the year 1933-34. Five houses were completely excavated and three partially, all lying between and on the sides of two narrow lanes running East-West parallel to each other.

The buildings excavated have not been opened up below the late period level, the diggings being stopped with the indication of door-sills, pavements, drains and the last tread of the flight-of-steps.

In all about 300 antiquities were discovered. These comprise 29 seals, 16 showing the unicorn, one each a tiger, a rhinoceros, and a short-horned bull and 6 rectangular seals without any animal device. A aience seal has two rectangular sockets which were, in all probability, once inlaid with the same material. Among other objects were 4 pointed bottom jars bearing seal impressions; a number of copper tablets and other objects of copper and bronze; a gold fillet in pieces, weights of chert; beads of faience, stone, paste, etc., and stone, shell, ivory and pottery objects of the usual shapes and types.

The discovery of a good number of beads, 16 small weights, a pair of small copper scale-pans together with a fulcrum rod made in a room directly accessible from the lane suggests that this was a lapidary's shop.

EXCAVATION AT DELHI.

By Khan Bahadur Maulvi Zafar Hasan.

Excavation at QILA RAIPITHURA at Delhi was resumed at the site locally known as Chorghatta, which was partly dug in the year 1933-34. The clearance of earth and debris accumulated against the ruined wall of the city brought to light the remains of a gateway and a barbican in front of it. Muslim chronicles of India aver that Alauddin Khalji repaired and fortified the walls of Raipithura's city after the invasion of the Mongols in the year 1303 for protection against their future inroads,[1] and this statement receives support from the structural remains discovered. The walls are constructed of rubble in mud, but there are traces of ashlar masonry in lime and also of lime plaster which are indicative of work of the early Pathan period. The arrangement seems to have been that the

[1] *Tarikh-i-Firoz Shahi* by Ziya-ud-Din Barni, Persian text published by the Asiatic Society of Bengal, p. 302; *Tarikh-i-Farishta*, Persian text, Naval Kishor Press, Lucknow, 1905, Part I, p. 112.

barbican with its walls as much as 18′ thick at the foundation, was fortified by circular bastions, and a tortuous passage flagged with Delhi quartzite ran through it. The road passed through two outer gateways before giving access to the main gate, which was pierced in the city wall. Of the latter and bastions of the barbican, as well as the inner and outer gateways, only the foundations have survived, but in some cases the plinth and parts of the superstructure also remain. The barbican has not yet been fully excavated, and there still remains to be unearthed one of the flanking bastions of its outer gateway and the east wall connecting it on that side with the city wall of Rai Pithura's Delhi. The antiquities discovered embraced an earthen pipe, a stone gargoyle, a terracotta pinacle, a few stone balls and five coins including a copper coin of Ghias-ud-Din Balban and another copper and a billon one of Ala-ud-Din Khalji.

EXCAVATIONS AT NALANDA.

By Dr. M. Nazim.

During the year under report the excavation of the Buddhist site of Nalanda in Bihar was continued at an expenditure of Rs. 3,500.

West front of Monasteries 6 and 7.—Clearance of debris from the north-west corner of Monastery No. 6 revealed the remains of a brick shrine with a 4′ 5″ wide entrance facing south. Only traces of the external walls up to a height of about 2′ and three fragmentary pedestals within the chamber walls are left *in situ*. Its west external wall still has a course of moulding. The entrance has a stone door sill measuring 5′ 7″ ×17″×7¼″. The side walls of the entrance are splayed at an angle of about 45 degrees with a view to ensure the maximum opening of the door. The deep sockets at the ends of the side walls are presumably for the reception of the upright stone or wooden posts, fixed against the side walls and resting on bed stones at the bottom. The shrine chamber itself is oblong in shape, measuring about 18′ long and 12′ wide, with a damaged concrete floor about 2′ lower than the entrance. The three fragmentary brick pedestals, referred to above, are constructed side by side with no gap in-between, against the back wall of this chamber. The front face of the middle pedestal projects about 8″ from the faces of the adjacent pedestals which are plain. The middle one which is carved is divided into three parts as its central portion projects about 6″ above the contiguous facets. All these three pedestals probably belong to Buddhist images. Twenty inches below the entrance described above, there is evidence of the existence of an earlier entrance, about 12′ in width which appears to have been blocked up at a later period, when a narrower entrance was constructed over it at a height of about 2′ 9″ from the lowest concrete flooring. In fact, there are remains of 3 floorings laid one over the other, in front of the shrine. The highest concrete floor is not on a level with the later entrance already referred to above but is about 20″ below it.

Trial excavations at the south side of the brick shrine described above have brought to light traces of ruined brick structures which still require proper

examination. These ruins, along with others already exposed in previous years, prove conclusively that the wide open space between the Monastery and the Stupa ranges was interspersed with beautiful shrines, votive *stūpas*, etc., erected at different periods of occupation of the site.

Chaitya Site No. 13.—Operations were vigorously resumed at the Chaitya Site No. 13 (Plate XII, *a*). The structure was completely exposed by the removal of huge masses of debris, but its walls are so badly ruined that in many places nothing survives above the plinth level, whereas at places even the foundation has perished. The ruined fabric of the original *Chaitya* seems to have been used for a later restoration. All that can now safely be said is that the outer facing of the original *Chaitya* having collapsed, its walls were built up again directly over the earlier ruins, while the original shrine continued to serve as altar.

A careful examination of the original projections at the north-east, north-west and south-east corners of the *Chaitya* revealed that the section of the plinth of the projection at the south-west corner was not similar to that of the other three corners referred to above. If the projection at the south-west corner were restored according to the measurements of the other projections, it would not be in alignment with the other three projections. As the architects who designed the noble pile of buildings at Nālandā were undoubtedly skilled men, it is hard to attribute the above defect in section to their lack of knowledge. It appears that the plinth was laid out at different times without a plan, and when the mistake was discovered, it was difficult to rectify it without pulling down the whole structure.

Various important clues of the ancient method of brick construction were brought to light by digging numerous trial pits in the *Pradakshiṇāpatha* and the shrine chamber. The area comprising the main shrine (excluding the *Pradakshiṇāpatha*) seems to have been excavated to a depth of about 12′ below the then ground level for the purpose of laying the foundation of the Chaitya which rests on a 5′ thick layer of sand. The foundation consists of 23 courses of bricks in sand and 83 courses of bricks in mud mortar up to the floor level of the shrine which was approximately 18′ above ground level. On this basement were raised the walls of the shrine chamber which are in double section and are 33′ in breadth. In order to strengthen this basement and to enable it to resist the outward thrust of the huge mass of masonry over it the *Pradakshiṇāpatha*, which is about 25′ wide, was excavated down to the virgin soil and cross walls were found built in it at intervals of about 24′ for tying the basement with the outer walls of the *Pradakshiṇāpatha*, the compartments thus made being filled in with alternate layers of pure earth and concrete mixed with earth or *surkhi*. This elaborate planning of the foundation and the enormous thickness of the walls resting on it presumably indicates that the walls were meant to be raised very high. It is not possible now to determine the shape of the superstructure but it is likely to have been of the nature of a curvilinear Indo-Aryan *śikhara* of imposing height. The Chinese traveller Hiuen Tsang who visited Nālandā in the course of his travels in India was struck by the Nālandā buildings, which has described in very eloquent terms.

The outer walls of the *Pradakshiṇāpatha* which have been traced down to the foundation level at the north, west and south sides only, are but poorly preserved, at several places the entire foundation which rises from at least 15′ below the level of the concrete floor of the *Pradakshiṇāpatha* having disappeared.

The *Chaityāṅgana*, or fore-court on the east side of the main structure, was further cleared up in continuation of the works done in 1935-36. This court measures about 180′×88′ and its damaged floor is paved with at least 6″ of brick concrete. At the north and south ends of this court, besides the damaged votive *stūpas* which were discovered in 1935-36 were exposed traces of the staircase of the *Chaitya* and fragments of its two side walls. This ruined staircase stands in the middle of the court and is built against the east external wall of the main *Chaitya*. At the east adjacent to this staircase is a damaged concrete paved portico, measuring 36′×30′ enclosed by ruined brick walls with a flight of steps provided in the middle. An old drain with a stone drip which runs through the east wall of the portico close to the north side of the flight of steps, is also left *in situ*. Adjacent to the south-west corner of the portico there is a small damaged brick chamber with concrete floor. The north wall of this chamber is now missing. While the remaining walls are built up to a height of only 3 or 4 courses with thick concrete topping which projects over the southern wall towards the floor of the chamber. It is evident from several plaster pieces still adhering to them that the walls were thickly plastered. This small chamber seems to have been erected for some specific purpose, probably before the staircase came to be built.

A damaged four-chambered smelting furnace having two flues in each chamber was also brought to light near the north external wall of the main *Chaitya*. Each chamber is 3′ 4½″ square with a height of 3′ 1″ from the base to the projecting course of bricks. The inside walls are plastered with sand, cowdung, etc. The discovery from the furnace of metal slags, fragmentary fireclay crucibles, clay moulds, ribs, or ridges of furnace made up of clay with the admixture of husk, twigs and sand, and crucible lids stuck with slag of molten metals shows that the monks and students of the Nālandā university were familiar with the process of casting metal for their images, etc.

Adjacent to the south face to the south-west corner projection of the Chaitya was unearthed a damaged square pit (3′×3″) constructed of rough bricks. The existing maximum height of this structure is over 6′. It has no outer face, but being paved it seems that the original structure was built up to a height of over 20′, *i.e.*, up to the level of the concrete bed of the *Pradakshiṇāpatha* around the main shrine. The proximity of this pit to the temple suggests that it might have been a dumping hole for the offering of leaves, flowers, etc., which, having become holy by being offered at the altar, could not be thrown away on the rubbish heap.

Besides the works mentioned above, a good deal of clearance was done along the western boundary of the *Chaitya* and a large slice of the huge mass of debris heaped along the western boundary line of the Nalanda site was removed. Besides this, the long *kachcha* drain, cut in previous years from the north side of the

Chaitya Site No. 12 was properly cleared, and two new *kachcha* drains, one running from the west and the other along the entire east and south sides of Chaitya Site No. 13 were provided to meet the above trunk drain which carries the entire rain water from the area adjoining the two *Chaityas* into the fields.

Besides the above, a great deal of care and attention was bestowed in collecting potsherds and old bricks from the spoils. The bricks, which are mostly fragmentary, were arranged in neat stacks for being eventually used in conservation works. Innumerable potsherds were recovered from excavation at the Chaitya Site No. 13 and have been arranged in neat stacks, according to various types, around the brick shrine containing a colossal but fragmentary image of Buddha which stands on the north side of the Chaitya Site No. 12. The numerous variety and abundance of pottery shows how popular this ware was at Nālandā. Not only utensils but also lamps or *chiraghs*, incense burners, etc., are commonly made of pottery. The various domestic utensils represented by the sherds comprise water-pots, jugs, dishes, *degchis*, tumblers, cooking pots, utensils, etc., of various sizes and patterns. The water-pots, which seem to have been extensively used in the monastic establishment were usually well shaped with a round bottom and a substantial neck. The bottom of these pots is either tapering or round. An interesting feature of these pots is that irrespective of their size, each of them was provided with a neat hole or a small spout for pouring out water. In some cases the body of these pots was incised with various designs and dusted with mica to give them a brilliant lustre.

Jugs are provided with a long, narrow spout and a handle for holding them firmly. These vessels were usually painted red or in other suitable colours. Ordinary pots, dishes, *degchis*, tumblers, etc., were of various patterns and sizes. Some of them were provided with handles. The rim of the vessels was always made very strong and sufficiently wide and thick for convenient handling. Further, the outer and inner faces of the rim were polished with brilliant red slips. The tumblers were of very convenient size and usually had narrow ribs on the body for holding them properly. The cooking vessels were of various designs and sizes, with handles and strong wide rims provided to most of them.

Besides the earthenware described above, a few potsherds were collected which have a number of small holes, but it is difficult to determine the object represented by them.

A few fragments discovered during the year under report and several others recovered previously are glazed earthenware ornamented with beautiful leaf decoration both inside and out on a ground of blue, white and other suitable shades.

EXCAVATIONS AT RAJGIR.

By Dr. M. Nazim.

At Rajgir, in the Patna District, approximately Rs. 1,000 were spent on excavation work.* At the *Maniyar Matha* digging was carried all round the main cylindrical structure down to an average depth of 3′ below the level exposed

last year. On the north and west sides, remains of a few brick and stone structures were exposed (Plate XII, *b*) which seem to belong to a period a little earlier than that of the main structure and the brick platform on the east over which a large collection of peculiar shaped pottery and other terracotta objects was discovered in the year 1935-36. At several places below these structures, traces of stone walls were located which require further clearance and examination. From the area excavated during the year under report, a fair collection of ceramics and other terracotta objects similar to those found in 1935-36 was obtained. Some of these objects were transferred to the Nalanda Museum and the rest neatly stacked within the wire-fence enclosure at the site on the east.

Besides the ceramics and terracotta objects mentioned above, a few inscribed fragments of sculptured stones were found and removed to the Nalanda Museum. On examination they proved to be the back portion of a sculpture with two Nāga figures which had been discovered in earlier years. These fragments have now been pieced together as far as possible (Plate XIII, *a* and *b*) and make the following panels of sculptures:

(1) The lowest panel represents eight Nāga figures, standing side by side, with an indistinct inscription on the pedestal. (2) Above it, a decorated surface with one niche on each of the two extremities, the left one containing a Nāgī sitting on a cushion in the *bhadrāsana*, with her feet resting on a stone pedestal which bears an inscription reading *Bhaginī Sumāgadhī*. The figure in the right niche is broken and only the canopy of serpent hoods is visible (3) On the top of this, there was another panel of standing figures, only the feet of which have now survived, with an inscription below which suggests that a certain king pleased Maṇi-Nāga[1].

All inscriptions belong to the 1st or 2nd century A.D., and as the sculpture is in spotted red sandstone of Mathurā, very likely it was carved there and brought to Rajgir. This sculpture therefore gives further evidence of the eastward diffusion of the Mathurā school, specimens of which exist at Saheth-Maheth (District Gonda),[2] Sarnath,[3] Kosam (District Allahabad),[4] and even at Rajgir, where a Mathurā stone pedestal with an inscription in characters of the early Kushan script was found in 1905-06.[5]

The sculpture further indicates the prevalence of Nāga worship, of which Mathura was an important centre.[6] The finding of the name Maṇi-Nāga in the Maniyar Matha area is interesting and the words *Bhaginī Sumāgadhī*, probably designating the Nāgī, remind one of the Yaksha names *Sudasana* and *Supavāsa* occurring on the Bharhut stones.[7] It appears that like the Yakshas, the Nāgas too had individual names in popular mythology.

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[1] The inscription is in Sanskrit and contains *ṛi*, unassimilated *pra* and *visarga* in the word, *Kṛitaprasādaḥ*.

[2] For illustration of the image see *Epigraphia, Indica* Vol. VIII, plate facing p. 181.

[3] Sahni, *Catalogue of the Museum of Archaeology at Sarnath*, plate VII.

[4] The photograph of the image has been published in *Annual Bibliography of Indian Archæology for the year 1934*, Leyden pl. ii. For the inscription on the image see *Indian Historical Quarterly*, Vol. X, p. 575.

[5] *A. S. R.* 1905-06, p. 106.

[6] *Ibid*, 1908-09, pp. 159 f.

[7] Lüders, *List of Brāhmī Inscriptions*, Nos. 726 and 790.

Jain shrine on Vaibhāra Hill.—At the north-east corner of the main Jain shrine, a few small shrines, built close together, were unearthed and the shrine situated on the east side of the temple, which had been exposed in previous years, was cleared on all the four sides. The shrines were found to contain several small stone Jain images of the Digambara sect (Plate XII, *c*). One such sculpture depicts a seated Jain Tīrthaṅkara with attendants on one side, and a female figure, with a Jain Tīrthaṅkara on its top, seated on the back of a tiger, on the other. This sculpture along with a few others was left *in situ*, while a few specimens were transferred to the Nalanda Museum.

Mahādeva temple on Vaibhāra Hill.—This site had not received attention ever since trial excavations conducted by the Archæological Department had revealed the inside core of the temple. Excavations carried out during the year under report brought to light almost the entire temple in a damaged condition. The main shrine, which is dedicated to the worship of Śiva, is a square structure with a *maṇḍapa* on the east side. An old drain was also traced on the north side of the temple. To the south side of the main structure, a small shrine containing a Śivaliṅga was exposed and on the east side, another shrine containing a fragmentary stone image of Hara-Pārvatī was discovered. Traces of the compound wall of the main temple, the outer face of which is smooth and the inner rough, were also found at several places. Several stone Śiva-liṅgas, earthen lamps, etc., were discovered during excavations and removed to the Nalanda Museum.

Shell inscription area near Banganga.—During the year under report, a good deal of debris was removed from the stone flooring enclosed by walls, revealing marks of the wheels of chariots used in ancient days.

Gṛidhrakūṭa.—This hill, familiarly known as the Vulture's Peak, is associated with the Buddha who is said to have spent considerable time in meditating and delivering some of his important discourses at the caves situated on its top. It is stated that king Bimbisāra of the Śaiśunāga dynasty met the Buddha here, and the road leading up to the top of the hill is therefore known the Bimbisāra road. About half way up the hill, remains of a couple of ancient brick stūpas in the middle of the road were cleared of debris as a preliminary measure of preservation. Exposing the brick shrine situated on the summit of the hill, a few inscribed clay sealings with impressions of the Eight Buddhas, beads, and a damaged red-stone image of Buddha seated on a high pedestal in *Dharma-chakra-mudrā* about 3′ in height were found and transferred to the Nalanda Museum. On the east and south sides of the caves mentioned above, traces of several shrines and of an original stone-paved foot-path running towards the east were also brought to light.

EXCAVATIONS AT LAURIYA NANDANGARH.

By the late Mr. N. G. Majumdar.

During the year further excavation of the mound at Nandangarh near Lauriya in Champaran District was taken up and the structural remains buried

in the western part of the area were gradually laid bare. The previous year's excavations had brought to light the basement wall of a stupendous structure nearly 80′ high which was found to take a zigzag course, showing a number of re-entrant angles. This wall was now followed and it became clear that the building was polygonal and star-shaped in plan. It measured about 500′ across the centre, and facing each cardinal point had a side 104′ in length. There were in all four such sides, each at a distance of about 266′ from the other. The space between the two sides in each of the four quadrants was covered by 28 smaller sides, showing 14 re-entrant angles and as many as 13 corners. Of course only a quarter of the structure has been cleared, but this is sufficient to enable us to visualize the original lay out of the building.

In plan, the monument is somewhat similar to the Main Temple of Paharpur in North Bengal excavated by the Archæological Department, although the latter was constructed six or seven centuries after the former. In point of elevation also there is similarity between the two monuments, in so far as both are constructed in terraces. The Nandangarh monument has at least five terraces, raised one above another, at three of which there is a passage for circumambulation. The lowermost terrace which is also the widest has a maximum width of 32′ and the one above that measures about 14′ across.

There is evidence of an architectonic character to show that the original plan of the edifice underwent radical changes in a later period. Originally there were two procession paths, one at the ground floor and another at the second floor. Later on three procession paths were provided. On the ground-floor, in some of the bays made by the re-entrant angles of the basement wall, rectangular masonry blocks were inserted and thus a pathway improvised on the first floor. From this floor again was raised a circular wall (Plate XXI, *a*) in two sections, one above the other, encompassing the whole edifice. The lower one having a width of 6½′ abutted on the floor level of the next higher terrace. The upper portion of the circular wall at the outer edge of this terrace had a total width of 9′. On the second floor terrace, at each of the re-entrant angles an arc-shaped solid mass of bricks parallel to the circular wall was built against the corner of each of the bays. The area between the circular wall and the arc-shaped masonry block was filled in and thus the third procession path was provided. These paths must have been reached by means of stairways, but none of them has yet appeared in the area we have so far cleared.

The circular wall mentioned above, which was a later addition, concealed many of the original features of the building. With a view to bring to light these features it was necessary to remove the circular wall as far as exposed, after it had been surveyed and studied. Plate XXI, *a* shows a partial view of the structure with the circular wall in front. How this wall concealed the earlier features of the building may be seen from Plate XXI, *b* which presents a view after the wall had been dismantled.

The façade of the monument does not appear to have been decorated with any ornamental plaques like the *stūpas* and similar other edifices of later times, at Paharpur and at Nalanda. The only relieving feature of the otherwise plain

exterior at each of the terraces is a projected horizontal band running along the wall consisting of a course of bricks with rounded edge, combined with two or three other parallel courses of plain bricks. Starting from the base there are at intervals traces of at least five of these cornice-like projections or string-courses (Plate XXI, *c* and *d*).

There is evidence to show that this structure must have been erected not later than the second century B.C. As a single brick-built edifice of such stupendous dimensions it is perhaps unparalleled in the whole range of monuments of the period to which it belongs. Although nothing definite has yet been discovered to throw light on the character of the monument it may be described as a Buddhist *stūpa* in the absence of any evidence to the contrary. The compound of the monument must have originally extended over many acres of land, surrounded by a massive rampart wall of which some portions were exposed as a result of this year's excavations. Between the rampart wall and the monument there are traces of buried structures here and there, and it is possible that these represent the dwelling area adjoining the religious edifice. Whether this was the site of a monastery as in the neighbourhood of the stūpas elsewhere is difficult to say. A few trial trenches sunk in this area brought to light only fragmentary walls from which no light could be thrown on this problem.

The antiquities recovered from the excavations comprise principally terracotta figurines and other articles, pottery vessels of various types, stone beads and coins. Special attention may be drawn to some of the more interesting objects. Several terracotta sealings were discovered of which one (diam. ·7″) shows the hill symbol with crescent on top, the tree in railing and a cross (Plate XXIV, 6). Another sealing (diam. ·8″) has the hill with crescent and also the cross but not the tree-in-railing. A fragmentary sealing (diam. ·9″) bears traces of symbols impressed on two faces, one of which is a cross. On another face occurs part of the legend *Brahmamit(ra)*.... in 1st century B.C. characters. A thick oblong copper coin, a *kārshāpaṇa* (·9″×·7″×·2″), was found near a wall at the base of the monument, which bears punch-marks on both sides. Most of the marks have become indistinct but one of them seems to be a solar symbol. There is another copper piece, which is a cast coin, showing the hill-and-crescent symbol on one side and an elephant on the other (cf. *Cat. of Coins in the Indian Museum*, Vol. I, p. 202, No. 6).

An interesting discovery was the terracotta mould of a coin or a token recovered in three fragments (Plate XXIV, 2-4), showing a tree-within-railing in one compartment, and the taurine and river symbols with a line of Brāhmī writing in another. The same devices are repeated in a series of compartments side by side. But the Brāhmī legend cannot be deciphered on the mould. Fortunately, we recovered a square lead piece (·7″×·7″), corresponding in every detail to the mould from which it must have been reproduced (Plate XXIV, 1). On the obverse of the piece the Brāhmī legend seems to read *Aya-Ritasa, i.e.*, 'Of the Ārya (Noble) Ṛita'. The characters are assignable to the 1st century B.C. The name Ārya Ṛita, which does not sound like a king's name, is not

known from any other sources. In Buddhist Prākrit of the inscriptions of this period the term *aya* appears as the title of a teacher. It is thus possible that the lead piece represents a token and not a coin. Otherwise it would be hard to explain the discovery of a coin mould in the remains of a religious establishment. Two copper coins of the Kushān period were also discovered, one of Kanishka showing the king standing on the obverse and the Sun God on the reverse, and another of Huvishka with the figure of the king riding elephant on the obverse and four-armed Śiva on the reverse. These finds indicate that the monument of Nandangarh was in existence even in the second century A.D.

Among other metallic objects besides coins mention may be made of a number of iron implements and weapons like knives, celts, daggers, awls and arrow-heads. A copper wheel with spokes (diam. 1·8″) was found which probably belonged to a toy cart. Terracotta wheels for such toy-carts are well known and have been found also at Nandangarh.

As in the previous year a large number of terracotta figurines, mostly fragmentary pieces, were found in the excavations (Plates XXII-XXIV). A majority of them are representations of females wearing the ear-ornament known in later texts *patra-kuṇḍala*. In some examples it is clear that the ornament was copied from the seed-vessel of the lotus. The heads of the figures show a great variety and in some cases their faces are not without expression. Plate XXII, 9 will be found particularly attractive. Against a face that is smiling is set a pair of eyes which have a staring look. It is not clear if all the figures are representations of divinities. That some of them at any rate were so intended is evident, as for instance Plate XXIV, 11, 16, which show a lady standing on a lotus under an umbrella and on two other lotuses stand her two attendants. Her right hand is in the *varada* or 'gift-bestowing' pose. What particular goddess she represents is not known. She may be the Goddess of Fortune; her figure is akin in conception to the female deity appearing on some of the coins of Azilises and on the Bharhut railing. There were found several crude figures showing a mother with a baby or two babies hanging near her breast (Plate XXIV, 14, 15). She is undoubtedly the Mother Goddess. Her representations were probably offered at this sacred spot by females who wished to have children. An object particularly noteworthy in this connection is a silver ring (diam. ·9″; maximum height ·7″). It is inlaid with two pieces of gold foil, on one of which is the seated figure of a woman in *repousse* (Plate XXIV, 5). The occurrence of these female figures, as well as their general preponderance among the terracottas of Nandangarh, is a point worth recording. The association of the Mother cult or female divinities with Nandangarh, if it happens to be a Buddhist stūpa, is difficult to explain, as this is not supported by texts. But a gold leaf bearing the figure of a woman (identified by Bloch as the Earth Goddess) was found in one of the earliest *stūpas* at Lauriya and a similar gold leaf representation of a female was found deposited with other relics in the Piprāhwā *stūpa* which cannot be later than the 3rd century B.C.

EXCAVATIONS AT MAHASTHAN.

By Mr. T. N. Ramachandran.

The principal centre of the year's activities was the site known as Govinda Bhita at Mahasthan in the Bogra District where excavations were first conducted by Mr. K. N. Dikshit in 1928-29 when he exposed a huge temple, figured in *A. S. R.*, 1928-29, Plate XXXIX (*a*) and later continued by Mr. N. G. Majumdar. A temple complex with at least two temples has been revealed at this site, situated within a double bend of the river Karatoyā outside the walled town of Mahasthan, which at once "marks it out as an important site". Whatever has been exposed is, however, so mutilated that it has not been possible to determine the correct plan and internal arrangements of the structures exposed, but as stated by Mr. Dikshit "they can be relegated at least to four periods of construction commencing from the late Gupta epoch (6th-7th Century A.D.) to the Muhammadan occupation".

A huge enclosure wall measuring 114′ long and 6′ wide on the west side where it is best preserved, encloses an area occupied by two blocks of buildings, *Western* and *Eastern*, the ground level of which is indicated by brick-on-edge pavements. The *Western* structure (A), which would appear to be the main building is no doubt a temple and consists of a solid platform in the centre intended for the deity, 27′ 10″ square (with a small projection towards the east), enclosed by three terraces, one below the other, 9′ 7″, 9′ and 8′ 6″ wide respectively. The terraces are supported on five superficial cells on three sides, except the east, being evidently foundations for the superstructure. A projection towards west from the middle of the second terrace, 22′ 4″×11′, was probably a landing with stairway, leading to the second terrace. This landing projects into the third (or lowermost) terrace, thus giving access from the third to the second terraces. The only entrance to this building seems to have been on the west, which was however covered by the later enclosure wall of about the 8th-9th Century A. D.

Immediately within the enclosure wall is a *pradakshiṇā* passage 5′ 6″ wide on all sides except the east where the structures are much dilapidated. Only the outlines of the three terraces referred to were followed in the excavations of 1928-29 and were dug to a depth of 3 to 4′ on all sides.[1] This year the lower portion of the second terrace wall was further excavated on the south to a total depth of 16′ 6″ from the top (Plate XIV, *c*), and was found to be decorated with three sunk panels, 9′ 8″×3′ 6″, in a horizontal row placed at equal intervals of 11′. The scheme of decoration would appear to be similar on the north and west sides as well, the base of the panels being about 7′ from the top level of the second terrace. At first the panels were not detected owing to the presence of a later abutting wall, 4′ wide, on all sides except east, which completely covered the face of the terrace walls including the landing on the west.

The eastern structure (B) also unearthed in the previous excavations[2] is 12′ east of the western one and is also a temple consisting of a shrine 14′ 6″ square,

[1] *A. S. R.*, 1928-29, pl. xxxviii, d.

[2] *Ibid.*, pl. xxxix, d.

enclosed by a wall 6′ wide and a verandah 14′ 3″ wide on all sides. In the centre of the shrine is a dais or *vedī*, 6′ 6″×5′ 6″, apparently the seat of the deity with a procession path 3′ or 4′ wide around. The basement wall that was partially exposed during 1928-29[1] was dug deeper this year revealing the lower part of the structure (Plate XIV, *b*) exposed in 1928-29, the total height of the exposed walls being 17′ from the top. An earlier verandah around the eastern structure of irregular width (10′ on the west, 11′ on the south and 4′ on the north) was brought to light. On the west, where it is 10′ wide, it was found to lie on an earlier passage of the same period as the earlier main eastern structure (6th-7th Century A.D.), the face of which was decorated with a series of grooves, 2′ wide, at regular intervals of 9″. The total length of this grooved face is 73′, and its south-west corner actually passes underneath the second terrace wall of the Western structure (Plate XIV, *d*), where a fine terracotta plaque bearing the figure of a bird (a highly conventionalised peacock) was found embedded probably in one of the grooves, thereby proving that the grooves were meant for holding plaques. It will be seen that an earlier date has to be suggested to the Eastern structure, particularly to the shrine with its walls to which the verandah with the grooved face would appear to belong.

The verandah, which was noted as irregular, seems to have been disturbed on the south, where it is 11′ wide, by an isolated structure (C) 34′ 8″×6′, standing on it but aligned with the verandah wall. Alongside of this, on the eastern corner Mr. Majumdar laid bare a wall running towards east to a length of 36′ (Plate XV, *e*), the base of which has a moulding above an offset consisting of three ashlar courses with an intervening sunk band in which are laid ornamental terracotta plaques and carved bricks as at Paharpur, 8″ high, and 2½′ above the original ground level. The scheme of decoration is elegant, envisaging dwarfish supporting Yakshas, alternating with floral and geometrical designs. While the purpose of both the wall and the isolated structure (C) is not clear their date may be taken as 8th-9th Century A.D. as they stand on the earlier verandah.

About 50′ to the south-east of the isolated structure (C), some very late and irregular structures (later than any in the temple area) were exposed (Plate XIV, *a*). Among these, can be discerned the remnants of a room, 12′ long on its western side, another 7′ 6″ square further north at a distance of 10′ and a third bigger room (20′×21′) situated under the first room and consequently comparatively earlier than the other two. About 5′ to the south of the last room is a solid platform 12′×5′, having three steps on its northern side, measuring 1′ 4″ wide. A small circular wall (presumably that of a well), 6′ in diameter, lies between the platform and room 3, touching both. The whole may be assigned to the 12th-13th Century A.D.

The antiquities found at Govinda Bhita this year are not numerous, considering the extent of the area explored. Apart from beads of cornelian, agate and chalcedony (Plate XVII, 18) found near the wall bearing the ornamental

[1] *A. S. R.*, 1928-29, Pl. xxxix, *d*.

terracotta plaques and carved bricks (Plate XV, *e*), terracotta figures and pottery vessels, which have to be assigned to the Pāla period (roughly 9th-10th century A.D.), a number of terracotta plaques similar in execution to the Paharpur examples (Plate XVI, *a*—*i*) and ornamental bricks with a variety of designs (Plate XVII, 1-17), both (plaques and bricks) to be assigned to the late Gupta period (6th-7th century A.D.) were found in the verandah between the Western (A) and Eastern (B) structures or temples.

Among the representations on the plaques mention may be made of two pot-bellied Yakshas, one with a close-fitting helmet and conventionalised curls and the other with elegant and curly hair and *patra-kuṇḍalas* with raised rim in the centre (Plate XVI, *a*), and a plant looking like a plantain. Yet another plaque (Plate XVI, *c*) shows in relief the seated figure of a god (probably Yama) holding a *pāśa* over his head and having conventionalised curls on his head, perforated *patra-kuṇḍalas* in the ears and a *yajñopavīta* of single cord. In the ornamental bricks designs such as chevron (Plate XVII), chess-board (Figs. 1, 7, 10 & 17) cross-petal, dentil (fig. 12), inverted pyramid (fig. 15), windows (fig. 11), corbelled arches (fig. 14) and flowers such as the sun-flower, lotus (fig. 2) and lily (fig. 7) predominate. An interesting find is lotus knobs (Plate XV, *c*), their undersides so scooped, as to easily suggest that they were meant to be inserted into mortices or holes like 'nails on plank' in a scheme of brick laying. Even as nails project a little from the plank level these knobs with the seed-vessel of the lotus done in relief project out of the brick level.

Another group of plaques of about the same period found near the lowermost or third terrace wall of the western structure (A) on its south-eastern corner, shows figural representations such as pot-bellied *Yakshas* with close-fitting helmets (Plate XVI, *a*), dragon-headed and elephant-headed *makaras* with scaly bodies and bold scroll work (Plate XVI, *d* and *e*), conventional geese (Plate XVI, *b*), lions, a human head with *ushṇīsha* and flower over ear (Plate XVI, *g*), flying Vidyādhara (fragmentary) with lotus footware and *kīrtimukha* as in Paharpur, vase as in stone carving in the western ante-chamber at Paharpur and scroll work designs superficially imitating *kīrtimukhas*. A fragmentary but interesting plaque found in the same locality shows a seated figure with the left hand so held as to suggest that a flower is held; the pose of the figure and its left hand are suggestive of Padmapāṇi.

Two plaques which may have a bearing on the determination of the religious character of the temples may be mentioned. On one, which is a circular lotus medallion (Plate XV, *d*) can be seen a human couple (*mithuna*), the man touching the woman's breast with his right hand while his left hand is resting with ease on his thigh (*kaṭyavalaṁbita*), and the woman carrying in her left hand a box with a lotus-shaped lid, the right being broken. The woman wears round her neck a torque with a jewel in its centre and *patra-kuṇḍalas* in her ears, while the man wears a single close-fitting necklace as in Gupta sculptures, and ring-like *kuṇḍalas* in the ears. Having been found near a well at the south-eastern corner of the third terrace wall of the Western structure (A) it has to be ranked in point of time with the group of plaques discussed in the previous para. The

couple represented may be an ornamental one (*mithuna*), so popular as a *motif* in early sculpture.

Another plaque found to the south of the wall containing the row of plaques and bricks represents a woman sleeping gracefully on a couch with her left hand supporting her head and her right extended and touching an animal descending from the skies, which is either an elephant or a bull, probably the latter (Plate XV, *a*). If the animal is an elephant, the scene may relate to Māyā's dream and hence from the life of the Buddha, but if it is a bull, as it seems more likely, it may portray the second dream of Marudevī, the mother of the first Tīrthaṅkara, Ṛishabhadeva, who is said to have noticed a bull descending from the skies and entering her mouth.

It is interesting to note that two small mutilated stone figures representing Padmapāṇi and Buddha seated in *bhūmisparśa* were also found here. The former was found south of the wall bearing the plaques and the latter from the southern *pradakshiṇā* passage adjoining the enclosure wall. The features of the *Padmapāṇi* figure recall those of the Sarnath school.

EXPLORATIONS IN ASSAM.

By Mr. T. N. Ramachandran.

Exploration of sites in Assam this year, particularly in the Nowgong and Sibsagar Districts have yielded good results, some of the sites needing excavation and protection. Such are the ruins near Doboka about 24 miles from Nowgong and the ruins near Numaligarh in the Golaghat Sub-Division of Sibsagar District.

The Doboka Group of Ruins.

The Doboka ruins are scattered over four places called locally Gosain-Juri, Akasi-Ganga, Gach-Tal and Mikir-Ati.

Gosain-Juri.

About three miles from Doboka are as many as 8 small mounds, all close to each other and one of them dug deep enough by the local people. From the first mound which is about 12′ high a pedestal of grey soapstone, 3′ 6″ ×2′ 9½″ with a rectangular mortice hole for holding the tenon of the image was discovered. By the side of the pedestal lay a gneiss door lintel, 5′×1′ 3″, with two sockets for the knobs of wooden doors. The mound shows traces of a brick structure, probably a small shrine, about 6′ square.

The second mound, also small, is adjacent to the first and needs to be excavated. Here were found a gneiss door sill embedded in the earth, two or three pieces of the same material and a door lintel of black stone, 5′ 6″×1′ 3″, showing a lotus in the centre. The third mound, which is low, has yielded till now as many as 8 red gneiss pieces, two of which bear frontal friezes, 8′ 2″×2½″, with the design of foliage inset between rosaries. Another architrave fragment of the same stone, 1′ 6½″×1′, which must have formed part of the capital of a pillar shows on two of its sides the designs of *gavākshas* (circular windows) sur-

mounted by trefoil (Plate XX, *c*). Yet another piece of the same stone found near the mound is probably from a pillar and shows a row of recessed and projecting moulding. The fourth mound shows traces of quartz pieces and a fragmentary pillar of gneiss. The fifth and sixth mounds have yielded respectively a door lintel carved with an interesting *Yavanikā* design and a round gneiss piece recalling in shape the moon-stones of South India and Ceylon.

The seventh mound is important in that it is higher than the others and reveals traces of brick structure. Here was also found an interesting stone sculpture of Vishṇu (Plate XIX, *f*), 4′ 6″×3′. Vishṇu is represented as standing in *samabhaṅga*, with a high coronet (*kirīṭa-makuṭa*) on head resembling the modern Tirupati cap of the South, flattened *patra-kuṇḍalas* in the ears, and two necklaces, one with the *kaustubha* pendent attached to it on the neck. The upper hands are missing as is also the lower left, while the lower right is in the *varada* (boon conferring) pose holding a lotus. *Vanamālā* is arranged as in the Deopani image of Vishṇu with which, both in decorative arrangement and facial type, the present image seems to be related and coeval. Śrī and Sarasvatī, each 1′ 9″ high, stand in *tribhaṅga*, the former to the right of Vishṇu and the latter to his left, both wearing conical *kirīṭa-makuṭas*, flattened *patra-kuṇḍalas*, single necklace with a pendent between the breasts, *aṅgadas* and wristlets. Śrī holds rosaries in her hands while Sarasvatī indicates *abhaya* or protection with her right hand and holds in her left a lyre of the type seen in ancient sculptures.

The eighth mound is comparatively bigger with abundant bricks in it. Apart from door lintels, sills and foot-prints probably of Vishṇu found in the debris here, a pedestal (or *vedī*) similar to the one found in the first mound, 4′×1′ 10″ and a fragmentary sculpture 2′ 7″ high representing Vishṇu are the more important finds from this mound. The latter is defaced but the *patra-kuṇḍalas*, *aṅgada*, *kirīṭa-makuṭa*, long and conical, and his upper right hand (which alone remains) holding a *gadā* as in Bihar and Bengal sculptures, can, however, be made out. The figure has a halo with a dentil edge which bears a carving of a hovering Vidyādhara with scraf held in hands in the ethereal region indicated by a circle with indented edges as in Pāla representations. A piece showing a hand with a lotus held by the stalk as in Bihar sculptures which was found in the same mound may belong to a smaller Vishṇu image.

Akasi-Ganga Ruins.

In a rocky spot within the forest seven miles from Doboka, are the ruins of one or two temples of gneiss, which appear to be Saivite in character covering an area of about a *bigha*. Their beauty is enhanced by a water fall (locally called the Ākāśa-Gaṅgā) which serves as a picturesque background for the ruins. A vast number of stones lie scattered here, including pillars, capitals—some with carvings—perforated windows, *āmalakas*, door lintels, sills and jambs, gargoyles, pedestals, and moulded architraves reminiscent of the Chālukyan style of decoration. A square piece shows courses of rosaries over a *tilaka* design placed in its turn between two leaves. Panels with figures such as *Śiva-dhyānin*, dwarfed Gaṇas and danseuses, dancing Gaṇeśa and miniature replicas of temples,

pieces of entablature with projecting petals, ceiling pieces with full-blown lotus designs, cucumber-shaped pillars with octagonal bases and central belts, the cucumbers arising out of lotus calyx, vases with *vyālas* flanking, capitals with cut ends of joists in the shape of scrolls held by leafy belts—all these indicate the remains of a temple with a *maṇḍapa* dedicated to Śiva. Figures of cows and bulls were found scattered, as also liṅgas, one of which is worshipped even now. Among the carvings on the slabs and panels a noteworthy one is that of Śiva as Śūlapāṇi in *ābhaṅga* pose flanked by two female attendants, one holding *chāmara* and the other with hands in *añjali* standing with bent knees on the back of an elephant.

Gach-Tal Ruins.

About two miles from Doboka are the Gach-Tal ruins, about a *bigha* and a half in area containing traces of at least two Śiva temples each perhaps consisting of a sanctum, an antechamber and a *maṇḍapa*. There are at least four doorways, the carvings on the door lintels and jambs consisting of Gaṇeśa, worshippers, Śiva standing with rosary in the right and trident in the left hands or seated in *yoga* with four hands, fat worshipping Gaṇas, vases flanked by *vyālas* and pillars by elephants, flowers, foliage courses with animal and bird insets, twisted serpents, and vases placed on *āmalakas*. Other architectural fragments worth noting are ceiling slabs bearing lotus designs, pillar bases of odd shapes, capitals shaped like *āmalakas*, and pieces with recessed edges of the *sarvatobhadra* type. On the fragmentary door jambs are noticed figures holding *kamaṇḍalus*, and door-keepers holding Śaivite symbols, such as *śūla* and *pāśa*. While representations of Dvārapālas, Śaivite in character, are associated with door jambs, we also come across figures, one holding a *kamaṇḍalu*, another seated crouching and so on; similar figures are also found on door lintels indicating the Śaivite character of the shrines. Some times the Dvārapāla have four hands in which case the *ḍhakkā* or the kettle-drum is held in one of the hands. Flowers, creepers with animal and bird insets and twisted serpent designs occurring on one of the door jambs recall of the Pāla parallel of North Bengal. Other interesting *motifs* are vases flanked by lions and foliage flanked by elephants which suggest late Gupta influence. The remains may date back from the 10th-11th Centuries A.D.

The entire structures here were of granite and no trace of bricks is found. Very little seems to have been buried underground, but the arrangement of the slabs and architectural pieces lying pell-mell will entail considerable trouble, as most of the superstructure is missing. A Śiva liṅga from the ruins is reported to have been removed to some unknown place.

Mr. R. M. Nath, Sub-Divisional Officer, Nowgong (Assam) brought to my notice similar ruins at a place called Mikir-Ati in the same neighbourhood. Among the few surface finds mention may be made of a pedestal (*padmāsana*) of grey soapstone and some stone pieces bearing carvings such as foliage, huge lions standing on couchant and vanquished elephants and god seated on bull probably representing Śiva. Apart from stone architectural pieces there were traces of bricks also at this place.

Numaligarh Ruins.

In the hills adjoining the Numaligarh Tea Estate are extensive sandstone ruins situated about six miles from Kamargaon and two miles from the Assam Trunk Road. Some carved stone pieces from here were removed to the Kamrupa Anusandhan Samiti's Museum at Gauhati. In a temple of Śiva at Sivathan at the foot of the Numaligarh hill are kept some more of the carvings removed from the hill. Two of the pieces here are interesting examples of the local art (Plate XX, *e*). One representing a lion *sejant* (*vyāla*) bears on the top a badly damaged inscription of four or five letters in Nāgarī characters of the 13th-14th Centuries A.D. Another which is the cubical part of a pillar shows on one side (Plate XVIII, *h*) Vishṇu seated in *rājalīlā* pose on a *padmāsana*, having four hands, the upper hands with mace and conch, and the lower right in *upadeśa-mudrā* while the lower left holds a rosary. Ring-like *kuṇḍalas* adorn his ears. The other side of the same piece shows Garuḍa advancing in a threatening attitude towards an emaciated figure of an ascetic who is seated with his hands raised above his head in supplication. Both Garuda and the man wear perforated *patra-kuṇḍalas* (Plate XIX, *a*). Both the sides appear to illustrate some mythological scene, probably the *Garuḍa-garva-bhaṅga* or the extermination of Garuda's pride in the Mahābhārata. The local modern temple in which these pieces are kept has two more sandstone pieces, also probably removed from the hill, one containing the figure of a squatting Gaṇa holding a mace (*gada*) and the other showing a cluster of lotus buds with long stalks and a central lotus in full bloom, the whole issuing from a pond as in a similar sculpture from the same provenance now in the Museum of the Kamrupa Anusandhan Samiti at Gauhati (Plate XVIII, *i*). Two small pillars evidently belonging to a balustrade were also found here, each surmounted by a *bali-pīṭha* shaped like an inverted *padma*.

The temple at Sivathan which is just a tin shed, enshrines, I was told, a big liṅga belonging to the old temple on the Deoparbat hill from the ruins of which it was removed to its present place for worship by a Brahmin some 60 years ago.

Deo-Parbat Ruins.[1]

The hill (644 ft. above sea level) so called because it is dedicated to Deva (Śiva) contains the ruins of a very interesting structure, no doubt a temple of about the 11th or 12th century A.D., the like of which is not found anywhere else in the Sibsagar District. The ruins comprise mostly fragments of sandstone from a temple such as are not met with locally. Elegantly sculptured blocks of sandstone recalling late Gupta art are found scattered in such profusion that already many of them are being taken away by house-builders and curio-hunters. A few were removed to the Museum of the Kamrupa Anusandhan Samiti at Gauhati (Plate XVIII, figs. *f*, *g* & *i*; Plate XIX, *d* and Plate XX, *a*). Luckily as most of the fallen parts are scattered in the Deoparbat area itself it should be possible to collect them all and reconstruct them.

[1] Surveyed in 1934 by Mr. R. M. Nath, S.D.O., Nowgong, whose note on the ruins has been published in the J. A. R. S., Vol. II, No. 1, pp. 7-9.

The floor of the original shrine with a mortice for holding the tenon of the image still remains undisturbed while the ceiling, its supporting pillars and the doorway have all tumbled down. The ceiling slab (13′×11′ 8″×9″) is massive and of artistic finish bearing the carving of an embossed lotus (*viśva-padma*) of about 8′ diameter in three courses. The seed-vessel of the *viśva-padma* bears in relief the figure of a Vidyādhara holding a scarf or a necklace with both hands and hovering in the sky as if to make obeisance to the deity below. His legs are so arranged as to be symmetrical with the circular course of the seed-vessel, a feature met with in Gupta and Pāla sculptures. While the facial type is local, the decorative and anatomic details of the Vidyādhara recall late Gupta and Pala features. A high crown (*kirīṭa-makuṭa*) with a frontal coronet adorns his head, perforated *patra-kuṇḍalas* are seen in the ears while his under-garment reaching the ankles has an elegant central tassel.

Two massive door-jambs, with foliage and sculptural representations on them are worth mention. One shows female door-keepers with coronets, and huge perforated *patra-kuṇḍalas*. In the carvings on door-jambs are to be noted various designs, such as drooping petals, encircling creepers with animal and human insets and strings of flying human beings. Coping pieces evidently of *toraṇa* gateways are also found scattered (Plate XIX, *b* & *c*). A specimen, which is similar to another now in the Kamrupa Anusandhan Samiti's Museum also originating from here (Plate XX, *a*) is a pyramidal bracket with a bold design of sinuous lines flanking a central cusp. Another is in the shape of a *śikhara* formed by a *kīrtimukha* and foliage issuing from it (Plate XIX, *b*). A third (Plate XIX, *c*) more interesting than these two, shows a *śikhara* of foliage with *āmalaka* and lotus-bud finial flanked by a god and goddess both dancing with their legs resting on elephants in turn supported by lotuses. Both the god and goddess have four hands holding bow, arrow, rosary and sword (stāff ?) and wear perforated *patra-kuṇḍalas* in the ears and a *kirīṭa-makuṭa* on head with a frontal tiara. Holes on the underside of the coping piece suggest that it was meant to be fixed on to a *toraṇa* beam.

Remains of what looks like a *mukha-maṇḍapa* in front of the shrine are also found, the pillar bases and capitals being carved and massive. On a pillar base can be seen what looks like a fan-palm (Plate XX, *b*).

Among pillar capitals found mention may be made of massive capitals with huge *kīrtimukhas* or *Vanaspati* or *Kāla-makara* decorations as they are known in Java, facing the four cardinal points with a worshipping Nāginī between every two points (Plate XIX, *e*). The *kīrtimukhas* bear a strong resemblance to the *Kāla-makaras* of Java,[1] while those occurring on the coping pieces (Plate XIX, *b*) are remarkably akin to the Javanese ones and provided like the latter with eyes having horn-like sockets.[2]

Plinths, entablature and pieces from the basement (*adhishṭhāna*) and superstructure were all found scattered, most of them bearing carvings. Two pieces

[1] Karl with, *Java*, Pls. 2, 5, 43, 46, 48, 80; Krom, *Hindœ-Javaansche Kunst*, III, Pls. 2, 24, 28, 29, 52, 70, 76, 86 and 88.

[2] Krom, *Hindœ-Javaansche Kunst*, II, Pls. 70, 86, 88.

from the plinth probably of a *maṇḍapa* now removed to the Kamrupa Anusandhan Samiti's Museum are typical. One (Plate XVIII, *g*) shows a row of busts with hands holding lotuses, tiara on head, flattened *patra-kuṇḍalas* designed like full-blown lotuses in the ears, a big circular *tilaka* mark on the forehead, and with a number of necklaces. Their facial type is local. The occurrence of these busts in a row in an attitude of supporting the superstructure suggests they are ornamental in character. Another piece (Plate XVIII, *f*) shows a row of elephants also in the attitude of supporting the superstructure. Similar pieces showing elephants in profile where each pair has only a single head were also found.

Friezes, of which there is a large number, and which must have come from the *adhishṭhāna* of a *maṇḍapa* are by far the most interesting feature of the edifice inasmuch as they show in a series of panels scenes either drawn from Hindu mythology or domestic including a few of an erotic character. Some of the noteworthy scenes may be mentioned here.

A frieze (Plate XVIII, *a*) having five panels, shows Rāma and Lakshmana seated, the latter behind the former, while Sugrīva is kneeling before Rāma in supplication, and Hanumān and another monkey are watching the scene with reverence, as indicated by their hands held in *añjali*. The scene portrayed evidently relates to the scene from the Rāmāyaṇa in which Hanumān succeeded in securing the friendship of Rāma for the protection of Sugrīva. Another frieze shows a royal archer shooting a deer couple when in coition. This represents the Mahābhārata story of Pāṇḍu, the father of the Pāṇḍavas, who was cursed to die with his sexual desires ungratified as a result of his having shot a deer couple (really a sage and his wife in the guise of deer) in coition.[1] A third frieze portrays an amorous scene (Plate XVIII, *e*).

A fourth which consists of three panels, show (1) a woman in her toilet, (2) a man dragging a fallen woman from a scene where another is about to thrash her, while another woman is dissuading him, and (3) a man advancing with a raised mace. A fifth frieze (Plate XVIII, *b*) which is divided into 4 panels, contains the following scenes from left to right: (1) an ascetic pushing a goat before him, (2) another ascetic dancing with *śūla* and *ḍhakkā* in his hands and *kamaṇḍalu* hanging from his right arm, and (3) a seated woman in an ecastatic mood. Worshippers sitting with hands held in *añjali* or *vismaya* or holding flowers form the subject matter of the sixth frieze, having four panels (Plate XVIII, *d*). Yet another frieze divided into two big panels illustrates a combat between two warriors. The actual combat is shown in one panel, while in the other, one of the warriors marches off in triumph with the severed head of the other held in his hand, the headless trunk staggering behind. (Plate XVIII, *c*).

Other scenes occurring on the friezes which are difficult to photograph in their present condition are—a horseman, a woman seated, another playing on lute, a bearded Dvārapāla resting on his staff, elephants sometimes shown facing and sometimes in profile with a single head but a double body, conventional

[1] The curse had its effect and Pāṇḍu died as soon as he touched Mādrī with desire kindled. See Mahābhārata, I, 109, vv. 5-28.

plants, foliage and bead courses, conch-blower, a man protecting his family seated on elephant's back against a man attacking, women dancing and worshippers in different poses. The facial type of the men and women occurring on these friezes is distinctly local.

A slab with an unfinished representation of Śiva as Tripurārimūrti on it (Plate XIX, *d*) was removed from here to the Kamrupa Anusandhan Samiti's Museum. At least four hands can be made out, the two main hands holding bow and arrow. A tiara is seen on the head while circular *patra-kuṇḍalas* adorn the ears. The god appears to be dancing too. Though superficially the figure looks like Mahishamardinī the absence of feminine traits in the figure precludes such an identification.

Slabs bearing *āmalaka* design are profuse, one of them with writings in late Nāgarī characters reading, *dhi u ma vya* (or *gha*).

On the same hill at a short distance from these ruins are ruins of another smaller temple with plain pillars, bases and capitals embedded in the earth in the midst of thick overgrowth of bamboo jungle. Not far off was found a pillar capital with recessed sides recalling the *sarvatobhadra* type. To the south-east of the Deoparbat ruins, about a furlong or so, remains of yet another structure, probably a *maṇḍapa*, were found including many slabs with *āmalaka* designs.

According to the report of Mr. R. M. Nath, the S. D. O. at Nowgong (*vide* his article "Ruins of the Siva temple at Numaligarh" in the Journal of the Assam Research Society, Vol. II, No. 1 (April 1934), p. 8) there are some more brick ruins on an adjacent hillock to the north of Deoparbat and "a huge number of stone blocks with architectural carvings ready for building construction" on the south bank of the Rangsali, a stream flowing about a mile to the south of the Deoparbat hill.

The Deoparbat ruins date in all probability from the 11th-12th centuries A.D. Some of the carvings recently removed from the place to the Kamrupa Anusandhan Samiti's Museum at Gauhati will have to be taken back to the ruins for reconstructing the fallen temple when the Numaligarh ruins receive protection.

Kamakhya Hill.

The western gateway of the Kamakhya temple bears some interesting carvings revealing exceptional sculptural skill such as is not usually met with in the locality. Two of them are found in niches facing each other on the sides of the entrance. One shows a conch-blower in profile with an *ushṇīsha* on head and a conch held to his mouth, the cheeks bulging out as in the act of blowing the conch (Plate XX, *f*).

The other which is a product of sculptural excellence represents Krishṇa playing on the flute (Veṇugopāla). The head-dress which is in the shape of flames is a conical cap. A single necklace of *maṇis* and an undergarment with central and lateral tassels recall the decorative features of the Gupta and Pallava periods in North and in South India respectively. The figure is a rare specimen

of anatomical perfection (Plate XX, *d*). Among the other carvings on the west gateway mention may be made of domestic scenes such as a householder doing his daily worship, while his wife is engaged in suckling her child (Plate XX, *h*) and a woman worshipper kneeling and pouring water from a spouted vessel into the mouth of an animal whose features are too indistinct to admit of correct identification. (Plate XX, *g*).

EXCAVATIONS IN SOUTHERN CIRCLE.

By Mr. H. H. Khan.

In the Madras Presidency a large number of fresh cases reported of ancient inscriptions, burials, funerary pottery and iron age antiquities demand a much more detailed treatment than it is possible for the Superintendent to give. During the year it was possible to conduct only small trial excavations at several places, the most important of which is Nagarjunikonda.

The site selected at Nagarjunikonda for the construction of the museum which will house the wonderful reliefs found there was freed from jungle and levelled. Suitable stones for stone masonry were collected and stocked at the site and necessary building materials were purchased and brought to Nagarjunikonda. In course of collecting old bricks and stones some more architectural fragments, an iron arrow-head, a few lead coins of the Andhras, a rectangular copper coin and a circular gold coin $\frac{3}{4}$″ in diameter bearing on one side the head of the Roman Emperor Hadrianus Augustus P.P. and on the other side a female figure probably the Empress riding a horse with letters COS III. This last find is most interesting.

The most important find of necropolitan pottery was reported in the Madura District where Mr. K. S. Srikantan of the Madura College excavated some jars in a piece of land, about 100 yards square, in the midst of paddy fields at Annupanadi (Plate XXV, *c*, *d*), 2 miles S. E. of Madura town. The jars were buried rather shallow, a number of them being found close to one another, the upper parts being actually visible, probably as a result of denudation by rains. The collection consisted of 2 large jars each 3′ high and 2′ 4″ in diameter at the mouth, smaller vessels, bowls and ring stands of the thin black glazed ware type known so extensively in the Madras Presidency (Plate XXVI, *b*). Another site discovered by Mr. Srikantan is that of Vadagarai (Plate XXVI, *a* and *c*) near Periyakulan, 54 miles from Madura at the foot of Kodaikanal hills. Here 3 funerary urns of the same type were discovered, one of which contained a highly rusted iron dagger. The pottery and its contents have been recovered in a much damaged condition. It is very desirable that pending adequate arrangements for the investigation of the prehistoric burials which require a trained staff and greater resources, amateurs and enthusiasts or ignorant villagers may be stopped from doing any further damage to these relics which are the only clues to the early cultures of South India. At my instance the Collector has issued instructions to prevent further damage to the buried remains of antiquity.

The Tahsildar of Calicut, District Malabar reported that one Payyata Rarichan, occupant of Pazhukkaliparamba (R. S. No. 73/6) in Ichanur desam of

Kannankara amsam, 10 miles North of Calicut, while excavating the granite rock surface for stones, discovered one small rock-cut cave about 8 feet in length and 4 feet in height with a small door on the south which was closed by a thick chiselled block of granite stone. Trial diggings were made at the site which resulted in the discovery of two small rectangular stone pedestals and a short broken stone pillar and various small earthenware pots of different sizes in the cave (Plate XXV, *a* and *b*). Further excavations may reveal the nature and extent of the monolithic remains and the purpose for which they were excavated.

While re-arranging the sculptures in the shed at Amarāvatī in the Guntur District, one inscribed stone with a line in Brāhmī was brought to light below an incised stūpa and by the side of a tree-guard.

Another important mound of the historic period brought to the notice of the Department during the year is Pallavamedu, a low mound situated in the vicinity of the city of Conjeeveram. As the Pallavas were known to have Kāñchī as their capital the association of the name Pallava with the mound raises the presumption that some structure of that period must have once stood at the place. Besides certain walls built with bricks of large dimensions and a few fragments of architectural stones, no important remains are visible above the ground to attest the legend which associates the name of the Pallavas to this mound.

THE ANTIQUITY OF KORKAI.

By Rao Bahadur C. R. Krishnamacharlu.

"The early Hindus must have been acquainted with the mouth of the Tāmraparṇī long before they knew anything of its inland course or of the falls in the mountains, so that I conclude that it was near its mouth and probably at the place where its junction with the sea took place that people bathed and performed austerities, as the gods are represented to have done in the time of the *Mahābhārata*. It would seem probable that there also, at Koṛkai, was formed the first settlement of civilised men in Tinnevelly and that it was there that the name of Tāmraparṇī by which the river became known was first given to it." In these words[1] does Dr. Caldwell describe the antiquity of the river and along with it that of Koṛkai, which, according to him, was the first home of civilised man in the Tāmraparṇī area. He also thinks that after the Aryan adventurers under Vijaya settled in Ceylon they may have formed a settlement on the Tinnevelly coast and given the chief river on the coast the name of the town from which they came.[2] Such a circumstance would according to him explain the origin of the name Tāmraparṇī as applied to the river. Originally in early Buddhistic times and in Aśōka's inscription at Girnar the neighbouring island (Ceylon) was known under the name Tāmbapaṇṇi and to the Greeks that first visited India in the time of Alexander the Great, the island was known as Taprobane. In any case

[1] *History of Tinnevelly*, (1881), p. 9.

[2] *Ibid.*, p. 10. It is equally possible that the name Tāmbapaṇṇi or Taprobane applied to Ceylon in pre-Christian times was first given to it by settlers in the island from the Tinnevelly coast, *i.e.*, the Tāmraparṇī region even before Vijaya's conquest of it.

the earliest knowledge of the Tāmraparṇī tract must have dated from the time of Vijaya's occupation of Ceylon and Koṛkai, the home of pearl fishery from earliest known times, must have been the chief seaport of this area watered by the river. Dr. Caldwell also records a Tamilian tradition according to which "the Chēraṇ, Chōḷaṇ and Pāṇḍiyaṇ were three brothers who at first lived and ruled in common at Koṛkai near the mouth of the Tāmraparṇī. The lands held by all the three in common were at Mukkāṇi (the three properties) near Koṛkai. Eventually a separation took place. The Pāṇḍiyaṇ remained at home. The Chēraṇ and the Chōḷaṇ went forth to seek their fortunes and founded kingdoms of their own to the west and north".[1] It would thus appear that Koṛkai was believed by local tradition to be the earliest home and the starting point of the founders of the three main ruling families of Ancient South India. According to the same authority, Koṛkai at the mouth of the Tāmraparṇī must have been the residence of the Pāṇḍyas at the early period, *i.e.*, six centuries before Christ. to whom the king of Tāmraparṇī (Ceylon) is said to have sent over ambassadors to negotiate an alliance by marriage with the Pāṇḍyas. The *Mahāwaṁsa*, which records the incident of this embassy, states that the "Southern Madhurā"[2] was the place at which the Pāṇḍyas lived and reigned at the time. This appears to be an anachronism, since, from all evidences it seems certain that the existence of Koṛkai as the early Pāṇḍya capital was forgotten by the time of the composition of the Singhalese chronicle in the reign of king Dhātusēna at the beginning of the sixth century after Christ.[3] From all sources it seems certain that it was the belief of the earliest Singhalese that the Pāṇḍya kingdom was in existence before the arrival in Ceylon of Vijaya and his followers, that is, before the introduction of Aryan civilisation into Ceylon which can hardly have been later than 550 B.C. For this reason Caldwell[4] thinks that this carries up the era of the first introduction of Aryan civilisation into the Pāṇḍya country, probably at Koṛkai to a very early period, *i.e.*, *circa* 700 B.C.

The great antiquity which is thus attached to Koṛkai seems also to be borne out satisfactorily by the geological and stratigraphical formations of the soil at and near about the place. Dr. Caldwell who carried out stray excavations here in about 1877, found that Koṛkai was situated in the last formed portion of the Tāmraparṇī delta, lowest and nearest the sea. He found the upper stratum of the area to be composed of stiff alluvial clay which the river had brought down in course of time. Every portion of the alluvium he found to contain sea-shells in great abundance. These were not merely sea-shore shells but deep-sea shells also, like the conch and pearl-oyster. He observes thus: "So abundant are they that in places where the surface of the ground has been washed away by the rain and cultivation had not been carried on, the white shell-covered surface glitters almost like water in the moon-light, and in some places as you walk along the roads especially near Māṛamaṅgalam the shells go crackling under your feet

[1] *History of Tinnevelly*, (1881), p. 12.
[2] As distinct from the original Mathurā in the north, (modern Muttra) associated with Krishṇa's life.
[3] Geiger—*The Mahāwaṁsa*, Introduction p. xii.
[4] Caldwell, *loc. cit.*, p. 14.

as they would by the sea-shore when the tide is out".[1] Under this stratum which is about six feet deep on the average, we find a layer of grit-stone rarely more than a foot in thickness, composed of the larger grains of sea-sand such as lie on the surface mixed with cominuted shells. On a careful examination of the several strata here, the Bishop concludes that this portion of the delta must have been inhabitated at least 2500 years ago and the deposition of the alluvium must have commenced many ages earlier. The ancient habitations could be traced only at a depth of 8 feet below the present level, and whenever this was reached traces of human occupation were found in the shape of sherds of Indian pottery, etc. When I inspected the site in 1936, I found quantities of conch-shells, some of which are cut or sawn, thus lending support to the fact that hereabout lay an ancient chank-factory manufacturing shell-ornaments such as bangles, rings, beads, etc., specimens of which obtained locally are illustrated here (Plate XXXVIII, *d*).

Dr. Caldwell expected to find some Greek relics among the very few excavations that he made here, but he was disappointed. Except the sherds of Indian pottery, no other traces of habitation were found in the ancient level which was reached at a depth of eight feet below the present one.

On the surface he came across two copper coins with inscriptions entirely obliterated, but the arrangement of the drapery in the figures on it clearly pointed to their Singhalese origin.

The most interesting finds made here were the mysterious sepulchral urns, the nature or origin of which puzzled everybody. The natives knew nothing about them and Europeans ascribed these to a race which had died out leaving no other clues as to their characteristics. Among these are a few with some smaller vessels inside them, some of which bear marks of good workmanship and a polish or glaze which the potters of the present day cannot imitate. Two of the urns found by the Bishop contained no bones but only traces of bone-dust. A "monster" urn dug out by him measured 11′ in circumference and contained a complete set of human bones including a perfect skull. The urn had been originally deposited in the white sand *below* the grit-stone. The grit-stone had then reformed partially all round, since he found the cavity of the skull filled up with grit-stone. There was no basis for the belief that the bones belonged to a race of pygmies who were buried in these urns, since on examination these bones were found to be of the same size as those of a fullgrown man. The urns are of the series usually called *madamadattāṉ-tāḻi* of which specimens were found by me also at Tenkāśi and other places. Attention is drawn to my note on Tenkāśi where a fuller treatment of this is given.

From all relevant historical references there is ample evidence to infer that Koṟkai was the capital of the Pāṇḍyas from about 600 B.C. Caldwell opines that it must have been the chief gateway to South India for the Ceylonese colonists or ambassadors, that opened social or political intercourse with the mainland subsequent to the colonisation of Ceylon by Vijaya. He also think that the

[1] *Loc. cit.*, p. 284.

embassy sent by the king of Ind to the Emperor Augustus referred to by Strabo (A.D. 20) went not from Porus but from Pandion (Pāṇḍiyaṉ) and it must have related to the foreign trade carried on by the Pāṇḍiyans at Koṟkai. The existence of pearl-fishery in the neighbourhood of Kolkhoi (Koṟkai) in the kingdom of Pandion (Pāṇḍiyaṉ) in the 1st century A.D. is testified to by a Greek merchant writing in the *Periplus of the Erythrean Sea*[1] (A.D. 80) that king Pandion was the owner of the fishery. It should be noticed that the Greek writer refers to Kolkhoi as a 'city' and as an 'emporium' ('Kolkhoi emporium'), as also does Ptolemy the Geographer (A.D. 130). It is, however, curious that Professor Rawlinson (*India and the Western World*) omits to notice the existence of pearl-fishery near the city of Kolkhoi in Pandion's territory about this period. In contrast with Caldwell he associates the early Pāṇḍiyaṉs of this period with Madhurā, for which in the face of Caldwell's arguments and Greek references there is little ground. The transfer of the capital from Koṟkai to Madura is noted by Pliny (A.D. 77), according to Mr. P. T. Srinivasa Aiyangar (*History of the Tamils*, p. 242).

It should be observed in this connection that the name Kolkhoi is probably based on the Tamil word *koḷkai* (from root *koḷ-* to purchase) which indicates the 'act of taking or purchasing' and in a secondary sense probably signifies here the 'place of purchase' or 'emporium'. There does not seem much of validity behind Dr. Caldwell's derivation of the name from the Tamil root *kol* 'to slay' and interpreting the name as signifying 'the hand or arm (*kai*) of slaughter'.

It is further noteworthy that it is one of the very few places in India found in the ancient series of maps called, from the name of their discoverer, the *Peutingar Tables*. The actual date of these *Tables* is unknown, but on examining the Asian segments of the maps, Dr. Caldwell thinks that, because the author had no acquaintance with Ptolemy he probably lived at an earlier period.[2] These Tables call the place 'Coleis Indorum' the Colehis of the Indians, to distinguish it from the better known Colehis of the Black Sea. No coins or other relics of Roman origin have come to light at Koṟkai, but considering the antiquity of the tract it is reasonable to expect such remains if the area is properly excavated. There is no doubt that as one of the classical cities of South India this place calls for a systematic exploration at an early date. I understand that in the great temple at Tinnevelly there are some Roman coins and also a few in the possession of private parties at Koṟkai. No definite conclusions can be drawn from these till they are examined properly.

Early Tamil works refer to the place under the name Koṟkai and describe it as the chief sea-port of the Pāṇḍyas. 'In the broad expanse of the sea near this harbour of Koṟkai[3] grow pearls of excellent water', says one early poem, while another poem refers 'to the valiant Pāṇḍyas guarding the large port of Koṟkai which produces pearls'. The Tamil poem *Maduraikkāñchi* describing the greatness and exploits of the early Pāṇḍya king Neḍuñjeḻiyaṉ assigned to about the beginning of the 7th century A.D. styles him Porunaṉ, *i.e.*, the lord of the

[1] *Indian Antiquary*, Vol. III, p. 111; No. 10.

[2] *Loc. cit.*, p. 18.

[3] Koṟkai is now nearly five miles inland.

Tāmraparṇī (in Tamil the river is called Taṉ-Porundam). In the hamlets of his beautiful city Koṟkai there dwelt those who drank toddy and who dived into the sea to procure rich pearls and shells.[1]

Koṟkai has been always associated in Tamil literature and epigraphs with the Pāṇḍya rulers. The *Pattuppāṭṭu*[2] applies the title *Koṟkai-kōmāṉ* to an early Pāṇḍya king, though not named. King Māṟavarman Vikrama-Pāṇḍya of *circa* A.D. 1283 is entitled *Koṟkai-kāvalaṉ*,[3] while *Koṟkai-āḷi* (*i.e.*, ruler of Koṟkai) is a title given to the Pāṇḍya king Kulaśēkhara by the author of the *Veṟṟivēṟkai*, a work of the 16th century A.D. The Vēḷvikuḍi grant[4] of the Pāṇḍya king Neḍuñjeḻiyaṉ of the 8th century A.D. refers to Koṟkai as the native place of a donee who received gifts at the hands of the early Pāṇḍya king Palyāga Mudukuḍumi-Peruvaḻudi who figures as the very first king in the Pāṇḍya genealogy and who bears the title *Adhirāja*. Peruṅguḷam, three miles from Koṟkai, is stated in early inscriptions to have been included in Tiruvaḻudi-vaḷanāḍu (*Epigraphical Report* 1932-33, pp. 64 and 67). It is possible that the neighbouring village Māṟamaṅgalam was named so after the early Pāṇḍya king Tēr-Māṟaṉ (Rājasimha I), a very powerful monarch of this dynasty or his ancestors Avanichūḻāmaṇi Māṟavarman or Asamasaman Māṟavarman. The Tiruchchendūr inscription[5] of Varaguṇa-Mahārāja of about A.D. 874 also refers to Koṟkai. In the medieval inscriptions of this tract Koṟkai is given the surname Madurōdayanallūr.

Modern local tradition points to certain spots and sites as being old. In the centre of the village is a small mound called *Vaṇṇimēḍu* where coins of patinated copper are reported to be picked up soon after rains. The neighbouring village of Akkaśālai (Akkaiśālai in inscriptions) is supposed to have been the Mint attached to the ancient Pāṇḍya capital Koṟkai. In one place is reported to be a well or deep pit full of half-worked and unworked conches. Specimens of these secured by me are illustrated in Plate XXXVIII, *c*. Besides those dug up by Caldwell, villagers report that during casual diggings similar urns of varying sizes have come to light, but these were reburied or thrown away as being of no use. The images of 'Buddha' that Caldwell refers to as being seen here are really Jaina figures. The temple at Akkaśālai (Plate XXXVIII, *b*) which was a suburb of ancient Koṟkai is built completely of stone from the basement to the *stūpi* and in this respect resembles the early temple at Tiruvaliśvaram.

Considering the great antiquity attaching to Koṟkai and its suburbs, *i.e.*, the modern villages of Akkaśālai and Māṟamaṅgalam, a systematic and thorough exploration of the area must embrace these three villages and their vicinity, and may have to cover the entire hinterland between these and the present sea-coast. It may also have to extend up to Old Kāyal and Kāyalpaṭṇam which are supposed to have become sea-ports after Koṟkai ceased to be one. The land

[1] *Ind. Ant.*, Vol. XL, p. 227.

[2] *Śirupāṇāṟṟuppaḍai*, line 62.

[3] No. 365 of 1913 of the Madras Epigraphical collection. Winslow, in his *Tamil-English Dictionary* gives *Koṟkaiyāḷi* and *Koṟkaivēndan*, as referring to a race of Pāṇḍya kings.

[4] *Ep. Ind.*, Vol. XVII, p. 293.

[5] *Ibid.*, Vol. XXI, p. 107 f.

extending over two or three miles north of modern Kāyal and a mile and half inland as far as Māṟamaṅgalam, *i.e.*, the whole plain, is covered with broken tiles and remnants of pottery.[1] Caldwell thinks that Marco Polo must have visited Kāyal and that the port of Ma'bar mentioned by Muhammadan historians must be identical with it. Old Kāyal must be still more promising for antiquarian exploration. Incidentally we may note an interesting and quite unique sculpture of Hanumān not noticed elsewhere, showing him carrying a shoulder-yoke sling (Tamil *kāvaḍi*) found at Koṟkai which is shown in Plate XXXVIII, *a*.

Writing on the Prehistoric Antiquities in Tinnevelly, Mr. Rea says[2] that the prehistoric remains at Koṟkai are not to be compared to those at Ādichchanallūr. But the Koṟkai area has not so far undergone any detailed survey or excavation, and so we have no valid ground to accept Mr. Rea's conclusion as final. If in the tombs of Ādichchanallūr we have discovered a large variety of pottery and other prehistoric relics, Koṟkai may be expected to yield vast and varied traces of a pre-Christian and post-Christian capital of a long-famous dynasty and a far-famed sea-port.

SOME PREHISTORIC SITES IN THE RAMNAD AND TINNEVELLY DISTRICTS.

By Rao Bahadur C. R. Krishnamacharlu.

In the *Archæological Survey Report* for the year 1902-03 (p. 111), Mr. Rea has published a note on the Prehistoric Antiquities in Tinnevelly. Subsequent to this, little serious attention seems to have been given to the subject though some ancient urns and other objects found in the district (Plate XXVIII, *a*) and in the neighbouring District of Ramnad (Plate XXVIII, *e*) have been photographed. Following Dr. Caldwell, Mr. Rea says that prehistoric burial-sites are specially numerous in the gravelly mounds or low hills of the Tinnevelly district adjoining the valley of the Tāmraparṇī. Devoting particular attention to the sites in the lower reaches of the river only he listed nearly 38 places where, on conducting an extensive series of explorations, he was convinced that these were ancient sites. As can be seen from his list, these places are located in the lower Tāmraparṇī valley in the eastern parts of the district, mostly between Palamcottah and the sea. As he did not explore the upper reaches of the river nearer the Travancore border, it is necessary to draw attention to the sites in this part of the country.

At Tenkasi, the headquarters of the *taluk* of that name, situated on the banks of the Chittār[3] river, which is a northern tributary of the Tāmraparṇī, is a gravelly hillock called Vāliyampottai about three-quarters of a mile to the west of the village. In the lower portions of the hillock are a number of small heaps or mounds overgrown with grass. At the spot near the road is a small area now in the occupation of a *sādhu* named Nāganāthasvāmi who has cleared some ground

[1] Caldwell, *History of Tinnevelly*, p. 41.

[2] *A. S. R.*, for 1902-3, p. 113.

[3] This is called Chitrā in Sanskrit. Caldwell thinks that this is identical with 'Sylaur' mentioned by Lassen, with *l* written in mistake for *t*. (*History of Tinnevelly*, p. 11).

and made his habitation therein with a small garden attached to it. In this area, some years back the *sādhu* dug up a few old pots with pointed bottom and narrow mouth, together with other small vessels (Plate XXVII, *a*) which are of a coarser composition but uniformly red in colour. Their thickness varies from ½″ to 1″ and the lip is usually 1″ to 1½″ wide. It is reported locally that some of the vessels contained pieces of bones and others only earth and gravel. Buried in the upper portions of this hill-slope some urns are still found intact and from my observation I strongly believe that the entire hillock is littered with such burials. Stone quarrying which I observed in the vicinity of this site in February 1936 has since been prohibited by the Collector at my request.

During my second visit in October 1936, I dug out a big urn of the thick and red variety measuring about 3 feet in height and 8 feet in circumference at the bulge. (Plate XXVII, *b*). Its lid was found broken into pieces and the urn was found to be filled with loose earth, except that in the central portion a few bone fragments were deposited. The bones were examined at the Indian Museum, Calcutta, where two of them have been identified as (1) part of the lower end of the shaft of a human femur and (2) two fragments of the shaft of a human radius.

This big urn is very much like two others now preserved in the State Museum at Trivandrum apparently from a site in the Travancore State. Similar urns unearthed at Ādichchanallūr are illustrated in Mr. Rea's *Catalogue of Prehistoric Antiquities at Adichchanallur and Perumbair*, (Plate IX). The row of finger-tip depressions seen below the rim of the present urn is also noticeable in a pot-sherd in Rea's list (*loc. cit.* Plate VII—fig. 3). A smaller urn of the same shape, colour and texture unearthed on this occasion contained only loose earth and small stones but no traces of bones (Plate XXVII, *e*). Unlike the bigger urn which has no ornamentation other than the small round depressions just below the rim, this small urn has a double thumb-nail creeper ornamentation carried all round, a few inches below the top rim.

Among the smaller vessels the one with narrow bottom (Plate XXVII, *d*) with a rather worn-out black paint or slip is slightly reminiscent of a similar vessel found at Mohenjo-Daro and illustrated by Dr. Mackay in his book on the *Indus Civilisation* (Plate P, fig. 12). It shows traces of a black slip inside as well as outside. As the mouth of the vessel is only 1¼″ in diameter some kind of brush seems to have been used for applying the slip on the inside.

With this vessel is associated a small narrow-bottomed cup-like vessel (Plate XXVII, *d*) which might have served both as a lid and as a service-cup. This bears traces of a black slip inside, partly worn out now, and all along the rim (about ½″ high) on the outside. When used as a cover the main vessel and the cup together would appear as shown in Plate XXVII, *c*.

Two earthen bowls were also brought to light here. Like the vessel described above these are thin and bear a black slip both on the interior as well as the exterior. The bigger bowl preserves the black slip on the exterior much better than on the interior, while the smaller has lost most of the outside slip though here, for a width of about ¾″ near the mouth and on the inside, it is

preserved tolerably well. The bottoms of both the bowls are slightly rounded. The edge of the mouth in both the cases is well smoothed and rounded, but the longer one has a concave rim. The bigger bowl measures 4½″ in height while its diameters, respectively at the bulge and the mouth, are 6″ and 4¼″. The smaller bowl measures about 3½″ in height and 4″ and 2¾″ in diameter respectively at the bulge and the mouth.

Another bowl is of ovoid shape with round bottom resembling the bowl illustrated by Rea (*loc. cit.* Plate VI—fig. 4). Part of it is broken. Its height is about 5″ and the diameters at the mouth and the bulge are respectively about 5″ and 6″. It has a fine black slip which is much worn out on the exterior and has exposed the red on which it was laid. A thick line or groove goes round the exterior of the bowl at about 1½″ below the mouth.

To this collection belongs another tiny vessel of the same material as the above vessels which too has a round bottom, a prominent neck and a black slip over red ground. It is 2″ high, 2½″ in diameter at the bulge and 1″ in diameter at the mouth. A similar vessel from Ādichchanallūr is figured in Rea's Catalogue (Plate VII—fig. 27).

A few potsherds found here are of the same coarse thick red variety as those found at Ādichchanallūr and illustrated by Mr. Rea.

It must be remarked that none of the urns or the vessels described above bears any marks of a pictographic or other nature to give a clue to their affinities. With Caldwell we have to suppose that these are the relics of a race who inhabited such sites at a remote time but have now died out beyond recognition. Could it be supposed that they might have belonged to the ancestors of the hill-tribes called Paḷiyans who now inhabit the hills overlooking the Sankaranainarkoyil *taluk* and the hills bounding the Srivilliputtur *taluk* of the Ramnad district and the Varshanad valley of the Madura district[1] ? Their present degenerate condition might be due to their having been vanquished and driven up into the hills by later conquerors. This possibility is suggested by the fact that they are a short race, which fact may account for the practicability of the ancient urn-burials met with in the prehistoric sites of the Madura and Tinnevelly districts. It is not improbable that like the Veddas or Vaeddas of Ceylon, who are now only a half-civilised hill tribe of the island but whom Mr. Parker, the author of *Ancient Ceylon*, believes to have formerly been a civilised and cultured race exercising mastery over the island,[2] the Paḷiyans are a fallen and dwindling race with an immemorial past not known to history. Dr. Thurston, it may be mentioned, thinks that the modern system of interring a selection of bones from the cremated body seems to have been followed at Ādichchanallūr, though there is no evidence of cremation at that place[3]. He, however, affirms that all the finds point to the fact that only certain bones were buried[4].

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[1] *Gazetteer of the Tinnevelly district*, (1917), p. 6.

[2] *Ancient Ceylon*, pp. 103 ff.

[3] Rea, *Catalogue*, p. 5.

[4] Mr. Vats's discoveries at Harappa conclusively prove that the pot-burials of Stratum I in the cemetery H there were the result of post-exposure burials. It appears that the same practice was followed at Ādichchanallūr and other places in the south. (Editor).

In this connection I wish to draw attention to the name of the hillock Vāliyampottai. 'The Agastyamalai is known to the natives as the Ēka Pothigai. This is a perfect cone in shape and the most striking peak in the whole range of the hills here..... Next to it on the south, but at a respectful distance, stands the great five-peaked hill called Ainthalai Pothigai'[1]. The hillock at Ēruvāḍi, in the Nanguneri *taluk* of this district is called *Iraṭṭaippottai*. In the Tinnevelly district '*pottai*' indicates 'a hillock' bearing the popular form of poṟṟai. This word in association with *pudais* (holes and caves), as the habitations of the above-mentioned hill-tribe Paḷiyans are called, points to a possible association of the remains with this tribe. The name Vāli suggests a traditional association of the spot with the monkey-chief of that name figuring in the *Rāmāyaṇa*. Though Vāli himself might not be necessarily connected with this or other pre-historic sites of these parts the name points to the direction in which we have to look for the origins of these burials. It may thus be not improbable that these sites were originally occupied by an aboriginal race, akin to or cognate with the Vānaras of the *Rāmāyaṇa* and whose modern representatives may be the hill-tribe of Paḷiyans with short bodies and square faces. Attention may be drawn here to the village and ancient temple called Tiruvālīśvaram near Ambāsamudram in the Tinnevelly district. The temple is of a very early type with exquisite sculptures, built entirely of stone from the foundations to the pinnacle and bearing on its walls inscriptions of early Chōḷa kings. It is my strong suspicion that the name of the deity is in tradition connected with Vāli, the monkey-chief. In the light of these names I have been led to suppose the existence of pre-historic settlements and remains of a race akin to the Puranic Vānaras in all places associated with the name of Vāli. My recent inspection and preliminary diggings at the spot have brought to light some pre-historic burial urns of the sort found at Vāliyampottai and these will be dealt with in a separate note[2].

I must not omit to draw attention here to a very significant passage in the log of Alexander the Great's admiral Nearchos, quoted by Colonel Sir Thomas Holdich, K.C.M.G., K.C.I.E., C.B., in his admirable work "*The Gates of India*" (p. 157) and extracted by Bruce Foote in his *Notes on Pre-historic Antiquities* (p. 13). The passage runs thus:—"It was at the mouth of the Hingol that a skirmish took place with the natives which is so vividly described by Nearchos * * * * *. There is a very close description given of certain barbarians clothed in skins of fish or animals, covered with very long hair and using their nails as we use fish-knives, armed with wooden pikes hardened in the fire and fighting more like *monkeys* (italics are mine) than men. Here we have the real aboriginal inhabitants of India. Not so very many years ago, in the woods

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[1] *Gazetteer of the Tinnevelly district*, p. 4.

[2] It is not improbable that the following places associated with the names of Vāli and Sugrīva may yield pre-historic remains:—(1) Vālikaṇḍapuram in the Trichinopoly district, (2) Vāli-Sugrīvula-meṭṭa near Kāmavarapukōṭa in the West Godavari district and (3) Sarkār-Periyapāḷayam, with the temple of Sugrīvēśvara, in the Coimbatore district.

of Western India, a specimen almost literally answering to the description of Nearchos was caught while we were in the process of surveying those jungles and he furnished a useful contribution to ethnographical science at the time. Probably these barbarians of Nearchos were incomparably older even than the Turanian races which we can recognize and which succeeded them and which like them, have been gradually driven south into the fastnesses of Central and Southern India".

I have already remarked that pre-historic settlements were not confined merely to the lower regions of the Tāmraparṇī valley between Palamcottah and the sea but also extended to the upper reaches of the river and its tributaries. Kuttālam (Courtallam) about three miles to the south-west of Tenkāśi has also yielded examples of some cinerary urns and ancient pottery[1] (Plate XXVIII, *b*). In the Travancore State Museum at Trivandrum are exhibited three burial urns which are supposed to have been found in the State. But two of these at least with wide mouths must be those reported by Mr. Bruce Foote to have been found at Kuttālam[2]. These are of a slightly different shape from the one discovered at Tenkāśi. One of the urns preserved in the Museum is very interesting on account of the relief figures of three serpents depicted on it. The significance of the serpent designs is not known and has to be investigated. Could it be that the burial belonged to the race of the Nāgas or Nāga-worshippers?

The existence of a big cave called Paradēśipudai (not Paradēśipoḍai as given in the *Epigraphical Report* for 1912, p. 50 and plate opposite) near Kuttālam suggests this to be an ancient abode of the cave-man and subsequently of religious mendicants or hermits (*paradēśis*). This is also testified to by the presence of small rock-hewn steps leading to it, as in the case of the inaccessible caverns of the Madura and the Tinnevelly districts. The small undeciphered inscription carved in it in Brāhmī-like characters seems to refer to 'Eliy' or 'Eliya' which perhaps is meant for the chiefs or members of the Mūshikavaṁśa with whom Elimalai (Mt. D'Eli of the Portuguese writers) on the West coast has been connected (*Epigraphical Report*, 1929-30, p. 86).

While camping at Tenkāśi I got information of burial urns being met with in a reserve forest at Puliyūr locally called also Kīḻ-Puliyūr. Burial urns of the red coarse variety found in the hillock at Tenkāśi have also been noticed here. Though I had not seen them personally for want of time, the local revenue authorities who had a few dug out had them re-buried at my suggestion so as to facilitate a future examination in detail.

At Kīḻ-Āmbūr in the Ambasamudram *taluk*, about 15 miles to the south-east of Tenkāśi and seven miles to the north-west of Ambāsamudram, I was informed that nearly 20 to 25 burial urns (of the type known as *Madamadattāṇṭāḷi*) containing bones had been unearthed and re-buried about 15 years ago by a former Revenue Divisional Officer, Mr. Muttuswami Ayyar, at a site near the

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[1] Negative Nos. A 8 to A 11 of the Office of the Superintendent, Archæological Survey, Southern Circle.

[2] *Indian Pre-historic and Proto-historic Antiquities* p. 47. Though Foote mentions four urns exhibited in the Museum, the Curator of the Museum has sent me photographs of only three.

village cattle-ground. It is not improbable that the lower levels of the hillocks adjoining the village may reveal similar remains and ancient settlements.

On the strength of the discovery of pre-historic sepulchral urns at places like Kīḻ-Puliyūr, Kīḻ-Āmbūr, Kīḻ-Nattam (Plate XXVIII, *a*) and Kīḻpāṭṭam in the Tinnevelly district, I am inclined to think that such pre-historic settlements with associated remains may yet be looked for and discovered in villages bearing the epithet or prefix '*Kīḻ*' (in Tamil meaning 'lower' or 'eastern'). We may also be certain of tracing such sites in villages bearing such names, in other districts also.

In confirmation of this theory, I may quote here examples from Sewell's *List of Antiquarian Remains*, Vol. I:—

SALEM DISTRICT.

(1) Kīṟāṇūr (or Kīḻāṇūr), (p. 198). A quarter of a mile to the south of the village is a group of ten dolmens and close by another group of forty-seven.

(2) Kīḻapāṟai, (p. 198). Three dolmens.

(3) Kīḻaipaṭṭi (or Kīṟapaṭṭi), (p. 198). There are ten dolmens a mile to the south of the village.

(4) Kīḻśeṅgalpāḍi, (p. 198). Half a mile south of the village are to be seen about twenty dolmens.

MALABAR DISTRICT.

(5) Kīḻakkambaram, (p. 252) a group of twenty-four dolmens and stone circles and ninety-six menhirs.

(6) Kīḻariyūr, (p. 245). Two rock-cut caves.

MADURA DISTIRCT.

(7) Kīḻāṅgaṭṭūr, (p. 296). Quarter of a mile from the village are to be found sepulchral urns of terra cotta.

To this list may be added—

(8) Kilpauk (Tamil Kīḻpāk), Madras. Earthenware sarcophagus and urns were recently discovered here[1].

On the basis of these instances we may almost postulate the existence of similar pre-historic remains in other villages also whose names have this prefix:—

(1) Kīḻakkarai, Madura district,

(2) Kīḻamangalam, Salem district,

(3) Kīḻpaṭṭu, North Arcot district,

(4) Kīḻambil, Tanjore district,

(5) Kīḻappaḻuvūr, Trichinopoly district,

(6) Kīḻara, Malabar district,

(7) Kīḻśarukkai, Tanjore district,

[1] See *A. S. R.*, 1934-35, Pl. XX.

(8) Kīḻvaḷaivu, Madura district,
(9) Kīḻāvarai, Madura district, and
(10) Kīḻkaḍaiyam, Tinnevelly district.

This list of such villages is not exhaustive and many more may be added to it.

Śivaśailam, 10 miles from Ambāsamudram and about 12 miles south-south-east of Tenkāśi, is another pre-historic site. Old urns were dug up in a field about 3 furlongs to the east of the village some years ago. But ignorant people not knowing their nature or importance destroyed them when the field was reclaimed for cultivation. In the palmyra tope just on the banks of the stream called Ghaṭanānadī flowing close by the village and on the side opposite to the local Śiva temple I observed an urn imbedded in the soil, from out of which a palmyra tree has grown up. Similar urns are reported to have been unearthed in another field of the village, Paṭṭa No. 7, belonging to one Mr. Ramachandra Ayyar. It is not unlikely that similar sepulchral urns might be traced in the bed of the river itself. The village is located at the foot of the Ânaimalai hills.

Subsequent to Rea's notice of the pre-historic sites in the lower regions of the Tāmraparṇī in the *Archæological Survey Report* for 1902-03, Mr. L. A. Cammiade, ex-Deputy Collector in the Madras Civil Service examined a number of such sites in the Sankaranainarkoyil *taluk*, which comprises the north-western part of the district. He brings to notice the existence of burial urns at Śivagiri, Paṇaiyūr, Vāsudēvanallūr, Karuvanallūr, Kāriśāttāṉ and Ariyūr in this *taluk*. Ancient beads of ornamental stone and old coins are picked up on the sites of several old and forgotten townships, many of which adjoin pre-historic cemeteries. He mentions also the existence of old sites noticed by him at Paḷankōṭṭai, Śāyāmalai, Kuruvikuḷam, Nāluvāśal-kōṭṭai, Śaṅkaranainārkōyil, Peruṅkōṭṭūr, Perumbattūr, Kuvaḷaikaṇṇi, Marattōṇī, Karivalamvandanallūr Kāriśāttāṉ, Panaiyūr, Ariyūr (foot of the hill) Gūḍalūr, Vāsudévanallūr, several places east of Gūḍārapēri, beyond Śivagiri, south of Śivagiri town, Tenmalai, Dévikāpaṭṇam, Vīraśikhāmaṇi and Kulaśēkharamaṅgalam. "At Kāriśāttān below the town refuse, at a depth of six or eight feet large funeral urns have occasionally been met with indicating possibly an antiquity considerably greater than that of the nameless city that grew over them "[1]. None of these places are noticed by Rea and certainly they form a valuable addition to the long list of pre-historic sites in the Tinnevelly district already noticed. A systematic exploration of the several sites in this tract should considerably widen our knowledge of the remains embedded in them and enable us to determine the age and the stage of the art and civilisation of these pre-historic settlements.

UKKIRANKOTTAI.

Sewell in his *List of Antiquities*, Vol. I, p. 311, notices a place named Ukkiraṉkōṭṭai, situated 14 miles north-north-west of Tinnevelly. A mile north of the village are, according to him, the remains of an old fort wall, on a piece of waste

[1] Cammiade, *Gazetteer of the Tinnevelly district*, p. 409 f.

land. This description naturally led me to undertake an inspection of the village and the old fort area, as at first sight it appeared to me possible that the place and the fort might have some connection with the early Pāṇḍya King Ugra-Pāṇḍya. I visited the place in March 1936 and made a detailed inspection of the temples in the village and the old fort area. The latter is a highly raised ground covering an extent of nearly 100 acres. No remnants of the fort wall mentioned by Sewell, over 50 years ago, are preserved now, but parts of the deep old moat which went round the fort are still visible.

In this area is an ancient temple which now goes by the name of Chokkanāchchi-ammaṉ, under the management of the Ūttumalai Zamindar. Into the walls of this temple are built some sculptured stone eaves and friezes of an early type. There are also found some fragments of Vaṭṭeḻuttu inscriptions let into these walls. At the entrance into the spacious compound of this temple is lying a pillar with a Vaṭṭeḻuttu inscription on it. Inside the compound are found lying about in an almost neglected condition some early and well executed images of Vishṇu (seated), the Saptamātṛis etc. These associations fully confirmed my original suspicions regarding the connection of the place with the early Pāṇḍyas. The inscriptions also bear out this supposition fully.

The Vaṭṭeḻuttu inscriptions of the temple copied under my supervision by my assistant Mr. A. S. Ramanatha Ayyar, B.A., have been examined by him thoroughly and an article has been contributed by him on these to the *Epigraphia Indica*. Most important of these is a record of the Pāṇḍya king Śaḍaiya-Māṟaṉ dated in the 13th year opposite to the 2nd year of his reign. From internal evidence available in this and allied records the king has been identified with the Pāṇḍya king Rājasiṁha III who was known as Śaḍaiya-Māṟaṉ. The primary interest of these epigraphs is that they record donations made to a temple of the Sun-god (Āditya-Bhaṭāra) of the place which was then known as Karavandapura included in the territorial sub-division of Kaḷakkuḍi-nāḍu. The temple is referred to as *Vaikartanālaya*. It is therefore interesting to know that there was a temple of the Sun in this place in the tenth century A. D.

The other and chief interest of the inscriptions is the mention of the place by the name Karavandapuram with its surname Kaḷakkuḍi or Kaḷandai. This discovery of the ancient name of the place sets at rest a long standing doubt and conjecture regarding the identity of the village Karavandapuram mentioned as the native place of Māṟaṉ-Kāri the excavator of the rock-cut shrine at Anaimalai in the Madura district dedicated to god Narasiṁha in the time of the Pāṇḍya king Māṟaṉ-Śaḍaiyaṉ[1]. The present examination has revealed to us incontrovertible evidence to give up the tentatively suggested identification of Karavandapuram *alias* Kaḷakkuḍi with Kaḷakkāḍu of the Nanguneri *taluk* and definitely assert that it was identical with Ukkiraṉkōṭṭai.

The fort associated with Ukkira *i.e.*, Ugra might owe its origin to the early Pāṇḍya king Ugra-Pāṇḍya *alias* Ugrap-Peruvaḻudi, as I believe, or alternatively

[1] *Ep. Ind.*, Vol. VIII, p. 319 and Vol. XVII p. 298.

to Ugra-Pāṇḍya, a prince whom Parāntaka Vīranārāyaṇa-Śaḍaiyaṉ (*c.* A. D. 900) fought and captured in a battle at Kharagiri, as Mr. Ramanatha Aiyar suggests. Since we know from a definite statement in the Madras Museum Plates of Neḍuñjeḻiyaṉ that he built the fort with a broad stone ditch and lofty wall, it would not be justifiable to ascribe the fort to a temporary occupant of it like the above-mentioned later Ugra-Pāṇḍya. On the other hand I believe that Karavandapuram, which must have been a local capital with a primitive sort of fort in Ugrap-Peruvaḻudi's time, was further developed into an impenetrable fort and a great stronghold by Neḍuñjeḻiyan in about A. D. 785.

That the place was a very ancient settlement is proved by the discovery of old earthen pots of the pyriform shape which have come to light in pre-historic sites like Tenkāśi, Śivaśailam etc., in this district. Such a vessel with a rounded-off bottom excavated by a villager of Ukkiraṇkōṭṭai in the old village-site has been secured by me (Plate XXVIII, *c* and *d*). Among the potsherds picked up in the fort area is one interesting piece with the ancient bead and wavy-line ornamentation (Plate XXVIII, *f*, lower central object) found in examples from other pre-historic sites noticed above. The plain-line decoration of this pot presents affinity to that of the potsherd (side of vessel) with 'reeded' fillet on bulge, found at Narsipur Sangam, Mysore, and illustrated in Foote's collection[1]. A broken fragment of an earthenware lamp (Plate XXVIII, *f*, top left) was found here and when whole the complete object must have borne close resemblance to the object found at French Rocks, Mysore, and illustrated by Foote[2]. The other two small objects figured along with this are probably necks of vessels. One of them is perhaps a lid[3]. The fort area when properly excavated and explored should certainly yield not only evidences of settlements dating from the early Pāṇḍya times but perhaps even earlier ones. At the site where the urn was dug up by the villager, it is reported there are numbers of such still lying underground. The site deserves an early and thorough examination.

EXPLORATION IN BURMA.

By M. Chas. Duroiselle.

From the grant of Rs. 700, Rs. 299 were spent at Pagan, Rs. 328 at Hmawza (Old Prome) and Rs. 69 at Waw, Pegu district.

Pagan.—The work of the clearance of debris and sand from inside the remains of an old monastery south of the Sōmingyi Pagoda at Myinpagan was completed, and the exposed brickwork was repaired. The remains of the monastery consist of eleven small cells arranged along the inner sides of a rectangular area measuring 83′ east to west and 79′ north to south, with a two-storeyed chapel

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[1] *Loc. cit.* Pl. 30, figs. 234-80.

[2] *Ibid.* Pl. 39, figs. 252-88; *cf.* also Rea, *Cat. Pre. Ant.* Adichchanallur etc., Pl. VI, fig. 38.

[3] *Cf.* Foote, *loc. cit.* Pl. 54, figs. 3308 and 234-107.

in the middle of the western row of cells, projecting 11 feet, and a lobby in the middle of the eastern row, projecting 16 feet (Plate XXIX). What was supposed to be a square brick platform in the centre of the rectangular area ultimately proved to be one of sand retained by a brick wall. The sand rose to a height of $1\frac{1}{2}'$ above the surrounding stone pavement; and the slender retaining wall, ($7\frac{1}{2}''$ thick) built of bricks in mud mortar is clearly not coeval with the building. Sand was also found to cover the stone-paved floor of the cells and other parts of the monastery; and during the present year it was found to cover also the lower floor of the chapel and the floor of the vaulted corridor running round its three sides. This layer of sand, covering practically the whole floor area of the building was manifestly brought in by later occupants. These late inmates probably had also narrowed the doorway of the lower chamber of the chapel by building up additional brickwork (Plate IX, *a* and *b*), which was removed after the flat arch over the doorway of the lower chamber of the chapel, which had cracked badly, had been re-built with Burmese brick in lime mortar mixed with cement; and the walls flanking the doorway were repaired with Burmese brick in mud mortar, while the equilateral arch over the opening of the upper chamber of the chapel was repaired with Burmese brick in lime mortar mixed with cement.

The upper and lower chambers of the chapel are identical in all respects except the dimensions of their doorways on the east face. Each of them measures internally $7' \times 9'\ 6''$ with a central height of $11'$ from the floor to the curved ceiling and has a niche in each of the side walls. The doorway of the lower chamber has a flat arch and is $4'\ 9''$ wide and $8'\ 3''$ high, while that of the upper chamber has an equilateral arch and is $3'$ in width and $5'\ 9''$ in height to the crown of the arch. No trace of a Buddha image was found in the upper chamber, but in the lower one the portion below the waist of a seated Buddha in brick and plaster was found and the same together with the throne on which it stands has been preserved. The throne had been dug into by treasure-hunters. The vaulted corridor running round the three-sides—north, west and south—of the lower chamber is $3'\ 6''$ wide with a central height of 7 feet. Its roof as well as that of the chapel have been made water-tight by grouting the cracks and relaying the upper two or three courses of brick in lime mortar mixed with cement. Steps have been taken to bring this monastery on to the list of monuments maintained by this Department.

Excavations were conducted at Pagan at seven sites. The first was a rectangular brick mound measuring $41'$ east to west and $25'$ north to south and $5'$ in height, situated at a distance of 100 yards to the south of the Somingyi Monastery at Myinpagan mentioned above. A rectangular brick enclosure measuring $4'$ in height and $32'\ 5''$ east to west and $18'\ 5''$ north to south was uncovered. A brick partition running parallel to the west wall of the enclosure at a distance of 7 feet from it, divided the enclosure into two compartments, with a narrow doorway at its southern end. The eastern room had four doorways, each $3'\ 5''$ wide, two $8'$ apart on the east face and one on each of the sides. The remains unearthed were probably those of a monastery.

The second site was a small ruined temple in Ko Po Saw's field about half a mile to the south-west of Koktheinnayon at Myinpagan. From the debris of this the following antiquities were found :—

(1) A small bronze image of Dīpaṅkara Buddha (height 5½ feet) standing on a lotus with the right hand in the *abhaya mudrā*, the left in the *varadamudrā*. It is a good piece of work of the mediaeval period (Plate XXX, *a*).

(2) A few terracotta votive tablets of two different types, all fragmentary except one. Similar specimens had been found in previous years.

(3) A copper finger-ring.

The temple was a rectangular building facing north measuring 30′×18′ with walls 4′ 7″ thick and 4′ 10″ high. Against the inner face of the south wall was found a pedestal in brick and plaster measuring 5′ 7″×3′ 2″×3′ with the lower limbs of a seated Buddha in the same material. The pedestal had been dug into and looted by treasure-hunters ; the relic chamber in it was consequently found empty. The articles recovered had probably formed part of the contents of this chamber and been thrown aside as useless by the despoilers.

The third site was a circular mound 34 feet in diameter at the base with a central height of 6′ situated in a field cultivated by Maung Chan Aye to the west of Koktheinnayon at Myinpagan. The reason for selecting the site was the proximity of the stone inscription of historical importance dated 1247 A.D. noticed elsewhere in this Report. No other loose antiquities belonging to that period were, however, discovered and it turned out to be an enclosure 29′ square, paved with bricks measuring 11″×8″×1½″. The walls are 1′ 6″ thick and 2′ 6″ high, and have three doorways, each 3′ wide, in the middle of the north, east and south walls. The building was no doubt a monastery and was either the one named Thin Lyin Kyaung or another unnamed, which was founded by the parents of Ngayanthin, both of which are referred to in the inscription.

The fourth site was a circular mound of bricks measuring 50 feet in diameter at the base with a height of 8′ in the centre, situated at a distance of 2 furlongs to the north-west of Koktheinnayon at Myinpagan. A shaft, 8 feet square was sunk from the top. At a depth of about 1′ there the following antiquities were found in the debris :—

(1) Stone image of Gaṇeśa. (Ht. 4¼″).

(2) Stone figure (2′ 6″ high) seated in the 'adamantine pose' with both hands brought together against the chest, palms inwards. He wears a belt round his waist and the usual ornaments round his neck ; his hair is gathered in a low knot on the top of the head. This is probably a representation of the founder.

(3) Two pot-bellied seated figures of *Arhats* in whitish soft stone ; one is 1′ 2″ and the other 4¾″ in height.

(4) Stone image of Buddha seated in the *bhūmisparśā mudrā* on a lotus throne with a back-slab. (Height 5″).

(5) Stone image of Buddha in the earth-touching attitude. Workmanship crude. Height 4″.

(6) Terracotta votive tablet similar to many found in previous years.

(7) Copper finger-ring.

Lower down in the shaft was uncovered the lower part of a seated Buddha installed on a brick pedestal (8′×3′ 6″×3′ 6″) which was placed against the south wall of a rectangular temple measuring internally 17′ 9″ north to south and 14′ 9″ east to west with a porch 8′ 7″ wide on the north or entrance side.

The fifth site was the remains of a small temple situated at a distance of about 300 feet to the west of the Kyazin Pagoda at Myinpagan. A villager had picked up from the debris inside the temple an interesting stone sculpture measuring 9″ in height and 6″ in breadth, and brought it to me (Plate XXX, *b*). It depicts Gautama Buddha seated on a lotus in the earth-touching attitude flanked by a Bodhisattva, who is also seated on a lotus in the Rājalīlā pose. A few fragments of terracotta votive tablets, a small headless stone image of Buddha and traces of a Buddha image in brick and its pedestal were discovered, but as in the case of the other ruined temples, the treasure-hunters had forestalled this Department and removed every thing of value from the relic chamber of the pedestal.

The remaining two sites were situated close to the south of the Pawdawmu Pagoda at Myinpagan. One was a monastery and the other a temple. At the latter two terracotta votive tablets were discovered in the debris, but they were duplicates of numerous tablets found in the past. The monastery yielded nothing.

While I was at Pagan conducting excavations in December last, the Public Works Department Overseer in charge of the monuments there sent me three images of the Buddha and a double lotus pedestal all in bronze found in the following circumstances:—To the west of the Shwesandaw Pagoda and quite close to it within the same enclosure, is a small roofless temple measuring about 20 feet square, which has been in a very ruinous state for years. It originally enshrined an image of Buddha with a *tagè* (back-slab of Buddha's throne). The Buddha is missing. It was probably built of brick and plaster and was smashed by the roof crumbling down. The Tagè also constructed of the same material against the east wall fills the whole width of the room, and is still intact. In the south wall of the temple which has canted outwards, a long and wide vertical crack has appeared, revealing at a height of about 10 feet from the floor a relic chamber which measured 1′ 6″ square and 2′ in height and contained the images just mentioned. These may be assigned to the XIth or beginning of the XIIth century. One represents Dīpaṅkara Buddha standing on a circular, plain pedestal with the right hand in the *abhaya mudrā* and the left holding the hem of his robe. Height 2′ ½″. (Plate XXX, *c*). Another is a seated image of Buddha in the *bhūmisparśa mudrā*. The *ushṇīsha* is surmounted by a flame. The throne is missing. Height 1′ 5″. (Plate XXX, *d*). The third image similar to the second is Buddha seated in the same posture and the *ushṇīsha* is also surmounted by a flame. The throne of this image also is missing. Height 1′ 2″. (Plate XXX, *e*). The pedestal belonged to a seated Buddha image and is of no particular interest. It is somewhat triangular in shape and measures 11″ in length and 8½″ in height.

At Hmawza (Old Prome), the excavated sites worth preserving were found, during my visit to the locality in January 1937, to have been attended to and kept clear of jungle by the durwan looking after the ancient monuments and antiquities there, and therefore no expenditure was incurred under the head : " Preservation of excavated sites ". The sum of Rs. 328 mentioned above was wholly spent on excavations.

The operations were restricted to twelve sites consisting of brick mounds, five within and seven without the old city walls of Srikshetra. It may be mentioned at the outset that the results were extremely disappointing, inasmuch as no fresh information was obtained regarding the ancient history and art of this very old locality. Of the five mounds examined within the city walls, one measuring 33′ north to south and 27′ east to west with a height of 3′ above the surrounding ground level is situated in U Aung Po's garden west of the Palace site. The building that had stood here was in complete ruins and contained a brick pedestal in the relic chamber of which was found a small bronze image of the Buddha in the *bhūmisparśa mudrā* seated on a lotus throne. The image is 4″ in height including the lotus-seat. It is evidently the work of some local artist as distinct from specimens of Indian craft formerly found in the locality.

Another mound within the old city walls situated close to the north-west of the Payataung Pagoda yielded two terracotta votive tablets and a small clay seal similar to those recovered previously. The structural remains exposed here consisted of a few fragmentary disconnected walls.

The third mound was situated at a distance of 90 feet to the west of the Subokkon Pawdawmu. It disclosed the remains of a brick temple measuring 21′ square of which the walls had survived to a height of 4′ to 6′ on each side. Against its west wall facing the entrance was a pedestal of the type common in Burma. It had, of course, been dug into and all its contents removed by treasure-hunters. The other two mounds, one situated in U Po Kyaw's garden and the other in Maung Tha Saung's garden did not yield anything.

Of the seven mounds without the old city walls, one was situated at Theindaung about a mile due west of the Bawbawgyi Pagoda, two near the Payingan Tank south of the Tharrawaddy Gate and four near the Pyogingyi Tank. The mound at Theindàung was found to have been a burial ground, for in it was discovered a rectangular brick platform measuring 15′×20′ retained by walls 3′ high whereon were found only broken earthenware urns and pieces of human bones. Of the two mounds near the Payingan Tank, one marked the site of a stūpa around whose square base were found earthenware urns containing human bones, for in Old Prome, urns containing the ashes of eminent monks or laymen were sometimes placed at the base of stūpas. The other completely in ruin and nothing but broken bricks were found there. Of the four mounds near the Pyogingyi Tank, the one to the south was a circular stūpa built over the earthenware funeral urn of some personage; and of the other three situated to the north-west of the tank, one was a burial mound, while the other two revealed nothing of antiquarian interest.

As proposed in my last report, I visited Kyontu near Waw, Pegu District, during the last cold season, and examined the site where the terracotta plaque noticed in that report was discovered. It is a small hamlet situated at a distance of about a mile to the east-north-east of Waw, a railway station on the Pegu-Martaban Branch of the Burma Railways, and consists of about a dozen huts, a monastery, an old tank and two small stūpas known as Kyontu Paya standing on a common platform. The stūpas are slender conical pagodas erected recently on two old brick mounds situated east and west close to each other, the eastern and bigger stūpa entirely encases the eastern mound, while the other crowns the western mound (Plate XXXI, *a*).

A local tradition ascribes the foundation of the original stūpas to a son and a daughter respectively of two wealthy families who with their followers migrated from Martaban which at the end of the 13th or beginning of the 14th century A.D. was in a state of political upheaval, and settled down at Kyontu forming a colony of their own. The young couple met each other, fell in love and contracted a marriage, in commemoration of which each built a pagoda at the site.

The terracotta plaques discovered at the site and noticed lower down are certainly the work of Indian artists who were no doubt natives of Eastern Bengal[1], the features of the figures and their coiffure being Indian.

The old tank known as Mya-Sein-Kan from which the terracotta plaque noticed in my last report was recovered, lies to the south-east of the two stūpas. It measures about 100 feet square. On its east inner slope were found two figures of lions, each carved out of a single block of laterite, but their features have been obliterated by long exposure. Since no traces were found of the stairs such as usually descend into these monastery tanks, and at the top of which ornamental figures are sometimes found, the probability is that the lions as well as the plaque found in the bed of the tank belonged to the original Kyontu stūpas of which the common platform measures about 240 feet square and 5 feet in height above the surrounding level. Traces of retaining walls of the platform were found here and there on the four sides, and from the rubbish consisting of broken bricks and earth lying along the south were recovered some terracotta plaques which are now deposited in the monastery close to the east of the stūpas. The plaques which are of baked clay are mostly in fragments and similar in workmanship to the one noticed in my last report. The entire ones are each 4″ thick and are either square or rectangular; the square ones measuring 1′ 6″ and the rectangular ones varying from 1′ 4″×1′ 6″ to 1′ 8″×1′ 9″. With the kind permission of the venerable abbot of the monastery, photographs were taken of a representative group of them, and are reproduced in (Plate XXXI, *b* and *c*) and (Plate XXXII, *a* and *c*). Each plaque has, in the centre, a circular sunken panel enclosed by a beaded band and at each corner a floral design and a half seal impression. Some of the plaques are inscribed on the upper rim, and one only on both the upper and left rims, with one, two or three old Indian characters of the Telugu-Canara alphabet, closely resembling the Kadamba type. Although all

[1] Such is also the opinion of Rao Bahadur K. N. Dikshit, Director General of Archæology in India.

have not yet been deciphered, they evidently represent mason's marks; similar marks having been found in Old Prome and in Pagan (*vide* Provincial Report for the year ending 31st March 1924, paragraph 31, Plate III and Archæological Survey Report, 1930-34, Part I, page 191). Within the sunken panels are depicted various scenes such as battles, hunting scenes, bull fights, boxing, etc.

In Plate XXXI, *b*, we have a village bull fight with five onlookers of whom two are musicians and three dancers; of the former, the one on the left plays a drum, and the other, above him and half hidden by the central figure, plays some sort of flute or horn; the central figure and the two on its left are dancing. Each wears a necklace of beads, armlets, and wristlets and the usual Indian dress of the period. This plaque is now in the Archæological office, Mandalay.

The four corners and a portion of the circular band of the plaque in Plate XXXI, *c*, are broken off. Near the lower rim is a lion attacking a man and regardant on two other men restraining it from behind by means of a chain tied round its neck. Above them is another lion rampant, which is being pulled back by two other men by a chain which passes over the upper figure's right arm; the animal has its jaws open and is in the act of devouring a man.

The plaque shown in Plate XXXII, *a*, has its lower left corner broken off, and what remains is also damaged. It depicts a fight on horseback. On the left are seen two horses facing right, one above the other, each carrying a rider. The upper part of the body of the man on the lower horse has practically disappeared; he appears to have been holding some sort of weapon in the act of smiting the enemy in front of him. On the right are three horses with their riders, one above the other. Of the uppermost horse only the head, turned to the right, is seen. Its rider holds the reins in his left hand while the right is raised backwards in the act of catching the reins of the horse behind, of whose rider only the right leg can be seen, the upper part of the body having been smashed. The middle horse is at a gallop to the left. Its rider holds the reins in his left hand and in his right a weapon which can not be identified; of the lowermost horse, which is apparently lying, only the tail and the hind portion of its back and left leg are left; the other portions have broken off. Its rider from what can be made of him—seems to have been thrown off his mount. All the animals are fully caparisoned. The plaque bears a mason's mark on its upper rim.

The plaque shown in Plate XXXII, *b*, depicts a fight on fully caparisoned elephants. The figures are very much blurred. On the left are two elephants facing right one above the other, each carrying two men. Of the riders on the lower elephant, the one on the back appears to be sitting with his body and face turned backwards and leg stretched out; while the other on the head appears to be seated cross-legged with both hands thrown in the act of falling back. Of the two men on the upper elephant the one on the head is probably the *mahaut* guiding the elephant; the other on the back is sitting sideways with his right knee raised up and seems to be reaching the man on the head of the lower elephant as if to prevent his fall. On the right are also two elephants facing left, one above the other, each again carrying two men. The man on the back of the

upper elephant appears to be hurling something from his right hand; the other, much faded is the *mahaut*. The man on the neck of the lower elephant is sitting and looking forward, while that on the back has his arms stretched out. This elephant is treading on a man fallen under him. This plaque bears an inscription on its upper rim.

The plaque shown in Plate XXXII, *c*, is in weathered fragments, of which the two top corners and the lower left corner are missing. In the centre are two men standing face to face ready to begin a boxing or wrestling match. On the right close to the combatants is another man of whom only the head and lower portion of the body below the waist, but not the lower legs, are seen. He is apparently a spectator. Above them are two other men; the one on the left is presumably the umpire holding up his left hand to signal the combatants to commence their contest. The other is blowing a conch shell to announce the starting of the match.

In removing the rubbish lying along the south retaining wall of the platform two more plaques were found *in situ*, 3′ apart, in a portion of the wall which is fairly well preserved (Plate XXXIII, *a*). The plaque on the right depicts four galloping horses each fully caparisoned and with a rider. The plaque on the left also depicts horses with riders. Near its lower rim is a horse standing left; before it is another horse of which only the head turned to right is visible. Immediately above them are two other horses fighting. The rider of the animal on the left is throwing out his right hand while his left holds the reins. Above them all and near the top is seen another horse of which only the head is visible. Each plaque bears a numerical symbol on the rim.

Fragments of some other plaques were also recovered from the rubbish, a representative selection of which is shown in Plate XXXII, *f*, and Plate XXXIII, *b*.

Plate XXXII, *d*, depicts a dancing scene. The man in the centre and the woman on his right are dancing; on the right another man is blowing some kind of instrument which is very much damaged. Two other women near the top rim appear to be spectators. There are mason's marks on the upper rim.

The plaque shown in Plate XXXII, *e*, is broken into two parts. It depicts a fight on horseback in a more convincing and distinct manner than the plaque described above (Plate XXXII, *a*). It bears a numerical symbol on the upper rim.

The plaque shown in Plate XXXII, *f*, is a mere fragment. It depicts the head, neck, right shoulder and arm of a human figure wearing a necklace and a typical Indian head-dress. The face is much damaged. The right arm is bent upwards and is touching the head-dress. The plaque bears no inscription.

From the debris was also recovered a fragmentary terracotta lion which appears to have been seated on its hind legs now missing (Plate XXXIII, *b*). The lower portions of the fore legs are also missing and the jaws and the nose broken off. The mane is very distinct.

The south retaining wall so far uncovered measures 240 feet; but its major portion had crumbled down with the plaques which were recovered from the

accumulated debris. At a distance of 190 feet from the south-west corner were discovered two parallel brick walls about 33′ apart running north to south and abutting on the south retaining wall of the pagoda platform. On the east side of these walls two plaques were left *in situ* (Plate XXXIII, *a*) and the loose ones were brought over and kept in the office at Mandalay. Owing to the limited time and funds available I could not complete the work of excavations at Kyontu last cold season, and propose to resume it next year.

In the paddy fields surrounding the hamlet of Kyontu are several pretty big mounds of brick worth examination. At one of them called, Let-Khokpinkon, about a furlong east of Kyontu Paya, was picked up a fragment of a terracotta plaque similar to those described above. It depicts four elephants (Plate XXXIII, *e*).

The abbot of the Kyontu monastery has two terracotta votive tablets, one measuring 4″×2″ and the other 3½″×2″, and a clay mould of the smaller tablet. Each bears an effigy of the Buddha seated cross-legged on a throne in the earth-touching attitude in a temple of the type of the Mahabodhi at Bodh-Gaya. On either side are two small stūpas placed one above the other. The tablets and the mould are said to have been recovered from the debris while removing the rubbish from the eastern mound of the original Kyontu Paya in the course of building the modern one. The tablets do not bear any inscription and their age cannot be fixed with any certainty. Tablets of such a type are plentiful in Pagan.

I visited Pakhangyi in the Pakokku District in December 1936 to see the ancient remains in its neighbourhood as well as to inspect an old monastery in Pakhannge, a distance of about three miles to the east of Pakhangyi. The existence of the latter had been brought to the notice of this Department by the Executive Engineer, Pakokku Division. This building, constructed of wood, was not considered worth preserving as we have better examples of such monasteries at Amarapura and Mandalay, which formerly on the list of monuments maintained by Government had to be struck off some years ago owing to the large expenditure involved in the preservation of wooden structures, and they always present danger of fire.

Ancient monasteries, stūpas and temples have been found at Pakhangyi and its neighbourhood. The monasteries are built of wood, and most of them are still tenanted. The stūpas and temples are in brick masonry and are copies of those at Pagan in the Myingyan District, but being very much inferior to the latter in conception, size and workmanship and in all stages of decay they are not preserved at the expense of Government.

I could stay in Pakhangyi only four days from the 11th to 14th December 1936, and the exploration of the locality was, therefore, but a cursory one. It was however, not without results. There were found eight new stone inscriptions which, being important from the epigraphical point of view, have been noticed in that section. As four of the newly found inscriptions and three others discovered previously were in imminent danger of destruction, I had them removed and placed temporarily in the Dak Bungalow in Pakhangyi pending the erection of a suitable shed.

Among the other objects found may be mentioned the following:—

(1) An old stone slab with Buddha-pada from a shrine near Kanzwe—Tawyagyaung Monastery at Thetywa about 1 mile 6 furlongs to the north-west of Pakhangyi.

(2) A stone figure of Jambupati[1] *i.e.*, Buddha in regal dress, seated cross-legged in the *bhūmisparśa mudrā* on a throne made up of three lotuses, the two upper ones resting on the lowermost which is reversed, 5′ 8″ high. It was placed on a brick pedestal in a ruined *Sima* close to the east of the Shwe-on-hmin Monastery the site of which lies at a distance of about 1 mile 4 furlongs to the north of Pakhangyi (Plate XXXIII, *c*).

(3) Stone dragon heads erected against each of the boundary pillars of the ruined *sima* mentioned in (2) above. It is the only instance I have come across of a *sima* ornamented with such figures. One of them is shown in Plate XXXIII, *d*. The dragon's crest is broken off.

In my last report mention has been made of the discovery of a bronze figure of Jambupati, two Buddha images in silver and an image stand in bronze together with four inscribed stone slabs in a ruined pagoda at Myogale in the Pegu District. I visited the site on the 8th February 1937 in order to decide whether any action should be taken under the provisions of the Ancient Monuments Preservation Act, 1904, in respect thereof. I found that the ruined pagoda marked one corner, *i.e.*, the north-east corner, of a square enclosed area. This is said to have been a fort built by Alaungpaya, King of Burma (1752-1760 A.D.) measuring 600 feet on each side. A portion of it at the west end has been eroded by the Pegu River. The pagoda is a shapeless ruin, and the objects it has yielded are probably all that it contained. There is also another mound of bricks in the same ruinous state at the south-east corner of the remains of the fort. It is not considered worth while to take any action under the provisions of the above-mentioned Act in respect of the site.

EXCAVATIONS AT SANCHI.

By Mr. M. Hamid, Superintendent of Archæology, Bhopal.

To the east of the Sanchi stūpa No. 2, between the Gigantic Begging Bowl and the old tank and partly traversed by a modern road, there was an extensive mound nearly square in form. Covered with thick scrub jungle this mound was until recently completely hidden from view. Early in February, 1936, excavation revealed the existence of a *vihāra* (Plate XIII, *d*). Trial digging in the middle of the western side of the mound yielded numerous brick-bats and a few whole bricks which measure 15″ by 9″ by 3″ and 16″ by 10″ by 3″ and correspond exactly

[1] The legend of Jambupati is well known in Siam and in the Laos, where it is the same as the Burmese one. It seems to have been introduced among the Burmese by the Mon (Talaings) as was the cult of the saint Gavampati. The legend is told in the Jambupatisutta, which is rather scarce, but there is one copy, on 38 palm leaves in the Taik-Kyaung Monastery at Kado, Lower Burma; the Burmese version is given in extenso in the *Tathagata-Uddasa-dipani*, Vol. I, p.p. 543 ff.

in size with those used in the construction of the large stūpa and other structures of the Mauryan period. Further excavation brought to light the fact that the inner faces of the walls of cells and the floor of the verandah were tiled with bricks of the same dimensions. Unfortunately the fall of the roof and upper portions of the walls had broken and damaged many of the bricks.

The western retaining wall of the *vihāra* is 109 feet long and 4½ feet thick. The southern retaining wall is 107 feet 3 inches long, the eastern wall 107 feet 6 inches long and the northern wall 107 feet 10 inches in length. The walls are constructed of hammer-dressed blocks of stone laid in clay and sometimes in clay mixed with pounded brick. These retaining walls were found inadequate to meet the strain imposed on them, a second wall was subsequently erected on the outside of it and the space between the two was filled in with stone boulders. Another reason for erecting a second wall might be to provide a level for the *vihāra* after the manner of the Mauryan architects, as the natural rock inclined in an oblique direction towards the west as well as towards the south and a few yards towards the north. The second wall was founded on living rock, and whether it was as high as the first one can not now be determined, for the upper part of it has fallen down. Deeper excavation on the western side brought to light the gate or entrance of the *vihāra* which was made in the middle of the retaining wall. It is 9 feet in width, but unfortunately, no means are left now to determine its height, In front of the entrance (towards the west) is a terrace, wide enough for a porch, and beyond it is a projecting ramp with steps now destroyed. This entrance (towards the east) led to a hall 17 feet 2 inches by 8 feet 8 inches. There is another doorway leading into another hall 16 feet 9 inches by 6 feet 4½ inches. The faces of the walls were tiled and the floor paved with bricks of the aforementioned dimensions. To the east of this hall there are two stone steps by which the quadrangle or courtyard is approached. The courtyard is 54 feet long and 53 feet 7 inches wide, and is paved with bricks of the aforementioned dimensions. It slopes towards the south-west corner where there is a fairly large drain. The verandah runs all round in front of the cells, and is 10 feet 9 inches broad, raised 1 foot 10 inches above the courtyard, and has at regular intervals square blocks of stone which served as bases for the pillars. The pillars and the roofs of the cells and verandah were probably of wood and must have burnt down at an early age as is corroborated by the fact that no vestige of them had survived except the charred remains of timber which crumbled into dust with the least touch.

On both sides of the gate there is a row of three cells.

The southern side of the mound was next exposed, and the removal of debris brought to light a range of six cells. After digging about a foot deep, 8 Western Kshatrapa silver coins, ancient copper coins of different periods, a strainer of light green jade (minus the handle) with 8 holes in the middle, an uncut sapphire and several interesting iron objects among which was an iron trident (one arm lost) were found in a cell. From the other cells were recovered a gold medallion embossed with the head of a Greek king, but with no inscription, one roughly cut squareshaped diamond with a hole in the middle, two fairly big, oval-shaped carnelian

balls or beads, several beads of agate, cat's eye and other semi-precious stones, fragments of emerald and ruby, fragments of bangles of ivory and crystal, copper and brass finger and toe rings, ankle and toe ornaments and other interesting antiquities. The most interesting find is a steatite seal bearing the name of Basali with the impressions of Buddha's feet below the name. (The seal was kindly read by Dr. N. P. Chakravarty, Government Epigraphist for India). We find this name on a pillar of Stūpa No. 2, which dates from about 200 B. C. The floor was paved and the faces of walls of the cells were tiled with bricks of the aforementioned dimensions.

The eastern side of the *vihāra* has also 6 cells and an entrance facing the western gate. In front of it (towards east) there was a porch 14′ 10″ by 12′ 2″ was approached (from the east) by one step only. This porch gave access to the gate which is raised only about 10 inches above the pavement of the porch. This gate leads (towards the west) to a hall which has an inner measurment of 14′ 8″ by 8′, and in front of which is the verandah. On each side of the entrance, projecting from the retaining wall (towards east) are two narrow cells, measuring 7′ 4½″ by 2′ and 7′ 6½″ by 2′ respectively. To the east of this gate (just opposite and in a straight line) at a height of about 24 feet is the western gateway of the large stūpa, and a little to the south-east is the old tank. Behind the retaining wall is a narrow platform covered with heavy slabs of stone, which perhaps served the purpose of a bathing platform. The space between the platform and the tank was paved with stone slabs of various dimensions.

Many iron objects, pieces of glazed and unglazed pottery, stone weights, terracotta ushṇīshas, etc., were recovered from the eastern cells.

Excavation of the northern side of the *vihāra* was rewarded with a beautiful red stone image of Vishṇu, which has a tenon at the base. It was either morticed into a small stone plinth or was embedded in masonry. Unfortunately it was broken in two at a point little above the ankles. Images of Garuḍa of dark greenish stone, of Mahishamardinī of white stone, mutilated figures of Gaṇeśa, a Yaksha, and a few fragments of other images of black, red and white stones were recovered from debris. In the corner of one cell was found a coiled serpent of iron.

There are 6 cells this side also and were probably tiled with large bricks as several undamaged bricks and numerous pieces as well were recovered. It is worthy of note that only in the Northern cells of the *vihāra* images were found.

Unfortunately no inscription was found to establish the identity beyond doubt of this structure with the famous Dēvī's *vihāra*, but there are strong reasons to believe that this is the same *vihāra* which was erected for Dēvī, the Queen of Aśoka.

Firstly.—That from the size and fabric of the bricks, it may be concluded that it was erected during the Mauryan epoch.

Secondly.—That the very construction of the second wall outside the retaining wall and filling with stone boulders of the space between the two, thus providing a level for the *vihāra* after the manner of the

Mauryan architecture, furnish another proof of its being erected in Aśoka's time—a conclusion which is corroborated by the absence of any debris between its foundation and the actual rock.

Thirdly.—That the discovery of the steatite seal of Basali, which can hardly be assigned to a later period than 200 B. C., corroborates the Mauryan date assigned to the structure.

Fourthly.—That the jewellery recovered from the *vihāra* tends to prove that it was once occupied by a royal personage.

Fifthly.—That the faces of the walls and floor of no other *vihāra* on the Sanchi hill were tiled with bricks except the one in question. We have the authority of the Mahāvaṁsa that Dēvī had erected a sumptuous *vihāra* at Chetiyagiri in which she used to live. Of course this *vihāra* situated at Chetiyagiri was the only one befitting a princess or a royal nun.

Taking the abovementioned points into consideration, it may be regarded as convincing that the *vihāra* in question was occupied by a royal nun, who can be none else but Dēvī.

Probably after Dēvī's death, the *vihāra* was presented to the Saṅgha, and was occupied by the Bhikshus or Bhikshunis. Like so many other buildings on the site, this *vihāra* appears to have been burnt down, and had never since been re-erected. This is evident from the quantities of charred remains that were found on the floor of the cells, verandah and the courtyard.

Selected antiquities recovered from Dēvī's Vihāra at Sanchi (Plate XIIIe).

1. White crystal beads of different shapes and size.
2. Stone beads of different shapes and size.
3. Carnelian, crystal, agate beads of different shapes and size.
4. Head of a Yaksha in white sand-stone.
5. Strainer of light green agate.
6. Ushṇīsha of alabaster.
7. Turquoise inlay piece.
8. Beads of carnelian and coloured crystal.
9. (*a*) Carnelian bead.
   (*b*) Agate stone beads.
10. Beads of red stone and copper.
11. Etched carnelian barrel-shaped bead, length 1″.
12. Uncut piece of lapis lazuli, barrel-shaped, about 1″ long.
13. Jadeite with a gold band around with a gold ring at each end. Size $1\frac{1}{4}'' \times \frac{1}{4}'' \times 1''$.
14. Piece of Quartz (square, uncut) with a hole in the middle. Size $\frac{1}{2}'' \times \frac{1}{2}'' \times \frac{1}{4}''$.
15. Carnelian (to match No. 11) barrel-shaped, Size—length 1″, circumference $2\frac{1}{2}''$.
16. Carnelian bead.
17. Gold Medallion with bust resembling that of Antimachus on coins.
18. Gold, very small ear-drop.
19. Barrel-shaped jadeite bead with a hole perforated through in length. $\frac{1}{2}''$ in length.
20. Turquoise and an uncut agate with a hole in the middle.
21. Figure of Garuḍa in black stone.
22. Beads of clay.

SECTION III.

EPIGRAPHY.

By Dr. N. P. Chakravarti.

Collection and Decipherment of Inscriptions.

A few interesting inscriptions in Brāhmī characters have come to light during the year under review, but the collection of later inscriptions dating from 5th century onwards, has been particularly satisfactory. I shall, first of all, review the inscriptions collected by the Epigraphical Branch or brought to its notice by others. Those collected by the Circle Officers and Curators of Museums will be dealt with below in their proper places.

The earliest inscription in the collection made by this office was found by me in the Treasury at Rewa. It is a single plate of copper, now broken into two pieces, which is stated to have been discovered at Singraulī in the Rewa State bordering on the Mirzāpur District of the United Provinces. The plate is inscribed on both the sides but due to corrosion the writing has been damaged in places, particularly on the obverse. The seal is still attached to the plate with a ring but it is also covered with verdigris in consequence of which the legend has suffered. The document which was issued from Jayapura, records the grant of the village of Mēghakuṇḍa-pallikā as an *agrahāra* to a Brahmin named Mandarabhūti by the *Mahārāja* Lakshmaṇa on the 2nd day of the dark fortnight of Mārgaśīrsha in the year 158. The date is referable to the Gupta era and would thus correspond to A.D. 477. The *Dūtaka* of the grant was the illustrious *Mahārāja* Naravāhanadatta and the writer Baladēva. Only one more grant of this ruler, dated in the same year though in a different month, is known where the *Dūtaka* and the writer are the same as in the present record.

Taking advantage of my stay for more than a week in the Rewa State, I visited certain places which, I was told, contained remains of archæological interest but were not inspected before. Thus, while I was camping at Shādol, I visited Sohāgpur, Lakhwaria, Singpur and Antarā. Sohāgpur was first inspected by Beglar in the field season of 1873-74 when he found the surrounding country very rich in antiquities. Nearly half a century later, when Mr. R. D. Banerji visited the place during the official year 1920-21, he found that most of the antiquities had already disappeared. The same scholar has given a detailed account of the only Śiva temple—popularly known as the temple of Virāṭa—that still remained in a ruined condition. It may be added that the images in the niches seem to have further disintegrated since his visit. No inscription could, however, be traced anywhere in the temple with the exception of a few names, probably of masons, on the stones inside the *maṇḍapa*. Among the collection of images in the Kothi of the local Thākur, also described

by Banerji, I found a Jaina image with a short votive inscription which reads: *Vapiyā-puttrasya Dhanadattasya kṛitiḥ, i.e.*, '(this is) the work of Dhanadatta, the son of Vapiyā'. The numerous Jaina images found built into the walls of the Kothi show that there must have been once a splendid Jaina temple in the neighbourhood but no trace of it can be found at present. I was told that stones and images from the ruins at Sohāgpur had been carried even to Shādol for building purposes. Near the temple of Virāṭa is a *kuṇḍa* known as Bāngaṅgā. Both the *kuṇḍa* and the temple attached to it are modern but some of the pillars in the latter may have been collected from the ruins of some medieval temple in the neighbourhood. Under a tree near by, I found a group of Śaiva images, mostly broken, also collected from the neighbourhood. Lakhwaria is now an insignificant place, 2 miles from Arjhulā, a village of some importance, situated at a distance of 20 miles from Shādol and 7 miles from the Burhār Railway station. My purpose of visiting the place was to examine a series of rock cut caves stated to have been in existence there. I counted altogether 17 cells, 5 facing the north and 11 facing the east and another at a little distance in the same direction. All the cells appear to have been dug into a small sandstone hill. In front of the caves in the north, there is a heap of stones which seem to be the ruins of a temple. Under a tree in the vicinity are placed a few Jaina images and bas-reliefs which might originally have come from this temple. The caves in the west are now used by a Bābāji as residence and have been plastered over with mud and lime. Two of these now contain huge and crude figures of Hanūmān which are modern. Placed near by is a small standing figure of a Tīrthaṅkara which, according to the Bābāji, was brought from a site near the Thākur's Kothi at Arjhulā. There are a few more broken Jaina images lying about and a big tank, still in a good condition, is found just below the hill. The site seems to have been once a fairly big Jaina establishment and the cells were probably used by Jaina monks as residence. I was told that stones from this site have been carried away by the local people for building houses. In the Kothi of the Thākur's brother I found fragments of a few old pillars. This gentleman told me that ruins and numerous broken images are still to be found scattered all over the place in the jungles at Arjhulā. Singpur is a village 8 miles to the south-east of Shādol. There are two temples in this place one of which is called the Panch Math. There is nothing worth mentioning about this temple except that it contains a beautifully carved door jamb of marble and a few pillars which are old. The central figure above the lintel is that of Vishṇu riding Garuḍa. There are other Vaishṇava figures either fixed in the wall or lying outside the temple. I found also in one of the walls, the figure of a Jaina goddess with a badly damaged votive inscription in Nāgarī under it. From the medley of collection and want of symmetry it appears that materials from the ruins of some other temples were collected and used either for the construction or renovation of the present temple. There is a tank in the vicinity on the bank of which are placed four big images of Tīrthaṅkaras. As they were partly immersed in water it was not possible to examine if the pedestals contained any inscriptions. The second temple is a modern structure containing

in the shrine an image of Kālī. In one of the wings are preserved certain beautiful images of Hindu gods which are decidedly old. At Antarā which is about 5 miles from Shādol and the same distance from Singpur, I found the ruins of three temples lying side by side in the midst of jungles. The one to the east, now popularly known as Kālideo, is the biggest of the three. There is also a tank near by called the Dēvītalāo. On and about this ruin are found a number of images of Hindu gods and goddesses, many of which are labelled. There are four particularly big images one of which is that of Kālī and another of Vishṇu. Most of the other images represent different forms of Śakti and it appears that the main temple was dedicated to this goddess. The images are interesting from the iconographic point of view as many of the names inscribed on their pedestals are not met with in the common works on iconography. The script in which the labels are written may be of about the 10th century A.D. In addition to the names that are well known such as Śivadūtī, Vārāhī, Yamī, Yōgēśvarī and Lakshmī we find many that are uncommon, *e.g.*, Tāraṇī, Sabhavā, Thabhā (Stambhā for Stambhinī ?), Kapālānī, Vāṇaprabhā, Tāmakā, Damakā, Itaralā, Sandhyā, Taralā, Kṛishṇa-Bhagavatī, Ramaṇī, Chapalā, Vāsavā, Śōbhanā, Vajrā and Vadarī. Of the male deities only one label is intact which reads Shaṇmukha. No images could be found in the other two ruins but it is not unlikely that those found in all the three ruins were collected by the local people and put together in one place.

While at Rewa I paid a visit to Garh and the Ginja hill. At Garh which is 15 miles south-east of the Rewa town, I visited the ruins of the old fort but could not trace any inscription there. I, however, found three late inscriptions in two small temples of the place, one of which is dated *Saṁvat 1711 Mārga-vadi 1 Budhē* and mentions *Mahārāja* Amarasiṅghadēva (A.D. 1624-1640) but his connection with the inscription is not clear. Another is dated *Saṁvat 1712 Mārga-vadi 2 Budhavāra* and belongs to the time of *Mahārāja* Anūpsingh of Rewa. The purpose with which I visited the Ginja hill was to re-examine the inscription of the *Mahārāja* Bhīmasēna referred to by Cunningham. But in spite of a careful search being made I was unable to find any trace of it. I found, however, traces of crude drawings in red paint of men and animals not only on the southern side of the hill but also on its northern side.

At Mahobā on the Kaṭhēśvara hill situated on the southern side of the town near the temple of Chaṇḍikā, there are several figures of Tīrthaṅkaras and other images carved on the rocks. On these rocks I noticed five Jaina votive inscriptions three of which are dated. The earliest is dated *Saṁvat 1235* and mentions *saiddhāṁta* Guṇabhadra. The other two bear one and the same date, *viz.*, *Saṁvat 1240 Māgha-sudi 13 Śukrē* (=Friday, 27th January, A.D. 1184). Several other inscriptions, mostly fragmentary, were found at Mahobā and at Sijahari, a village near Mahobā.

While at Bharatpur, I visited Kāman, Bayānā and Rūpbās. Kāman, a place of Vaishṇava pilgrimage, is 39 miles north-west of Mathurā and 36 miles from Bharatpur in the same direction. This place was visited by Indraji in 1880 and by Cunningham in 1882-83. Banerji also visited it in 1918-19 and

wrote a short note on its antiquity. Here, near the temple of the Five Pāṇḍavas is a well, popularly known as *dharmakūpa* or *Jvālātīrtha*, which is said to have been excavated by a Hindu ascetic called Kambalwālā Bābāji. Sometime back this well was re-excavated by Goswāmi Vallabhāchārya Lalji Maharaj, the family preceptor of the rulers of Bharatpur. I was told that many broken images of Hindu deities were extracted out of it at the time. Among these was also an inscribed slab of stone which is now preserved in the library of the Sanskrit school attached to the temple of Gōkulchandramājī. Goswāmi Mahāraj very kindly allowed me to copy the inscription. Unfortunately, the writing on the stone has been badly defaced, apparently by the Muhammadan conquerors, and very little of the inscription can now be made out. The epigraph has 24 lines of writing and like the Sīyadoṇī inscription and the Āhār inscription of the time of Bhōjadēva, contains a list of donations made at different dates by various persons, apparently to the temple to which the inscription belonged. As in the Āhār inscription, the dates in the present record also are not given in the chronological order and are referable to the Harsha era. The first date legible in the record is *Saṁ 229* (A.D. 835) *Māgha-sudi 3*. The next date preserved is *Saṁ 232* (A.D. 838) *Vaiśākha-sudi* .., when a certain guild seems to have made a permanent endowment to the temple. Another guild made another endowment in *Saṁ 233* (A.D. 839) *Pausha-sudi 7*. In *Saṁvat 220* (A.D. 826) *Śrāvaṇa-sudi 5* certain other gifts are recorded and in *Saṁvat 18[0]* (A.D.766) *Śrāvaṇa-sudi 3* the *śaṁkhika* (worker in shells) Bhadra donated 2 *āvarīs* (shops or enclosures). The latest date found in the record is the Phālguna of *Saṁvat 299* (A. D. 905-06). It is mentioned in this connection that Bhōjadēva originally donated an amount in *drammas* to the preceptor Pramāṇarāśi which after the death of the latter was made over to certain guilds. The guilds are stated to have purchased two *āvarikās* with this sum of money. This Bhōjadēva is certainly no other than the Pratihāra ruler of the same name whose latest date so far known was H. 276 found in the Pehoa inscription. It appears from the inscription that there was a big market-place (*haṭṭa*) in the neighbourhood of the temple which was managed by a guild and which, we learn from l. 23, was called Kamvali-*haṭṭa*.

I visited Bayānā with a view to copying the fragmentary inscription in the Vijaygaḍh fort of a *Mahārāja Mahāsēnāpati* belonging to the Yaudhēya-*gaṇa* which was published by Fleet in his volume on Gupta inscriptions. But even after a careful search no trace of it could be found nor could I get any information as to its being removed to any Museum. At Bayānā itself I could not trace the Sanskrit inscription stated to be engraved on a pillar in the Bhitar Bahāri mosque nor the Hindī inscription in a small mosque to the west of the Rāṇi Bāgh. I was told that in the latter the doorway above which the inscription is said to have existed had fallen and that it was replaced by a new one a few years ago.

I paid a flying visit to Rūpbās in order to examine the inscriptions on statues referred to by Cunningham in his Report (Vol. XX, pp. 98 f.). It was found on examination that Cunningham misread nearly all the inscriptions. The earliest

of them is dated *Saṁvat 1666 varshē Māgha-māsi kṛishṇa-pakshē pratipada Ravi-vāsarē.* The inscription of Saṁvat 1888 seems to record that the image of Lakshmī-Nārāyaṇa was set up by Gaṁgāvisunajī the *phaujdār* of *Mahārāja* Balabaṁtasiṁghajī and there is no mention in it of the uncle of this ruler as Cunningham had supposed. At Simra, a small village about 2 miles from Rūpbās, I found an inscription on a pillar which is now lying near a pond in the jungle. The date on it reads: *Saṁvat 1645 varshē Vaiśāsha-sudi tṛitīyā Suma-dinē.* This is therefore the earliest inscription found so far at Rūpbās and the neighbourhood.

In the Provincial Museum at Lucknow I found a large number of Jaina statues with inscriptions on their pedestals. Besides the date, many of them mention not only the names of the donors but also those of a number of Jaina teachers and places. Though they are interesting to a student of the history of Jainism it would be out of place to notice them in detail in this report. I shall, therefore, select only two of them which contain a reference to the ruling prince of the time. One of these is found on a marble frieze containing a sitting lion on each side. Apparently the statue once set up on it has now disappeared. The whole record is in three parts. The one to the left records that the image of Śāṁti(nātha) was caused to be made by the merchants Pāhila and Jījū, that in the middle mentions *Paṇḍitāchārya* Vāsavachaṁdra and the inscription on the right says that the image was set up by Kīrttidhara in Saṁvat 1132 in the reign of the illustrious Vijayapāla. This ruler is most probably to be identified with the father of Vikramasiṁha of the Dubkund branch of the Kachchhapaghāta family for whom we have a record of V. 1145. The Vijayādhirāja of the Bayānā Jaina inscription of V. 1100 has been identified with this Vijayapāla. But if he is a prince of the Sūrasēna family whose inscriptions have been found in Bharatpur State, as he seems to be, then the present inscription would be the only record so far known of the Kachchhapaghāta Vijayapāla. The same Paṇḍit Vāsava-chandra is also mentioned in another inscription found on the pedestal of two standing Jaina images now preserved in the same Museum. The second record containing the name of a ruling prince is found on the pedestal of an image of Sumatinātha, the 20th Tīrthaṅkara. It is dated *Saṁvat 1210 Jyēshṭha-sudi 3* in the reign of the illustrious Gōvindachaṁdradēva (of the Gāhaḍavāla dynasty of Kanauj) and records the establishment of the image by Durlabhachaṁdra, the son of *sādhu* Sōna of the Vāstavya family and by *sādhu* Jālhala.

The same Museum preserves a stone slab containing a fragmentary inscription in 9 lines written in characters of about the 13th or 14th century A.D. As the major portion of the inscription is lost, it is difficult to identify the persons mentioned in the record. In l. 1 mention is made of Rāshṭrakūṭa and in l. 3 of Jayatalladēvī who was apparently a queen. Verse 9 (ll. 3-4) contained the name of a ruler which is now lost. In l. 5 reference is made to one [Ra]lhaṇa and in l. 6 of Chāhaḍa. The next verse introduces us to Chāhaḍa's daughter whose name appears to have been Dhītā. We know of two Chāhaḍadēvas—one a Chāhamāna prince and the other a Yajvapāla ruler. But Chāhaḍa of the present record, if he was a ruling prince at all, may not be identical with either of these

as he may have been of the Rāshṭrakūṭa lineage as the first line of the inscription leads us to think. Another slab of stone stated to have come from Dudhai in Lalitpur District, contains a very fragmentary inscription in 9 lines in the script of about the 12th century A.D. In l. 5 mention is made of a king (*rājā*) Chaṁdra and in l. 8 of Kuśasthalapurī (Kanauj). One would thus feel tempted to ascribe the inscription to the Gāhaḍavālas of Kanauj but we know from other inscriptions at Dudhai that the place was under the Chandēllas in about the 11th century A.D. But as the present record is later in date it may be that the Chandēllas lost hold of this part of the country about the time of the inscription. There are two other stone inscriptions in the Museum without any labels showing their provenance. One of them contains 17 lines and the other 20 lines of writing in Nāgarī. The former is dated *Saṁvat 122*[*8*] *Jēshṭa* (*Jyēshṭha*)-*sudi 6 Sōmē* (=Monday, 1st May A.D. 1172, the year being Kārttikādi) in the reign of the *Mahārāja* Haripāladēva, meditating on the feet of (?) Sutavāsadēva. The other is dated *Saṁvat 1228* [*Bhādrava-va*]*di 5 Gurau* (=Thursday, 10th August A.D. 1172, taking the month to be *pūrṇimānta*) and mentions the same Haripāladēva and Sutavāsadēva.

There are a few more stone inscriptions in the Museum which have been noticed in the catalogue of inscriptions published by Pandit (now Dr.) Hirananda Sastri, the then Curator of the Museum. But as very meagre or, in certain cases, altogether wrong information has been supplied about them, it may not be out of place to notice here a few of the more important ones. One such inscription is marked É. 17 in the catalogue which states that the inscription records the erection of a Jaina temple. It is a stone inscription from Gwalior in 25 lines of writing which is badly effaced in most places. The examination of the impression, however, shows that it has no connection with a Jaina temple. It records the erection of a temple of Balarāma on Gōpaśaila (Gwalior). After the opening verses in praise of Kṛishṇa and Saṁkarshaṇa the inscription gives a description of the rulers of the Kachchhapaghāta family of Gwalior. Unfortunately the inscription is badly damaged and it is not possible to determine how many princes were mentioned and what was their exact relationship with one another. It is the same inscription referred to by Cunningham in *A. S. R.*, Vol. II, p. 363 as being found in a Jaina temple and which was returned to him by Rajendralal Mitra as 'not decypherable'. If the inscription was found *in situ* by Cunningham this must have been the site of the original temple of Saṁkarshaṇa which was later on converted into a Jaina temple, probably after its destruction by the Muhammadans. But it is not unlikely that it had been brought from elsewhere and preserved in the Jaina temple. The first name found in the record is that of Lakshmaṇarāja. The next name preserved is Sūryapāla. In l. 9 the name of Sūryapāla's wife was given but from the fragmentary nature of the verse it is difficult to ascertain whether her name was Lakshmī or she is only compared to the goddess of fortune. Sūryapāla's son was Mahīpāla. He was the forehead-mark of the rulers of the earth (*kshitipati-tilaka*) and seems to have distributed his weight in gold. From l. 14 it is quite clear that Mahīpāla's son, born of Raṇṇādēvī, was Ratnapāla which is, therefore, a new name in the

Kachchhapaghāta genealogy. The latest date of Mahīpāla is found in the Sāsbahu temple inscription of V. 1150. The record under consideration shows that the Gwalior inscription of V. 1161 belonging to his successor should also be ascribed to this Ratnapāladēva. Therefore Mahīpāla must have died sometime before V. 1161. Bhandarkar identifies Pṛithvīpāla mentioned in the Iṅgṇoḍa inscription of Vijayapāla of V. 1190 with the Kachchhapaghāta ruler Mahīpāla and therefore takes Tihuṇapāla as his son. It may be, however, pointed out that there is nothing in the inscription to show that the rulers mentioned in the Iṅgṇoḍa inscription belonged to the Kachchhapaghāta family of Gwalior. The object of the present inscription is to record the construction of a temple of Balarāma (Sīrapāṇi) on the top of the Gōpa hill by Kulhaṇa who was the 'lord of the entire army' (*nikhila-balapati*) and the 'Chief minister' (*mantri-mukhya*) of the king. The name of his father was Sāhni; that of his grandfather is lost but the name of his great-grandfather seems to have been Madhumathana, who was a Brahmin belonging to the Śāṇḍilya-*gōtra*. The *praśasti* was composed by Ānanda, the son of Maṇikaṇṭha at the request of Ratnapāla. It may be mentioned in this connection that the Sāsbahu temple inscription was composed by Maṇikaṇṭha himself. The date of the record as given at the very end is *Saṁvat 1167 Phālguna-sudi 8*. The next inscription to be considered is marked É. 22 in the catalogue. It was discovered by Cunningham in 1843 in the fort wall at Mahobā and was first noticed by him in *A. S. R.*, Vol. XXI, p. 72 where he published also a facsimile plate. The record is broken on all sides except at the bottom but it undoubtedly contained at the outset an account of the Chandēl kings. Its date is *Saṁvat 1240 Āshāḍha-vadi 9 Sōmē*. The ruling prince at this time was Paramardin whose name is lost in the record. Cunningham could not find any king's name in the record but in the fourth line of the extant portion of the epigraph the name of Madanava[rman*] is found partly preserved. The next line refers to war with Aṁga, Kaliṅga and Vaṁga in vague terms. Ll. 11-13 record that in the great Vāstavya family was born Sūhila, the son of Ahallaṇa. Sūhila's son was Jayapāla who was the composer of the *praśasti*. The object of the record, as stated in ll. 13-14, is the construction of a Śiva temple by the Brahmin Mādhava who was the son of Lakshmaṇa and grandson of Nōlaka and who belonged to the Kāśyapa-*gōtra*. Kielhorn has already discussed the date which is given in the inscription both in words and in figures, and has shown that it corresponds to Ṃonday, 4th June A.D. 1184. L. 15 mentions that the engraver was Dēvarāja, the son of Sōmarāja. The next record (É. 24 of the catalogue) is a fragmentary inscription in 15 lines stated to have come from Jhānsi. It is broken on all sides except perhaps at the top. The middle portion of the inscription has also suffered to a large extent. In spite of its fragmentary nature the record, which belongs to the Chandēl rulers, is interesting. In ll. 5-6 we find the name of Vījāka who is the same as Vijayaśakti, the brother of Jayaśakti. L. 7 mentions Dhaṅga and ll. 8-10 Kanhapa who is no other than Kṛishṇapa, the younger brother of Dhaṅga, and who has so far been known only from the Dudhai inscriptions of his son Dēvalabdhi. Kanhapa is referred to in the record as a *nṛipa* and seems to have founded a

city which was his capital (*rājadhānī*). The *praśasti* appears to belong to Kanhapa himself, though the purpose for which it was composed cannot be ascertained. The last inscription to be noticed here is É. 27 of the catalogue It is a fragment in 23 lines and its provenance is not known. A foot-note on p. 50 of the catalogue states that according to Führer 'it is said to record the erection of a Śiva temple at Sūryapur on Thursday, the 10th day of the bright half of Kārttika in *Saṁvat* 1189'. Sastri himself has read the date as Saṁvat 1189 and the label now attached to it in the Museum gives the date Saṁvat 1247. The last line of the record which contains the date is very badly effaced. But all the same the date appears to me to be Saṁvat 1207 (A.D. 1150) the reading of the second and the last digit of which is absolutely certain. Moreover, at the commencement of l. 4 it reads—*dachandrō nṛipaḥ* which shows that the context probably referred to Gōviṁdachandra, the Gāhaḍavāla ruler of Kanauj. As no mention is made of a successor of his in the following lines, it may be presumed that the inscription belonged to the time of this ruler himself whose known dates range from A.D. 1114 to 1154. The date read by me would thus fall within his reign only. In the fourth line is found a reference to his prime minister (*prādhānya*) whose name is now lost. The second part of the record which begins in l. 12 stated the object with which it was composed. But unfortunately this portion is also badly damaged and very little of it can be made out. It, however, seems to refer to the construction and consecration of a temple of Śiva called Nirjjarēśvara and mentions the gifts made to the god. If my identification is correct, the inscription is interesting as it is one of the very few stone records known of this ruler.

In course of my second tour during the year, I paid a visit to the Idar State for copying the inscriptions there. Two inscriptions from this State were noticed in the last year's report. This year, while at Idar, I examined the 19 records which Mahārāj Mānsinghjī, the younger brother of the ruling prince of Idar, collected from the step-wells and old monuments in the State and which are now kept in the compound of his residence. Unfortunately the records had no labels showing their provenance and as the Mahārāj Sāhib was away it was not possible for me to get the required information from him. Eighteen of the records are in the Nāgarī script, their language being either Sanskrit or local dialect, and the remaining one in Persian. These are all late records but many of them are interesting from the point of view of the later history of the State, particularly of the period when Idar was connected with the Raos. The earliest of these is an inscription in 13 lines dated *Saṁvat 1256 varshē Vaiśā[kha*]-vadi 1 Sōmē* (=1st May, A.D. 1200, Monday, the year being Kārttikādi). It does not contain the name of any ruling prince, but only gives in detail the genealogy of the Brahmin Vikramasvāmin of the Śāṇḍilya-*gōtra*, who is responsible for the excavation of a *vāpī* called *Sūrya-vāpī*, the recording of which is the object of the inscription. The *praśasti* was composed by the Brahmin Sarvvadēva and the architect was Śāmvala, the son of Dēvadhara. The earliest ruler mentioned is Nārāyaṇadāsa (son of Puñja, the successor of Ranmal) in an inscription of Saṁvat 1514. It appears from a statement in the *Bombay Gazetteer*

(Vol. VI, p. 403) that Nārandas was succeeded by Bhān before A.D. 1445 while the present inscription shows that the former was still ruling in A.D. 1457. Of his brother and successor Bhāṇa we have two inscriptions one of which is dated *Saṁvat 1532 varshē Śākē 1397—Phālguna-māsē śukla-pakshē daśamyāṁ tithau Bh[au]ma-vāsarē* (=Tuesday, 5th March, A.D. 1476), the cyclic year being Śubhakṛit and the *nakshatra* Pushya. The other is dated *Saṁvat 1532 varshē Phālgana-vadi aṭhamī Sōmē* (=probably, Monday, 18th March, A.D. 1476). The next inscription is dated *Saṁvat 1566 varshē Śaka 1431* in the reign of the *Mahārāja* Bhāramala (Bhārmal) and records the construction of a *vāpī*. There is another inscription (now only partly legible) of the time of the *M. Mahārāya* Bhāramala which is dated *Saṁvat 1579 varshē Āshāḍha-sudi 9 Sōmavārē*. This date is slightly irregular as *navamī* fell on a Sunday. The intended date, therefore, seems to be Monday, the 10th June, A.D. 1523. The next inscription records that one Nāthala, whose genealogy is given in detail in the inscription, constructed a *vāpī*. The work was commenced in *Saṁvat 1599 varshē Māgaśara-vadi 4 Ravau* (=26th November, A.D. 1542, Sunday) and concluded in *Saṁvat 1600 Chētra-māsē dvādaśyā[ṁ*] Guru-vāsarē*. The ruling prince at the time was the *Mahārāyārāya* Bhāramalla. There is another small inscription in 4 lines which contains a verse in praise of king Bhāramalla. The inscription belonging to the reign of the next ruler is dated *Saṁvat 1612* (A.D 1555-56), and records the construction of a *vāpī* by Pratāpadēvī, the wife of Puṁja. It gives the following genealogy of the rulers of Idar: At Īlādurga (Idar) there was king Bhīma; his son, from Prēmadēvī the daughter of the ruler of Vidarbha, Bhāramalla; his son, from Rājamatī, Puṁjarāja who defeated Mahimūdhaśāha (probably Mahmūd III of Gujarāt). Puṁja's wife was Pratāpadēvī *alias* Rūḍā, the daughter of the Jhālā Rāghava. Of Kalyānmal, the successor of Viramdev we have two inscriptions. The first is dated *1676 varshē Chaī(Chai)tra-vada(di) 13* in the reign of the *Rāyārāya Mahārāja* Kalyāmṇa[mala]jī. The second, which is in a mixture of Sanskrit and local dialect, is dated *Saṁvat 1682 varshē Śākē 1547..... Phālugna(lguna)-māsē śucha-pakshē paṁchamyāṁ 5 tithau Sōma-vāsarē* (=20th February, A.D. 1626, Monday, Kārttikādi) when the *nakshatra* was Aśvinī. It mentions Īlācha[la*]-durga, its ruler *Mahārāyāṁrāya* Kalyāṇamalajī and his queen Pāṭamadē. The record also mentions Bāī Pāvāṁnīmanī, the prince Jagaṁnātha in possession of the Siṁsuvaṇā village, the minister Vēnī and his son Gōpaladāsa of the Galāḍiyā village and several others. The next inscription is dated *Saṁvat 1702 varshē.....Śākē 1567 Phālugna(lguna)-māsē kṛishṇa-pakshē shashṭ(ṭh)yāṁ tithau Budha-vāsarē* (=25th February, A.D. 1646, Wednesday, Kārttikādi) when the *nakshatra* was Anurādhā, *yōga* Harshaṇa, *karaṇa* Vaṇija, in the reign of the *M. Mahārāyāṁrāya* Jagannātha, the son and successor of Kalyānmal. It records that the *sūtradhāra* Bhōja lived at Īlādurga with his two wives Bāī Ramādē and Līmādē and his sons and their wives. One of his descendants Pītāṁbara with his wife Lāchamadē and the members of his father-in-law's family constructed a step-well which was consecrated in the presence of king Jagannātha. There is another inscription of this ruler in which the date is partly preserved as *Saṁvat 17....varshē Chaitra-sudi 8 Budhē*. The next dated inscription is of *Saṁvat 1829*

varshē Śākē 1694—Kārttika-māsē śukla-pakshē 15 tithau Bhōma-vāsarē (=10th November, A.D. 1772, Tuesday) and mentions the *Mahārāja* Śivasiṁgha and the prince Bhavāṁnīsiṁgha (Shivsing and his son Bhavānīsing). The last record in this collection is dated *Śākē 1782 Saṁvat 1916 Śrāvaṇa-sudi 11 Bhṛigu-vāsarē* (=probably, 27th July, A.D. 1860, Friday). It is written partly in Sanskrit and partly in local dialect and mentions the *Mahārāja* Javāṁnamsiṁgha (Javān Sing, A.D. 1833-1868) as the ruler of Ilvalapura (Idar). Its object is to record the renovation of a step-well by the *Mahaṁta* Khēmabhāratī at the cost of Rs. 2,502.

Of the other inscriptions I copied in the Idar State I shall briefly notice only a few which are of sufficient interest. At Vadali, a place of importance 7 miles north of Idar, I copied 5 inscriptions of which the one in the Vaidyanāth Mahadeo temple dated Saṁvat 1264 has already been noticed in last year's report. Among the others the earliest is found on a stone pillar now lying in the compound of the same temple and is dated *Saṁvat 1185 Asau[ja*]-vadi 3 Śanau* (=13th October, A.D. 1128, Saturday, the year being Chaitrādi). There are also two other stone inscriptions in the same place one of which is dated *Saṁvat 1327 Kārttika śu 8 Gurau* (=23rd October, A.D. 1270, Thursday, the year being Kārttikādi) and belongs to the time of the (Vāghēla chief) *Mahārāṇaka* Arjunadēva. It mentions Vāṭāpalli which is the same as the modern Vadali. The next inscription is dated *Saṁ 133[1] Āśvina-vadi 3 Budhē* (9th October, A.D. 1275, Wednesday, Kārttikādi) and refers to the same chief. The fourth inscription was found in the Śāntinātha temple engraved on a pedestal which originally contained an image of Śāntinātha. It is dated *Saṁvat 1275 varshē Vaiśākha-sudi 4 Śukrē* (=19th April, A.D. 1219, Friday, the year being Kārttikādi) and mentions the following Jaina teachers: In the Chandra-*kula* Vardhamānasūri, in his line Dēvasūri, Hēmasūri, Yaśaśchaṁdrasūri, Munichandra and Kamalaprabhasūri. It also records that the image of Śāntinātha was established at Vāṭāpalli (Vadali) by the Śrīsaṁgha and was consecrated by Sōmasūri.

Dāvad is a village about 15 miles to the north-west of Himatnagar. Here I copied 3 inscriptions on hero stones near the Aṅkal Mātā step-well. Two of these are dated *Saṁ 1305 varshē Āśvina-vadi 11 Sōmē* (=4th October, A.D. 1249, Monday, the year being Kārttikādi) and record that the stones were set up in memory of certain persons who fell in battle on behalf of the *Mahāmaṇḍalēśvara Rāṇaka* Lūṇadhavaladēva. In one of these the old name of Dāvad occurs as Dayāvaḍa. The third is dated *Saṁvat 1353* and mentions *Rāṇa* Kuṁrapādē (?).

At Himatnagar there are two inscriptions fixed in two niches in the Kāji's step-well near the Power House. One of them is in Persian and the other in Sanskrit. The latter is dated *Saṁvat 1578 varshē Śrāvaṇa-sa(śu)di 3 Gurau* and refers itself to the reign of *Pātiśāha* Mudāpharaśāha (Muzaffar II of Gujarāt). The date is slightly irregular as, taking the year to be Kārttikādi, śudi 3 of the year fell on Friday. The intended date therefore seems to be the 24th July, A.D. 1522, Thursday. Bhiloda, about 23 miles from Himatnagar, has a Jaina temple with a *kīrtti-stambha* attached to it. The temple contains a number of images of Tīrthaṅkaras with votive inscriptions engraved on the pedestals of

many of them. On a stone built into the *kīrtti-stambha* there is an inscription of Saṁvat 1666 (A.D. 1609) which mentions the Jaina teacher Vādibhūshaṇa belonging to the Mūla-*saṁgha*, Sarasvatī-*gachchha*, Balātkāra-*gaṇa* and Kunda-kundāchāry-*ānvaya*. The name Bhīlōḍā is also found in the second line of the inscription. Shāmalji is a well-known place of pilgrimage 12 miles south-west of Bhiloda. There is a small temple at the place known as Ranchhōḍjī temple having in the shrine an image of Kṛishṇa. But it was originally a Śaiva temple. Even the *liṅga* is still there over which has been placed the image of Kṛishṇa. On the left side of the door of the shrine is carved the figure of a man riding on a charger which is trampling on crouching figures. There is a man at the back holding a *chhatra* over his head and at the bottom is an inscription which reads *Rāja-śrī*-Mahīpāla[jī]. Evidently the principal figure is that of a king who is trampling on his enemies and whose name is inscribed below the figure. I am not, however, certain of the identity of this Mahīpāla. The chief temple in the place goes by the name of Shāmalji and is dedicated to Kṛishṇa. On the south side of the first floor of the temple I found two inscriptions, one of which is dated *1507 Māgasira-vadi 5 Ravi-dinē* and mentions the *sūtradhāra* Shīma(Kshēma)rāja and Gadādhara. The other is dated *15[0*]8 Bhādravi-sudi 9 Ravi*. The dates which are probably to be referred to the Vikrama era, are irregular. There are a few more short inscriptions in the temple which do not contain anything of importance.

Of the inscriptions that I copied in the Prince of Wales Museum, Bombay, fifteen are in Kanarese. Mr. N. Lakshminarayan Rao who examined their impressions reports that four of them have already been reviewed in the *A. S. R.* for 1924-25. It may, however, be noted that the name of the warrior, mentioned in the hero-stone of the 9th century A.D., which has been given there as Iromaḍi (Irmaḍi ?) Siṅga should be read as Kōmaḷiga. Out of the remaining records the earliest belongs to the time of the Rāshṭrakūṭa king Khoṭṭigadēva and has been published in *Indian Antiquary* (Vol. XII, p. 255). Four of the inscriptions explicitly refer themselves to the reigns of the Chālukya kings of Kalyāṇī. The record of the reign of Trailōkyamalla (Sōmēśvara I) is dated *Śaka 982, Śārvvari, Pushya, puṇṇami, Ādityavāra, Uttarāyaṇa-saṅkrānti*. The English equivalent of this date would be Sunday, 10th December, A.D. 1060; the Uttarāyaṇa-saṅkrānti, however, occurred a fortnight later, *i.e.*, on 24th December. The inscription states that the *Mahāsāmanta* Indrakēśiyarasa of the Maṇalēra family made a grant of land and house-sites for a *sattra* (free feeding house) at the village of Bhaṇḍivāḍa. Indrakēśin is stated to be the son of Jayakēśin and had a son also named Jayakēśin. Though in each of the two Hulgūr inscriptions of Śaka 960 and 999 (*Epigraphia Indica*, Vol. XVI, pp. 330 ff.) a Jayakēśin of the same Maṇalēra family is mentioned, it was not known whether the chiefs figuring in them were identical or two different individuals and in what way they were related to each other. Now, the record under review shows not only that they were grandfather and grandson but also that there was another chief Indrakēśin between them. In this connection it may be noted that Dr. Barnett has said (*Ep. Ind.*, XVI, p. 330) that "this (Maṇalēra) family appears also above

(*i.e.*, *Ep. Ind.*) Vol. VI, p. 52 and *Ann. Report Mysore Archæological Dept.* 1908-09, p. 16". But the name Maṇalēra occurring in those places is only that of a person and not that of a family. It is not impossible, however, that the originator of the family was the Maṇalēra figuring in the Ātakūr inscription as a follower of the Western Gaṅga prince Būtuga. Another Chālukya record refers itself to the reign of Tribhuvanamalla (Vikramāditya VI) and mentions his feudatory the *Mahāmaṇḍalēśvara* Gūvaladēva, also called Gōpāladēva, of the Kādamba family. The date of the inscription is given as Chālukya-Vikrama year 3, Siddhārthin, Māgha, śu. 3, Ādityavāra, Uttarāyaṇa-saṁkrānti, *Sūryagrahaṇa*. In Siddhārthin which corresponded to A.D. 1079, the *tithi* cited fell on Sunday the 29th December; but the solar eclipse and the *saṁkrānti* took place on the 26th of the month. It is likely that while the grant was made on the occasion of the eclipse, it was recorded after three days on the date cited. The earliest date hitherto known for this prince was Śaka 1003 (A.D. 1081). This record would show that he reigned at least two years earlier. It mentions a Śaiva *āchārya* named Sadyōjāta-Paṇḍita (or Munipa) who seems to have been a great scholar and is described as *bahu-śāstra-saṁyuta*. The inscription which is mostly in verse is said to have been written (composed ?) by Jayadēva, 'the lord of pure fame'. The third Chālukya inscription which is also of the reign of Vikramāditya VI is dated in the 36th year of the Chālukya-Vikrama era (A.D. 1111) and brings to light a hitherto unknown officer of this king. He is the Brahmin general *Mahāsāmantādhipati Mahāprachaṇḍadaṇḍanāyaka* Muṭṭigalla-Bhaṭṭōpādhyāya whose ancestors hailed from Koggaṭanūr in the division of Karahāḍa four-thousand. This officer seems to have been highly venerated by the king, for the epithet *Tribhuvanamalladēvasaṁpūjya* is applied to him in the record. His other epithets, *viz.*, *ubhayamīmāṁsāratnākara*, *shaṭtarkkakamalinīdivākara* and *kāvya-kēlīśāradarājahaṁsa* would indicate that he was a highly learned man. The object of the inscription is to record a gift of lands by Māchiyakka, the wife of Muṭṭigalla, to the *trikūṭa-prāsāda* of the god Muṭṭēśvara which she constructed at the village of Eleyapurvvadavaḷḷi. This village is stated to have been governed by Malayamatīdēvī, the *piriyarasi* (senior queen) of Tribhuvanamalla. It may be observed here that in the same year (*i.e.*, A.D. 1111), Lakshmīdēvī, another wife of this king, is also spoken of as the *piriyarasi* (*Bom. Gaz.*, Vol. I, pt. ii, p. 448). An epigraph, which refers itself to the reign of another Chālukya king, who is mentioned only by the surname of Tribhuvanamalla in the record, is worth noticing here. It is dated in the cyclic year Kālayukta, the 12th year of the reign of the Kādamba prince Jayakēśin which commenced, as stated in the record, in the Kali year 4288 (=A.D. 1187-88). The date of the inscription would therefore be A.D. 1198 and hence king Tribhuvanamalla of the record can be no other than Sōmēśvara IV. Jayakēśin, who bears the title of *Mahāmaṇḍalēśvara* is described as the *pādapadmōpajīvin* of the king. The latest date that we now have for this king is A.D. 1189 and the Muttage inscription of the same year of the Yādava king Bhillama would show that the northern and eastern portions of the Chālukya dominions were then in the hands of the Yādavas. In A.D. 1192 the Hoysaḷas had occupied the southern portion of the territory

of the Chālukyas (*Bom. Gaz.*, Vol. I, pt. ii, p. 466). If, therefore, the mention of Tribhuvanamalla as the paramount sovereign in the record under review is not conventional we must surmise that Sōmēśvara IV was still alive in A.D. 1198 and continued to rule the south-west portion of his empire where his suzerainty was acknowledged by the Kādambas. It may be noted, however, that in a copper-plate grant of A.D. 1199 of the same chief Jayakēśin III, no overlord is mentioned.

The existence of three inscribed stones near the Mysore Frontier on the Ootacamund-Mysore Road was brought to my notice by Mr. A. H. Khan, Deputy Conservator of Forests, Nilgiris. In March last I inspected these stones, which seem to have originally formed part of a doorway, and copied the inscriptions which are engraved on them. Mr. N. L. Rao who examined their estampages says that the writing on two of the stones together forms one record. It refers itself to the reign of the Hoysaḷa king Ballāḷa (II) and is dated Śaka 1138 (A.D. 1216). The epigraph states that at Kallakōṭe *Heggaḍe* Dēva had a fort constructed and a door-frame of stone fixed and that he also built a tank. Kallakōṭe, we are told, was in Kuḍugu-*nāḍu* which was in Dēva's charge. The inscription on the third stone gives this Dēva several *birudas* among which the most noteworthy is *Nīlagiri-sādhāra*. We know that this title was borne by Mādhava-Daṇṇāyaka who was the governor of Padinālku-nāḍ (fourteen districts) from A.D. 1311 to 1318 and his son Kētaya-Daṇṇāyaka (*Ep. Carn.*, Vol. IV, Introduction, p. 23), who were probably descendants of Dēva.

Dr. B. C. Chhabra, the Assistant Superintendent for Epigraphy, was on tour in some of the Orissa States. At Sonepur he came across a new copper plate inscription. But as the plates were stuck together by mud and verdigris he could not examine the contents of the record at the time. They have since been obtained on loan from the Sonepur Durbar and properly cleaned by the Archæological Chemist in India. It is understood that the plates were discovered while digging the foundations on a plot of land opposite the Khambhēśvarī temple at Sonepur. They were found deposited in a massive stone chest which appears to have been specially made for their safe keep. The charter belongs to the *P. P. M. P.* Mahābhavaguptarājadēva(II)-Janamējaya of the lunar dynasty, the successor of the *P. P. M. P.* Śivaguptadēva and 'the lord of Trikaliṅga'. It was issued from Ārāma and records the grant of the village of Gōttaïkēlā in the Luputurā-*khaṇḍa* of (Dakshiṇa)-Kōsala to the illustrious *Kamalavanavaṇik-sthāna, i.e.*, 'the Assembly of merchants of Kamalavana', by the king himself. This Guild or Assembly is stated to have immigrated from Khadirapadra to Suvarṇṇapura. It is further mentioned that this *vaṇik-sthāna* transferred the same gift to two temples, one of Kēśava and the other of Āditya, for meeting the costs of offerings to the deities as well as of repairs to the temples. The grant was made on the 5th day of the bright half of the month of Āshāḍha in the 17th year of the king's reign. Towards the end of the record one verse is given to the praise of Sādhāraṇa who was a minister of the king. The charter was written by the *Mahākshapaṭalika* Alava, the son of Kailāsa who was attached to the *Mahāsandhivigrahin Rāṇaka* Malladatta. It was engraved by Haradāsa,

the son of Sīvṛillā. Three of the officials mentioned here, *viz.*, Sādhāraṇa, Alava and Malladatta, are also known from other plates of the same ruler.

At Ranipur Jharial, in the Patna State, the same officer examined the inscription found above the doorframe at the entrance to the sanctum of the Mahādēva temple. It was examined long ago both by Beglar and by Cunningham (*Reports*, Vol. XIII, p. 131 and Vol. XVII, p. 65) but neither of them gave a correct report about its contents. It is an inscription in Sanskrit consisting of six unequal lines and written in the Northern script of the 10th or 11th century A.D. It seems to record that the sanctuary was built by the (Śaiva) *āchārya* Gaganaśiva who was an original resident of Utaratēramvagṛiha. The appellation Sōmēśvara-dēvabhaṭṭāraka occurring at the commencement of the record refers to Śiva, the deity of the shrine, and not to a Rājā as Beglar and Cunningham had supposed. He found another short record on a rock in front of the Kenduvalli temple which records that Dēvānanda, the son of Jōgēśvara, built a temple of Kṛishṇa by which probably is meant the Kenduvalli temple itself. In the Kōsalēśvara temple at the village of Baidyanāth on the Tel river in the Sonepur State was found a short epigraph containing the name of *Rāṇaka* Bandhōka. Another inscription on a stone slab found lying outside the same temple and now removed to the office of the Deputy Secretary at Sonepur, is dated in the 4th year of the reign of Vīrabhānudēva. A slab containing an inscription in 8 lines was found in front of the Khambhēśvarī temple at Sonepur. The temple is modern but the stone is said to have been brought from elsewhere. This record refers to the 3rd year of the reign of the same Vīrabhānudēva. It mentions Sūnapura-*kaṭaka* which is evidently to be identified with the modern town of Sonepur. Both the inscriptions record some donations made by the king to the god Vaï-(Vai)dyanātha (Śiva), whose temple might have existed in the village of Baidyanāth as its name leads us to suppose. They are late inscriptions possibly belonging to the 14th or 15th century A.D.

I shall now notice a few more inscriptions which were discovered during the year or even earlier but which could not be noticed before as their estampages were not available to me. First I may mention the two sets of Rāshṭrakūṭa copper plates from Sirso in the Akola District, the discovery of which was announced in last year's report. They have now been acquired by the Government of C. P. and deposited in the Central Museum at Nāgpur. The first set consisting of three plates was issued from Mayūrakhaṇḍī by the Rāshṭrakūṭa ruler the *P. M. P.* Gōvinda (III), meditating on the feet of the *P. M. P.* Dhārāvarsha, and who had the *birudas Pṛithvīvallabha*, *Prabhūtavarsha* and *Vallabhanarēndra*. It records the gift of the village Sisavai in the Māṇaka-*vishaya* along with a site in the village Mōragaṇa by the king to a Brahmin Risiyappa-Bhaṭṭa, a resident of Dhārāśiva. The donee was the son of Annasāvi-Bhaṭṭa and the grandson of Vishṇu. The gift was made on the occasion of a lunar eclipse on the full-moon day of Bhādrapada in the Śaka year 729, the cyclic year being Vyaya. This date seems to correspond to Saturday, the 21st August, A.D. 807 when there was a lunar eclipse but the cyclic year could be Vyaya only if it is calculated according to the northern luni-solar system which, as Kielhorn has

shown, was current in the South down to Śaka 855. The charter was written by Aruṇāditya, the son of Vatsarāja and the *Dūtaka* was Jaḍavula-Bhaṭṭa. The inscription gives a long description of the conquests of Gōvinda III closely following the Rādhanpur plates of the same ruler. The second set of three plates was also issued by Gōvinda III from Mayūrakhaṇḍī. His genealogy and *birudas* are the same as in the previous record. In fact the text in the descriptive portion of the ruler agrees with that of the previous record with the omission of a few verses. It records the gift of the village Lōhāra in the Murumba-*vishaya* to Rishiyappa-Bhaṭṭa, a resident of Dhārāśiva and the son of Aṇṇama-Bhaṭṭa and the grandson of Māsōpavāsi-Bhaṭṭa. It is also recorded that the donee after reserving 400 *nivartanas* of land in the village, divided the rest into 120 parts which he distributed among several others. The date given in the record is the solar eclipse day on the first *tithi* of the bright half of Mārgaśīrsha in the Śaka year 734. There was no solar eclipse on the day specified but there was one on the previous day, *i.e.*, the newmoon day of Kārttika. But as the *amāvāsyā* practically ended on the previous day we should take the corresponding date to be Monday the 8th November, A.D. 812. The charter was drafted by Aruṇāditya, the son of Vatsarāja and the *Dūtakas* were Chaṇḍiyamma and Vayama. In spite of a slight discrepancy in the genealogy, the donees of these two plates seem to be identical. The same name is also found to be borne by the donee of another grant of the same ruler, *viz.*, the Bhārata-Itihāsa-Saṁśōdhaka-Maṇḍal's Plates of Śaka year 732.

Another copper plate which has come to our notice, is said to have been discovered in the river bed near Sone East Bank. The record is written in the Nāgarī script and Sanskrit language and its date is *Saṁvat 1254 Kārttika-śudi 15 Sōmē* (=Monday, 29th September, A.D. 1197). The charter was issued from Navanēra(?)-*pattaṇa* and records the grant of the village of Gambhārī by the *Mahāmaṇḍalika* Udayarāja, a feudatory of the king Indradhavala, to the Brahmins Dhārēśvara and Mahāditya in the proportion of three to two. The genealogy of Indradhavala is thus set forth in the inscription: Khadirapāla, the founder of the family; in his lineage king Sādhava; his son Raṇadhavala; his son Pratāpadhavala; his son Sāhasa; his son Vikrama and his brother the great king (*Mahānṛipati*) Indradhavala. The *Mahāmaṇḍalika* Udayarāja was the son of Praharāja, who was the Prime Minister of one of the kings of the line of Khadirapāla and the grandson of Samarasiṁha of the Kadamba lineage. The document was written by the *Akshapaṭalika Thakkura* Sujana of the Vāstavya-Kāyastha community. Mr. H. K. Deb who is editing the inscription in the *Ep. Ind.* correctly identifies Pratāpadhavala, the grandfather of Indradhavala, with Pratāpadhavala, the ruler of Jāpila, of whom we have several inscriptions ranging in date from A.D. 1158 to 1169. The Tārāchaṇḍi inscription of this ruler shows that he was then a feudatory of the Gāhaḍavāla ruler of Kanauj.

Early in 1936, twelve massive plates of cōpper were brought to light near Ghumli in the Nawanagar State, in the course of digging on the road-side. They comprise the six grants noted below as *A. B. C. D. E.* and *F.* The text of these

records has been published by M. M. Pandit Hathibhai Harishankar Shastri of Jamnagar but they have not yet been noticed in any of the publications of the Archæological Department. Of these *A* is incomplete consisting of the first plate only. Of the others *B* has three plates and the rest two leaves each. All the plates are inscribed only on one side. They have double ring-holes, but all the rings are not forthcoming. Some of the rings which remain intact have the fish emblem on their seals. Three (*D. E.* and *F.*) of the grants also show the same symbol at the end. All the six charters were issued from Bhūtāmbilikā (modern Bhumli or Ghumli) and belong to the Saindhava chiefs who are styled, except in *A.*, *Aparasurāshṭrā-maṇḍala-maṇḍana* and *Aparasamudr-ādhipati*. Four of the records, *viz.*, *B. D. E.* and *F.* are dated. The era is not specified in *B.*, whereas in the other three it is stated to be *Gaupta, i.e.*, Gupta era. Only two other records of the chiefs of this line were hitherto known, *viz.*, the Dhiniki Plates of the *P. M. P.* Jāikadēva of V. 794 (taken by Bhagvanlal as a forged document) and the Morbi (second) plate of Jāiṁka of G. 585. Below is given a short account of the six records under consideration :—

A. This is only the first plate of a set and records the gift of the village of Bhēṭālikā in the Pachchhatrī-*vishaya*. The donor is the *Mahāsāmanta* Rāṇaka, the son of Agguka and the grandson of the *Mahāsāmanta* Kṛishṇarāja. The donee is, as far as can be made out from the extant portion, Rāṇaka's own queen, Kshēmēśvarī. The date of the record, if it were given at all, is now lost in the missing part. Palæographically, however, this seems to be the earliest of all the six inscriptions, and may be placed within the first quarter of the ninth century A.D.

B. It registers the grant by the *Mahāsāmanta* Jāiṁka, the son of Rāṇaka and the grandson of the *Mahāsāmanta* Agguka, of the entire village of Dhaṅkatīrtha along with the one-tenth share of the village Gulamikā (or Gulamayikā), both in the Pachchhatrī-*vishaya*, to a Brahmin, named Mādhava, the son of Kalyāṇa, for observing the five *mahāyajña* rites. The donee is described to be a resident of Sōmēśvara, a member of the *Chāturvaidya* community, a scion of the Sāmkṛitya-*gōtra* and a student of the Bahvṛicha-*śākhā* (of the Ṛigvēda). While *Mahattama* [Bā]lakavi acted as the *Dūtaka* of the grant, it was written by a Śaka, called Kapila who was the son of Vikkaṭa. The document is dated in the year 513, expressed in numerical figures. The era is not named, but in all probability the same Gupta era is meant here as is specifically mentioned in the inscriptions *D. E.* and *F.* below. The year 513 would thus correspond to A.D. 832-33.

Towards the end of the inscription, the donor is mentioned by his second name Jayasēna. Another very interesting piece of information is supplied by this record. According to it Rāṇaka had two sons Kṛishṇarāja and Jāiṁka (or Jayasēna, the donor of the present grant) from his two different wives. Kṛishṇarāja had a son called Agguka. Even though this latter was the legitimate heir to the throne, yet, the record says, the sovereignty went to Kṛishṇarāja's half-brother (*bhrātā vaimātrō*) Jāiṁka. As Kṛishṇarāja does not bear any titles in this record it seems probable that he died in the lifetime of his father Rāṇaka

without ever being a ruler. At the time of Rāṇaka's death his grandson Agguka must have been too young to rule and therefore Jāika, his uncle, took upon himself the responsibility of administration. The fact of Agguka being mentioned as the son of Jāika in *D* is due to some misapprehension. He seems to have been in reality the son of Kṛishṇarāja as the documents *B* and *F* show.

C. The object of this record is the grant of the village Dadhipadra in the Pachchatrī-*vishaya* by Jāiṁka, apparently identical with the donor of the grant *B*. The donee is a *Brāhmaṇa* called Bhaṭṭasvāmika, the son of Kulachandra. He is stated to be a resident of Bhillamāla (modern Bhīnmāl), a student of the Chhandōga-*śākhā* (of the Sāmavēda) and a member of the *Chāturvaidya* community and to belong to the Vatsa-*gōtra*. The purpose of the donation is again the observance of the five *mahāyajña* rites. The *Dūtaka* of the grant is *Pratihāra* Kṛishṇa and the writer is the same as in grant *B*. The present record is not dated, but the occasion of the gift is stated to be a *Pushya-snāna* ceremony.

D. This charter records the gift of the village Pippalapadra in the Suvarṇamañjarī-*vishaya* by the *Mahāsāmanta* Rāṇaka, the son of the *Mahāsāmanta* Agguka and the grandson of the *Mahāsāmanta* Jāika. As I have stated above Agguka seems to have been actually the son of Kṛishṇarāja, the half-brother of Jāiṁka, and not the son of the latter. One half of the village is allotted to three female deities, mothers of Hari, Haridaśva and Vināyaka, which were established by a hermit, named Śivarudra, the son of Pūrṇa and the grandson of *Bhaṭṭa* Śaṅkhadhara. Śivarudra is described to be a native of Dēndanī-bhaṭṭa-grāma, and a student of the Bahvṛicha-*śākhā* (of the Ṛigvēda). The second half of the village is assigned to the head of a monastery (*maṭh-ādhipati*) who also held charge of the temple. The income of the donated village was to be expended on the maintenance of and the repairs to the shrines and the monastery. The record is dated Gaupta year 555 (=A.D. 874-875), which is expressed in words. It is stated that *Yuvarāja* Jāiṁka himself acted as the *Dūtaka*, while the writer was Vakula, son of Viṭṭhaka. The record further informs us that Agguka, while he was living, himself anointed his son, Rāṇaka, king as his successor.

E. This inscription states that the *Mahāsāmantādhipati* Agguka, the son of the *Mahāsāmanta* Chāmuṇḍarāja and the grandson of the *Mahāsāmantādhipati* Jāiṁka, granted the village Harishēṇānaka in the Svarṇamañjarī-*vishaya* to two Brahmins, named Rudra and Sagara, sons of Guhēśvara, residents of the place called Gōmūtrikā in the Kachchha-*vishaya*, members of the Vatsa-*gōtra* and students of the Vājimādhyandina-*śākhā* (of the Yajurvēda) on the occasion of the lunar eclipse during the month of Āshāḍha (Śuchi) in the Gaupta year 567 (=A.D. 886-887). The gift was intended to be utilised by the *Brahmasaṁsad* (*i.e.*, an Assembly of the Brāhmaṇas). The charter was written by one Jhōjjha, son of Mādhava.

F. This is a charter of the *Mahāsāmantādhipati* Jāiṁka. It supplies us with the following genealogy: Pushyadēva, Kṛishṇarāja, Agguka, Rāṇaka, Jāiṁka, Chāmuṇḍarāja, Agguka, and Jāiṁka. No such title as *Mahāsāmanta* or *Mahāsāmantādhipati* is attached to any of these names. The dynasty is called Jayadratha-vaṁśa which is apparently the same as the Saindhava-vaṁśa

mentioned in the other five grants, Jayadratha of the *Mahābhārata* being styled in that epic as Saindhava, Sindhurāja, etc. The charter records the gift of the village Chhaṁpāṇaka in the Svarṇamañjarī-*vishaya* by Jāiṁka to the Nanna-madhikā (=Nanna-*maṭhikā* ?) shrine named after its founder Nanna, a merchant of Bhillamāla. This shrine is described to be situated to the north-east of the Purushōttama-madhikā in the city (*pattana*) of Bhūtāmbilikā (from where the charter is issued). It is further specified that one-fourth of the income of the granted village was to be spent on meals to be provided daily to the Brahmins and the remaining three-fourths to meet the expenses of the madhikā. The gift was made on the full-moon day in the month of Āshāḍha in the Gaupta year 596, expressed both in words and in numerical symbols. The charter was written by Mādhava's son Jhōjjha who is probably identical with the writer of the grant *E* above. The engraver of the present grant is one Madhusūdana, son of Śaṁkara. The engraver of the Mōrbī grant of Jāiṁka (G. 585), probably identical with the donor of the present grant, was Dēddaka, another son of Śaṁkara. Kṛishṇarāja mentioned in this inscription as the son of Pushyadēva seems to be identical with Kṛishṇarāja, the son of the *Mahāsāmanta* Rāṇaka mentioned in *D*. If this surmise is correct Pushyadēva would be another name of Rāṇaka.

South Indian Epigraphy.

With regard to the progress made in the collection of South Indian Epigraphy in the Madras Presidency and the Bombay-Karnatak the Superintendent for Epigraphy, Madras, sends the following report :—

"During the year 1936-37, 283 villages were visited and 373 inscriptions copied in the Madras Presidency. The epigraphical survey of the Rēpalle taluk of the Guntur District and of the Puṁganūr taluk of the Chittoor District was completed during the year, while good progress was also made in the survey of the Tirukkōyilūr taluk in the South Arcot District. In the Bombay-Karnatak the epigraphical survey of the Sindgi taluk of the Bijāpur District was completed. Altogether 98 inscriptions were copied from 153 villages. Thus the total collection of stone epigraphs for the year was 471. Besides these, 13 copper-plate inscriptions were also examined and 91 photographs of objects of antiquarian interest taken.

"The earliest unpublished copper-plate inscription in this year's collection, is that of Annavōta, the Reḍḍi chief of Koṇḍavīḍu, who was the son of Prōlaya-Vēma the builder of the steps leading up the hill of Śrīśailam. It is dated in Śaka 1280 and registers a grant of the village Kōḍūru, re-named Annavōtapuram, on the bank of the Malāpahā river made by the chief to a number of Brāhmans. This is the only copper-plate record of the king known so far. A grant coming from the Jamkhaṇḍi State in the Bombay Presidency belongs to the Keḷadi chief Basavappa-Nāyaka, the son of Sōmaśēkhara-Nāyaka and queen Chennamāji. It was issued in Śaka 1632, Virōdhin, recording a gift of land at Chikkamuḷukeṛe and Khaidoṭṭi in Gājanūr-*sīme* made by the king at the request of a certain Mariyappa to the teacher Charamūrti Rājavaṭṭidēva, the disciple of Charamūrti

Kabbinakante Kari-Basavarājadēva sometime previously, but not registered then. Basavappa-Nāyaka of this record is the well-known author of the Sanskrit encyclopædia called *Sivatattvaratnākara*. Two copper-plate records belonging to the Nāyaka rulers of Madura were issued in the reigns of Maṅgamma, the queen of Chokkanātha-Nāyaka, and her grandson Vijayaraṅga-Chokkanātha. They are dated in Śaka 1620, Vyaya (wrong) and Śaka 1630 respectively and register grants of land in Teṅgājji (modern Teṇkāśi) and Iḷañji in the Teṅgājji-*sīmā* for feeding *paradēśis* of the Udāsi sect.

"Among the stone inscriptions of the collection, the most interesting is a Brāhmī inscription of about the 3rd century A.D. on a pillar in a Buddhist *stūpa* found on a hillock near Reṇṭāla in the Guntur District. It is partly mutilated, but enough remains to suggest that it is dated in the fifth year of the Ikshvāku king Siri Chāṁtamūla and records the gift of this pillar by a merchant (*vāṇijaka*), his wife, son and relations. Another inscription in slightly earlier characters found at Gurazāla records gifts of land to Bhagavat (*i.e.*, the Buddha) by the lord of Halaṁpūra in the 4th year of the reign of Purisadata.

"Two other Brāhmī inscriptions of about the 3rd century A.D. recently found on the outer *prākāra* wall of the Amarēśvara temple at Amarāvati in the Guntur District show that the *Mahāchetiya* of the place received donations from a banker (*seṭhi*) and householder (*gahapati*) of the Veraka[1] clan, which is not commonly met with in Buddhist epigraphs. It is stated in one of these that a gift was made for the benefit of the *Thera* chitaka of the *Mūlāvāsa-chetiya* which is evidently the same as the *Mahāchetiya* mentioned in the other inscription. It may be noted that Mūlāvāsa was a famous Buddhist centre in Malabar (see *Mūshikavaṁśa* and *Trav. Arch. Series*, Vol. II, p. 116), held in great sanctity by the Bauddhas all over the world in the early centuries of the Christian era. An image of Lōkanātha found in Gāndhāra bearing a short inscription: *Dakshiṇāpathē Mūlavāsa-Lōkanātha* (Foucher: *Étude sur l'iconographie bouddhique de l'Inde*, Part I, p. 105, pl. iv, No. 5; *Trav. Arch. Series*, Vol. II, p. 117) bears testimony to the truth of this statement. The Amarāvati inscription under review thus furnishes the earliest epigraphical reference to *Mūlāvāsa*.

"The next important inscription from the Palnāḍ taluk of the Guntur District which is engraved in the Chāḷukyan characters of the 7th century A.D. furnishes the interesting information that the temple of Jalpēśa was constructed by the architect Maindarāma (Mahēndrarāma) who was otherwise called Kalgarābharaṇāchārya and belonged to *Kamma-kula* of the fourth caste. This is one of the earliest references to *Kamma-kula*.

"A family of local chiefs called the Ḷoṅkuḷas was already known to have been flourishing somewhere in the present Madanapalle taluk of the Chittoor District about the 9th and 10th centuries A.D.; but their relationship to the Vaidumbas was not clear. Two records secured this year from the Puṅganūr taluk in the same district belong to the reign of the Vaidumba chief Vīra-Mahārāja. They seem to suggest that a chief called Ḷoṅkuḷāditya who, according

[1] It is also possible that we have to read here 'Airaka'; see *A.S.R.* 1922-23, p. 130.

to one of these, was administering Sadumbu (Tsadum), was a subordinate of that chief.

"An inscription of the Rāshṭrakūṭa king Kannaradēva (III) from Pādūr in the South Arcot District, which is dated in his 26th regnal year, gives him the titles *Rājādhirāja*, *Paramabhaṭṭāraka*, *Achalakulōttama*, *Kā[ñchi]ka*, *Āṇaiviṭaṅka* and *Ellaru-maruḷa*, which have not hitherto been met with in his epigraphs of the Tamil country. The record registers the gift of the village Urumūr to a number of his Brāhman followers styled *Bhaṭṭa-putras*. On a hillock called Aṇḍimalai at Sōḷavāṇḍipuram in the South Arcot District are found groups of rocky beds called *Pāṇḍavar-paḍukkai* sheltered by overhanging rocks, some of which contain figures of Jaina *Tīrthaṅkaras* cut in relief on their sides. On one of the boulders here is engraved an inscription in verse praising the Chēdi chief Siddhavaḍavaṇ who is styled 'Kōvalkāvalaṇ', *i.e.*, 'the lord of Kōval or Tirukkōvalūr' and 'Malayakulōdbhavaṇ'. He is stated to have fought a big battle at Vīraśōḷapuram. The inscription is dated in the 2nd year of Mummuḍi-Chōḷa Gaṇḍavāditya (A.D. 951-2) and records a grant of land made by the chief to provide for the sacred bath and worship of the several images carved on the rocks. Siddhavaḍavaṇ of the present inscription is probably to be identified with the chief of Milāḍu who bears the same name and figures in a record of the 17th year of Kannaradēva (A.D. 955-56; *Ep. Ind.*, Vol. VII, p. 135) from Tirunāmanallūr in the same district, with the titles *Narasiṁhavarman* and *Śaktinātha*.

"An inscription from Villiyaṇūr near Pondicherry in the French territory settles an important issue with regard to the later Pallava history. The theory of the existence of more than one chief bearing the name Kōpperuñjiṅga has already been suggested, but it was not supported by any definite evidence hitherto. The Villiyaṇūr inscription which is dated in the 6th year of Sakalabhuvanachakravartin Avaniyāḷappiṛandāṇ Kōpperuñjiṅgadēva refers to an audit of temple accounts for the period commencing with the 37th year of Tribhuvanavīradēva (*i.e.*, Kulōttuṅga III) to the 11th year of Aḷagiyaśīyar Kōpperuñjiṅgadēva. Since the present inscription dated in the 6th year of a Kōpperuñjiṅgadēva refers to the 11th year of another chief of the same name, it is evident that there must have been two chiefs of this name one ruling immediately after the other in the 13th century A.D.

"The Travancore king Kōdai Ravivarman whose date had not been fixed hitherto now figures as donor in a record from Śrīraṅgam in the Trichinopoly District belonging to the 11th year of Rājarāja II. It is thus clear that he must have flourished about the middle of the 12th century A.D. In the present inscription he is called Vēṇāṭṭaḍigaḷ of Malai-nāḍu. In another record from the same place a different ruler named Ravivarman of the 14th Century A.D. is stated to have been on a visit to Kaṇṇaṇūr, and to have also founded an *agrahāra* called Ravivarma-chaturvēdimaṅgalam in Tiruvaraṅgam-Tiruppati (Śrīraṅgam). A record from Śrīraṅgam dated in the 3rd year of the Hoysaḷa king Vīra-Rāmanāthadēva registers the establishment of a dispensary (*śālai* or *ārōgya-śālai*) in the precincts of the Raṅganātha temple, near the *gōpura* containing the image of Eḍuttakai-aḷagiya-Nāyaṇār (*i.e.*, Narasiṁha) by a

pradhāni of the king named Siṅgaṇṇa-Daṇḍanāyaka, who also made an endowment of land for the maintenance therein of a *vaidya* (doctor) and two servants, and for the purchase of medicines. The dispensary was placed under the supervision of Garuḍavāhana-Paṇḍita who is stated to have been maintaining such an institution of his own accord for a long time previously and who also seems to have saved the life of the donor as he is called the latter's '*rakshaka*'. In a later inscription in the same place dated in Śaka 1415 it is stated that a Garuḍavāhana-Paṇḍita had received 2 *vēlis* of land as *pallakku-mānya* from god Śrīraṅganātha who 'was pleased' with Garuḍavāhana's work '*Raṅgaghōshaṇai*' composed in His praise. As the *ārōgya-śālai* mentioned above had been destroyed by fire (*vāṇam*) subsequently, his descendant Śrīnivāsa *alias* Śrīraṅga Garuḍavāhana-Bhaṭṭa, the son of Aḷagiya-Maṇavāḷa-Maṅgalādarāyar and one of the *Bhaṭṭāḷ-kottu* (of the temple), restored the *śālai* and installed therein (an image of) Dhanvantari, and endowed the *pallakku-mānyam* land for the worship of this deity. This Garuḍavāhana-Paṇḍita can be identified as the author of the Vaishṇava hagiology *Divyasūri-Charitaṁ*. The slabs containing these two inscriptions are appropriately enough set up in the Raṅganātha temple in front of the shrine of Dhanvantari, the divine physician, whose worship is no longer common elsewhere in Southern India.

"An inscription dated in the cyclic year Paridhāvin, corresponding to Śaka 1295, which comes from Kaṇṇanūr near Trichinopoly states that the Hoysaḷēśvara temple had been converted into a mosque by the Turushkas and that the Vijayanagara prince Kampaṇa in the course of his victorious campaign had it reconverted to its original character.

"We learn from an inscription copied at Perḍūru in the South Kanara District, which is dated in Śaka 1328, that the Vijayanagara king Bukka (II) made an endowment of land to *Purāṇika* Kavi-Kṛishṇa-Bhaṭṭa for the renovation and proper maintenance of a library which formed an annexe to the *maṭha* at Śriṅgēri in the time of the pontiff Narasiṁha-Bhārati. His son Kavi-Śaṅkara-Bhaṭṭa figures as a donee in another inscription from the same place dated twenty-six years later.

"An inscription in one of the *gōpuras* of the Śrīraṅgam temple engraved in characters of about the 15th century A.D. over the effigy of a Vaishṇava named *Śrīkāryam* Periyāḷvār wielding a scythe, mentions how he sacrificed himself by falling from the top of this *gōpura* as a protest against the stoppage of temple worship and how this lapse was rectified and the effigy received certain temple honours in recognition of the man's self-immolation.

"The inscriptions collected in the Bombay-Karnatak during the year represent mainly the three ruling dynasties of the medieval Deccan, namely, the Western Chāḷukyas of Kalyāṇī, the Kaḷachuryas and the Yādavas. From a study of these inscriptions it is apparent that the northern part of the Sindgi taluk in the Bijāpur District was under the sway of the Seḷaṛa (Śilāhāra) chiefs who belonged to the Jīmūtavāhana lineage and were called 'the lords of Tagarapura'. Among the Western Chāḷukya inscriptions a record from Kannoḷḷi belonging to the reign of Jagadēkamalladēva (Jayasiṁha II), dated in Śaka 962 (A. D. 1040), introduces to us for the first time a feudatory of his, named

Mahāsāmanta Gōpālarasa, and mentions the capital Poṭṭaḷakeṛe. In an inscription of Trailōkyamalla (Sōmēśvara I) dated in Saka 986 Krōdhin, secured at Dēvūr, the *Mahāsāmanta* Vārarasa, a hitherto unknown officer of Trailōkyamalla Noḷamba-Pallava-Permānaḍi Jayasiṅgadēva, who was then governing Taḷdavāḍi one-thousand province, is stated to have granted land to the temple of Mārasiṅghēśvara at Dēvapura. This temple is also mentioned in another record copied this year from the same place dated in Śaka 951 and belonging to king Jayasiṁha II.

"From a record at Malghāṇa dated in the Chāḷukya-Vikrama year 25, cyclic year Vikrama, it is learnt that Vikramāditya VI was encamped at Appayaṇadakuppa on the Bhīmarathī river in the course of his expedition 'against Bhōja in the west'. This Bhōja was evidently a chief of the Śilāhāra family of Karāḍ, whom the Sinda chief Āchugi II is known to have repulsed (Fleet, *Dyn. Kan. Dist.*, pp. 547 and 574). An inscription dated in the reign of Tribhuvanamalladēva (Vīra-Sōmēśvara IV) records that the *Mahāmaṇḍalēśvara* Gōvaṇadēvarasa of the Seḷaṛa family was forced to lay siege to Cheṭṭurage and after destroying the *dāyādas* established himself securely in his position. It records a grant of certain privileges and incomes to the *Mahājanas* of Cheṭṭurage for the assistance rendered to him in ousting the *dāyāda*-enemies.

"Two records copied at Kalkēri and Bekkinhāḷ both of which are dated in Śaka 1109, Plavaṅga (A.D. 1187) and the 2nd regnal year of a certain Vīranārāyaṇadēva, would show that the chief began his rule in A.D. 1185. We are not informed of the name of his suzerain or of the family of Vīranārāyaṇadēva. Since this date is close to the last known year of Vīra-Sōmēśvara IV (Śaka 1111) the northern portion of whose territory was conquered by the Yādavas, no overlord is perhaps mentioned here on account of the anarchy prevailing at this period. The chief Vīranārāyaṇa must, however, be distinguished from the Kaḷachurya king Āhavamalla who bore the title *Vīranārāyaṇa* but whose initial regnal year corresponded to Śaka 1102, Vikārin. An inscription at Hippargi belonging to Bhillama, the Yādava king of Dēvagiri, bears the date Śaka 1115, Paridhāvin, Bhādrapada ba. 8, while his son Jaitugidēva was a ruling sovereign in Śaka 1114, Paridhāvin, Pushya ba. 10, as stated in an inscription of his copied at Kaḍlevāḍ. From this it is clear that Jaitugi must have ascended the throne between Bhādrapada ba. 8 and Pushya ba. 10 of the cyclic year Paridhāvin.

"It is interesting to note that Kaḍlevāḍ on the bank of the Bhīmarathī was a great centre of religious and educational activities associated with the temple of Svayambhū-Sōmanāthadēva, and an inscription of Kaḷachurya Rāyamurāri Sōvidēva of the place describes the village as *ghaṭikāsthāna*-Kadaḷevāḍa. Kalkēri, a village to the south of Sindgi, had several guilds of commerce which maintained an educational institution, where provision was made for the teaching of Nyāya, Prabhākara, Ṛigvēda, Purāṇa and Vēdānta. The inscriptions at Kuḷēkumaṭgi and Malghāṇa record gifts to the temple of Āditya (Sun-god) and are valuable in so far as they mention separate temples or shrines dedicated to this god, which are not very common in the South."

PUBLICATIONS.

The Epigraphia Indica.

Four parts of the Epigraphia Indica, *viz.*, parts vi and vii of Volume XXII and parts i and ii of Volume XXIII were passed for final printing and issue during the year under report. Part vii of Volume XXII contains a further portion of Index to *List of Inscriptions of Northern India*, continued from part v of the same Volume. The final portion of this Index together with two more indices, namely *Find-spots* and *Deposit*, to the same List, is contained in part i of Volume XXIII. Besides the indices, the four parts under review contain sixteen complete articles. Some of the inscriptions published in these parts have been either edited previously or noticed in last year's report. Thus the Larger Leiden Plates (of Rājarāja I) and the Smaller Leiden Plates (of Kulōttuṅga I) that are published by Mr. K. V. Subrahmanya Aiyar, the retired Superintendent for Epigraphy, in parts vi and vii of Volume XXII were first edited in 1886 by Burgess and Natesa Sastri jointly. The text given by them was found defective in many places. In the case of the Larger Leiden Plates the very order of the plates was confused. Their interpretation of the record consequently proved erroneous. Moreover, no *facsimile* plates accompany their papers. Such defects amply justified the re-editing of these two important records. Prof. R. C. Majumdar has contributed quite an informative "Note on the Śailēndra Kings mentioned in the Leiden Plates," pointing out clearly the relation and intercourse that existed between the Chōḷa monarchs of South India and the Śailēndra sovereigns of Śrīvijaya (in Sumatra) and Kaṭāha (in Malay Peninsula). The "Hidda Inscription of the year 28" already edited by Dr. Sten Konow in *C. I. I.*, Vol. II, part I, pp. 157 ff., has been re-edited by the same scholar in part ii of Volume XXIII, introducing several improvements upon his former edition of the epigraph. The following three articles are also the contribution of Prof. R. C. Majumdar: Sruṅgavarapukōṭa Plates of Anantavarman, King of Kaliṅga; Narasiṅgapalli Plates of Hastivarman: the year 79; and Ganjām Copper-plates of Vajrahasta III: Śaka Saṁvat 991. The first of these inscriptions records the grant of the village of Kiṇḍēppa in Tēllavalli-*vishaya* as an *agrahāra* to the Brāhmaṇa Mātṛiśarman by the king of Kaliṅga, the *Mahārāja* Anantavarman, son of the *Mahārāja* Prabhañjanavarman, and grandson of the *Mahārāja* Guṇavarman, lord of Dēvarāshṭra. The grant was issued from Pishṭapura. The portion containing the regnal year is broken and lost. Palæographically, however, the record may be placed between A.D. 450 and A.D. 550. The second inscription registers the gift of a piece of land to the god Nārāyaṇa by the *Mahārāja* Hastivarman of the Gaṅga dynasty. The donated land was situated in the village Rōhaṇaki in the Varāhavarttanī-*vishaya*. The deed was issued from Kaliṅganagara and is dated in the year 79 (of the Gaṅga era). The third and the last inscription contains the grant of the Navagrāma village in the Varāhavarttanī-*vishaya* by the Gaṅga king Vajrahasta (III, or, according to a different reckoning, V), son of Kāmārṇava and Vinayamahādēvī. The donee is one Gōkananāyaka, the son of Bhīmanāyaka and Prōlakavā, and the grandson of Mallapanāyaka. The gift was

made on the 7th day of the first fortnight of the month of Āshāḍha in the Śaka year 991 (=9th June, A.D. 1068). As in the other known inscriptions of Vajrahasta (III or V), so in the present one also the exact date of his coronation is given which has been calculated to correspond to 3rd May, A.D. 1038, 8 h. 27 m. P.M. No details need be given of such records as have already been noticed in the previous reports.

In last year's report an acquisition of nine sets of copper plates (A-I) by the Indian Museum was announced. Of them the grant *B* has been published by Dr. B. Ch. Chhabra in part ii, Volume XXIII. About the grants *F* and *G* it was said that they belonged to Indravarman of the Gaṅga dynasty, but no further particulars were then available. One of these two has, meanwhile, been published by P. N. Bhattacharya in part ii, Volume XXIII. It records the grant of the village Tanardā in the Hallanyara-*vishaya* by the *P. M. P.* Indravarmadēva, son of Pṛithivīvarmadēva, to *Bhaṭṭaputra* Durgakhaṇḍi, son of *Bhaṭṭa* Bōdhana, belonging to the Chhāndōga-*charaṇa*, the Rāṇāyanīya-*śākhā*, and the Vatsa-*gōtra*, having five-fold *pravara* and *anupravara*. The grant was issued from Śvētka. It was written by an officer who bears the titles *Sandhivigrahin* and *Śrīsāmanta* but whose name is not given in the inscription. It was engraved by the brazier *śrēshṭhin Śrīsāmanta* Svaymbhu, son of Napa (Nṛipa) and registered by the chief queen (*mahādēvī*) *Vaishṇavī* Śrī-Gōsvāminī.

The South Indian Inscriptions.

During the year under review the final stitched proof of part i (pp. 1-409) of the volume on Kanarese inscriptions in the Madras Presidency (*S. I. I.* Texts, Volume IX), being edited by Dr. Shama Sastri, was ordered and about 350 pages of manuscripts of the Telugu volume (*S. I. I.* Texts, Vol. X) entrusted to Mr. Ramayya Pantulu was sent to press. About 100 pages of 1st and 2nd proofs and 180 pages of manuscript of the Bombay-Karnatak volume were also sent to press. Good progress was made in the preparation of material for the next Tamil volume.

Vol. VIII of *South Indian Inscriptions* (Texts) and *the Annual Report on South-Indian Epigraphy* for the year ending 31st March 1933 were also issued during the year.

EPIGRAPHICAL WORK DONE IN CIRCLES AND IN MUSEUMS.

Western Circle.

The Western Circle copied eight inscriptions in Nāgarī characters. Only one of the four inscriptions collected in the Khāndesh District may be noticed here. It is engraved on a slab of stone fixed in the wall of Manyar's Mosque at Nandurbar and its object seems to be the registration of certain gifts to the temple of Siddhēśvaradēva, situated near a holy place called Kōṭi-*tīrtha* (probably a *kuṇḍa* in the vicinity of the temple), by one *Dīkshita* Gōvinda. The

record refers itself to the reign of the *Mahāmaṇḍalēśvara* Lashumi(Lakshmī)dēva who acquired a boon from the god Vaidyanātha. This chief cannot be identified at present but he was probably a feudatory of the Yādavas of Dēvagiri. The inscription contains the date *Saṁvat 1269 Chaitra sudi 8 Ravau* which, taking the year to be Kārttikādi, would regularly correspond to Sunday, the 31st March, A.D. 1213. Of the four inscriptions from the Sholāpur District I shall notice three. The earliest of these is an inscribed slab from Mahim which is dated Friday, the *śuddha pratipada* of Jyēshṭha in the Śaka year 1191, the cyclic year being Śukla, and refers itself to the victorious reign of the (Dēvagiri) Yādava ruler Mahādēva who has the titles and *birudas*, *Mahārājādhirāja Paramēśvara Dvārāvatīpuravarādhīśvara* and *Prauḍhapratāpachakravartin* in the inscription. The date apparently corresponds to Friday, the 17th May, A.D. 1269 when the *pūrṇimā* ended at 41 *ghaṭikās*. The other two are stone inscriptions from Velapur written partly in Sanskrit and partly in Marāṭhī. The dates on them have already been noticed by Kielhorn. One of them was found lying in north-east corner outside a Śiva temple in front of the temple of Ardhanārīśvara. It is dated *Śaka 1222 Śārvarī-saṁvatsarē Mārgaśira vadi 9 Sōmē* (=Monday, 5th December, A.D. 1300) in the reign of the Dēvagiri Yādava ruler Rāmachandra and seems to record that Bāidēva Rāṇē, the brother of Brahmadēva Rāṇē and a subordinate of the *Sarvādhikārin* Jōidēva made a *sarvamānya* gift (of land ?) to the temples of Vaṭēśvara and Jōgēśvara at Vēlāpura in Mānadēśa. The second inscription is now fixed to the right wall of the steps leading to the well in front of the Ardhanārīśvara temple. It is dated *Śaka 1227 Viśvāvasu-saṁvachchha(tsa)rē Mārga sudha* (*śuddha*) *5 Sōmē* (=Monday, 22nd November, A.D. 1305) and mentions the same Yādava ruler. It registers various gifts by Brahmadēva Rāṇē who was the *Sarvādhikārin* of Mānadēśa, to the temple of Vaṭēśvara at Vēlāpura which is described as an *anādisiddhakshētra*. Among the gifts made are the images of the *lōkapālas*, the installation of a *kalaśa*, the erection of a *dhvaja* and a grant of land for the performance of *hōma*, feeding of Brāhmaṇas and the teaching of the six systems of Hindu Philosophy.

Central Circle.

The Superintendent, Central Circle, sent me impressions of inscriptions copied at Rājgīr and Nālandā in Bihār and also in the Saugor District and the Bastar State in C. P. The inscriptions of Rājgīr are from the Maniyar Maṭh area and are in Brāhmī characters of about the second century A.D. Unfortunately all of them are fragmentary and no connected sense can be made out in any of them. One of these, however, clearly mentions Maṇi-Nāga which shows beyond doubt that the site now known as Maniyar Maṭh was dedicated to this snake prince. We also know from the *Mahābhārata* that Maṇi-Nāga had his abode at Rājagṛiha, the capital of Magadha, by paying a visit to which one could acquire merit equal to that gained by a gift of thousand cows. The last two letters in this inscription clearly read *rāja* but the portion after it seems to have been lost and it is not possible to say whether it was followed by a personal name or contained only the name of Rājagṛiha. The next inscription engraved below the seated

figure of a *nāgī* reads *bhaginī Sumāgadhi* and it will, I fear, be hazardous to make any guess about the identity of this lady. It may, however, be noted here that Sumāgadhī is not a very uncommon name. We know that Anāthapiṇḍada, the merchant of Śrāvastī who donated the Jētavana vihāra to the Buddha, had a daughter named Sumāgadhā. Of the inscriptions from Nālandā two are only votive records on images and two are written on bricks. The latter were found in Stūpa site No. 3 and contain the *Pratītya-samutpāda-sūtra.* Several inscribed bricks containing this *sūtra* have already been found at Nālandā of which the two best preserved have been published by me. Similar bricks have also been found at Gopālpur in the Gorakhpur District of the United Provinces. One of the bricks under consideration, however, is particularly interesting. It is oblong in shape and contains fifteen lines of writing in the script of the Gupta period. It contains only the *sūtra*, and the text follows that found in the copper plate discovered in the relic chamber of the large *stūpa* behind the Nirvāṇa temple at Kasia and also in the brick from Gopālpur. The interesting part of the record is that it contains a date at the end which reads *Sa 100·90. 7 Māgha di 20.5, i.e.,* 'the 25th day of Māgha of the year 197'. This year has undoubtedly to be referred to the Gupta era and would thus correspond to A.D. 516. The second brick is elliptical in shape and contains the same text which abruptly stops in the middle of the fifth line showing thereby that the record was never completed. The inscriptions from the Saugor District all come from the fort at Dhamoni and three of them deserve notice here. The earliest of these is found on a stone now used as a lintel over the opening to a step-well in the fort. It is dated *Saṁvat 1388* in the reign of the *Mahārājādhirāja Pātasāhi Sura*[*trāṇa**] Muhamada (=Muhammad II, son of Ghiasuddin Tughluq). As portions of the inscription are badly preserved the purpose for which it was engraved cannot be made out with certainty. The next inscription which is found outside the fort is very badly damaged and very little beyond the date *Saṁvat 1713* can be read. The third inscription which is found on a slab fixed in the parapet wall of the step-well, is dated *Vikramāditya-rāja-sākē-Śālivāhana-Saṁvat 1662 varsahē Aśvinē māsi śukla-paksha....navamyāṁ puṇya-tithau Buddha-vāsarē.* The year must be referred to the Vikrama era in which case the date would regularly correspond to Wednesday, the 11th September, A.D. 1605. The record gives the following genealogy of a line of local chiefs: *Mahārājādhirāja Mahārāja* Gōrasha(ksha)-dēvavarmman, his son Vāhārāyadēvavarmman, (his son) Chaturbhujadēvavarmman and his son Sāhivarāyadēvavarmman, the last three bearing the title of *Mahārājakumāra.* Its object seems to be the construction of a step-well at Dhamānī which is mentioned as the *rājadhānī* or capital.

Burma Circle.

The Superintendent, Archæological Survey, Burma, sends the following report about the epigraphical work done in Burma during the year when this province was under the Government of India.

"Twelve new inscribed stone slabs were brought to light in Burma during the year 1936-37. The earliest is dated 533 Sakarac (A.D. 1171) and the latest

1053 Sakarac (A.D. 1691). One was found by Maung Chan Aye, a cultivator, in his land situated about half a mile to the south-west of Kotheinnayon (Kusinara) at Pagan in the Myingyan District. It contains 21 lines of writing in Burmese inscribed on one face only, the other face of the stone being blank. The first twenty lines constitute one complete document and the last or twenty-first line forms another. The latter document records the name of a slave called 'Dukkha' who was dedicated to a monastery named Thinlyin Kyaung (Sanlyan Monastery). The former records the dedication of slaves on Thursday the 5th waxing of Nadaw in the year 609 Sakarac (A.D. 1247) by Nagayanthin to a monastery (name unknown) founded by his parents and contains imprecations on those who would persecute and injure the slaves. Mention is also made in it of those persons who witnessed the dedication and of others who heard of the dedication at the time it was made. Among the latter are included two monks named Panthagugyi and Harithapu (Karissapū), and in this fact the interest of our document lies. Panthagu or Panthagugyi was a well-known monk of Pagan; he was the primate when Narathu killed first his father, King Alaungsithu (A.D. 1112-1167) and then his elder brother, Minshinzaw, and ascended the throne of Pagan in A. D. 1167. He left Pagan in disgust and went to Ceylon, but came home again soon after the first regnal year of King Narapatisithu (A.D. 1173-1210) and was again elevated to the rank of primate. He was then ninety years of age and did not live much longer.[1] This means that Panthagugyi died during King Narapatisithu's reign. But our inscription indicates that he was living in A.D. 1247 which was 37 years beyond the date A.D. 1210 assigned by Mr. Harvey for King Narapatisithu's death. A question, therefore, arises as to whether the Panthagugyi referred to in our inscription is the same person mentioned by Mr. Harvey or a different one. The probability is that both refer to the same monk, in which case the date Mr. Harvey assigns for King Narapatisithu's death is incorrect and should be rectified, and our inscription will be useful for the purpose.

"The second stone was found by a monk at the old Ye-u Kyaungdaik (Monastery) north of Thawtaban village near Sagaing in the Sagaing District, and he kindly supplied this office with a copy of an estampage he had taken of one face of the stone, which is in Burmese. It consists of only six lines and records the dedication by Ngaponthin, a *Taikthugyi* (headman of a group of villages), of land in honour of the copy of *Tripiṭaka* which his son had prepared; the ratification of the dedication was performed by Zeyathura Mingyin, by pouring water amidst the congratulations of his host of generals, ministers and soldiers; the purpose of the dedication was to provide for the performance of the services due to the Three Gems, the maintenance of the monastery, the supply of robes, food and medicines to the students (monks) and the perpetuation of the *Piṭaka*. The land dedicated was obtained from Zeyathura Mingyi whom Ngaponthin presented with 150 *ticals* of pure gold and the dedication was made on Thursday, the 5th waxing of Tazaungmôn in 533 Sakarac (A.D. 1171). Zeyathura Mingyi

[1] See G. E. Harvey's *History of Burma*, pp. 50, 51 and 55.

is King Narapatisithu. Mr. Harvey places his accession to the throne in A.D. 1173. But our inscription shows that he was already King in A.D. 1171. Mr. Harvey's date is probably incorrect, and our inscription will be useful in rectifying the dates.

"The third inscription was found in the Mandalay Monastery compound at Myingun in the Minbu District, and the fourth at U Pyinnyazawta's Monastery in the Chanthagyi Sathindaik to the north of Minbu Town, by Professor G. H. Luce of the University College, Rangoon, who very kindly furnished me with a copy each of their estampages. Both the inscriptions are in Burmese. The one at Myingun consist of fourteen lines inscribed only on one face of the stone. It records the dedication of slaves to a pagoda (name unknown) by Ngaphonsaungthin and his wife on Sunday the 14th waxing of Tazaungmôn in the year 609 Sakarac (A.D. 1247) and contains imprecations on those who would injure the slaves. The stone at Minbu is inscribed on both faces but is broken off at the bottom. Of what remains there are altogether forty lines. Many words appear to have been obliterated from lines 26-32, and some of those that remain are not quite clear; but the estampage, Professor Luce stated, was taken at night and was none too good. What can be made out from it is briefly as follows:— On Thursday, the 8th waxing of Tagu in the year 529 Sakarac (A.D. 1167) two monks, Thakhin Sagugyi Thera and Thakhin Thinga Thera, dedicated some paddy lands to the golden image of Buddha enshrined in Ngateikthin Monastery. The latter, Thinga Thera, had tanks dug and the land cultivated. He enjoyed the produce of the land, and when he died another monk enjoyed it, and when this monk died again another took his place and so on. Thus in course of time Thakhin Môn Taung was enjoying the produce of the land, when a dispute arose in respect of it between him and Aing Môn Thin. The latter claimed the land as belonging to his grandfather, Sagugyi. There being many witnesses to the dedication of the land, who are mentioned by names, the dispute was decided in favour of Thakhin Môn Taung on Monday the 5th waxing of Tabodwe in the year 582 Sakarac (A.D. 1220) and he continued to enjoy the produce of the land and after him two other monks successively enjoyed it. Then on Tuesday the 5th waxing of Thadingyut in the year 624 Sakarac (A.D. 1262) another dispute arose in respect of the same land, the laymen who claimed it on this occasion being Ngaphonyaukthin, grandson of Sithawut and Ngapangè. Several persons who had knowledge of the dedication of the land and of the produce of the land being enjoyed by monks and not by laymen gave evidence. The date of this stone is apparently 624 Sakarac (A.D. 1262), which is the latest date found in the inscription.

"The remaining eight inscribed stones were discovered in the neighbourhood of Pakhangyi in the Pakokku District during my short visit to the locality in December 1936. Six of these stones bear inscriptions in Burmese and the other two bilingual inscriptions in Pāli and Burmese. Of the six Burmese inscriptions two were found at Theindawpaya, and they record the same religious functions which took place simultaneously on the same date, *viz.*, the dedication of land to the Three Gems, the distribution of clothes among laymen and the gift of one

pig and one goat to certain persons by Min Pyihtwetpetamin (Mañ Prañ-thwak-pai-ta-mañ) and his wife in 800 Sakarac (A.D. 1438). A comparison of the writings of the two inscriptions points to the one being about a hundred years later than the other which is broken horizontally through the middle into two parts and this probably accounts for the copy being made. At the end of the original inscription are, however, about a dozen words added later. These words are omitted in the copy probably because they do not make a complete sentence to convey an exact idea of what is meant. The third Burmese inscription was found at Yanbokon Pagoda (in ruins). It records the dedication of lands to the Three Gems in the common Burmese Era 670 (A.D. 1308), 694 (A.D. 1332) and 713 (A.D. 1351) and the distribution of pieces of cotton cloth among laymen by Ngakantuthin, an official, and his wife. The fourth Burmese inscription was found at Shwethaminku Pagoda and records the dedication of land to the Three Gems by Yathin (Ryāsañ), a rich man, on Monday the 9th waxing of Tazaungmôn in the year 577 Sakarac (A.D. 1215). The fifth Burmese inscription which was found at Pawdawmu Thein (*Sīmā*) records the consecration of the Thein (*Sīmā*) by Thaddama Sakkayanthi (Saddhamma Cakkaramsī) on the 14th waxing of Tabodwe in the year 1053 Sakkaraj (A.D. 1691). The sixth Burmese inscription was found near the Damayon of the northern village of Pakhangyi. It records the foundation of a monastery and the dedication of paddy land thereto by Nga Phyit Kaung Thin (Ña Phlac Koñ Sañ), son of Lukyu (Lu Krū), on Friday the 5th waxing of Kason in the year 567 Sakarac (A.D. 1205).

"Of the above six stones with Burmese inscriptions, one at Pawdawmu Thein and another near the Damayon were left *in situ*, while the others owing to their having been in imminent danger of destruction or loss were removed to the Bungalow at Pakhangyi for their temporary preservation pending the erection of a suitable shed for them when funds are available.

"Of the two stones with bilingual inscriptions, one was found inside the Damayon of the northern village of Pakhangyi. It measures 5′ 1″ in height, 2′ 7″ in breadth and 4″ in thickness. It is inscribed on the four faces, the inscription on each face constituting a distinct document. Referring to the faces in the order of their dates, the first face consists of twenty four lines, of which the first line is in Pāli in Burmese characters and the rest in Burmese. The Pāli text records the adoration paid to the three objects (*i.e.*, Gems) and the setting up thereafter of images of the Buddha and stone inscriptions for the endurance of the religion. The Burmese text records the building by Letwe, a Chief Minister, and his wife of a gilt monastery ornamented with the seven kinds of gems for the residence of a monk named Thakhin Thinkhaya and the dedication thereto of lands purchased for 145 *ticals* of silver. The dedication took place on Tuesday the 8th waxing of Kason in the year 699 Sakarac (A.D. 1337) after the lapse of 1881 years of religion. It also records the gift of pieces of cotton cloth made to several persons mentioned by name. The second face contains thirteen lines of writing in Burmese and records the dedication on Thursday the 10th waxing of Wagaung in the year 713 Sakarac (A.D. 1351) of lands by Ponnya, the King's Chief Minister, and his son-in-law, Letya, also a

minister of the King, to a monastery built by the latter with the assistance of the *Thugyi* (village headman). The third face has sixteen lines of writing also in Burmese, but most of the letters have now become illegible. What remains legible indicates that the inscription records a dedication made in 727 Sakarac (A.D. 1365) probably of land to a pagoda or monastery. The fourth face shows twenty-eight lines of writing, of which the last line is in Pāli in Burmese characters and the rest in Burmese. The Burmese text is much worn and many letters have been obliterated. What remains of it shows that it records three events, which took place at three different times, namely: (1) the dedication of paddy land to the Three Gems by Phonmati, an official, and his wife, on the 13th waxing of Nayon in the year 676 Sakarac (A.D. 1314); (2) the dedication of land on the 14th waxing of Kason in the year 697 Sakarac (A.D. 1335); and (3) the building of a *gu* (cave) and a monastery and the dedication thereto of paddy lands, probably by a village headman, on Wednesday the 3rd waxing of Nadaw in the year 729 Sakarac (A.D. 1367). It also contains imprecations on those who would destroy the good work and benedictions on those who would promote it, and a wish that the King and ministers might participate in the merit thereof. The last line in Pāli contains a prayer that this work of merit might be a help to attain Nirvāṇa. The date of the record on this face may be taken as 729 Sakarac (A.D. 1367) the latest date found on it.

"The other stone with a bilingual inscription was found at Polugyi Pagoda. It is inscribed on both faces. The reverse face which has twenty-seven lines of writing are fairly well preserved, but the obverse has so very much suffered from the weather to which it has been exposed that many words of the opening lines have been effaced and the lines below the ninth have been entirely obliterated. What remains of the inscription indicates that the opening lines are in Pāli in Burmese characters and record the dedication of land to eminent and holy monks; the middle portion is in Burmese and defines the boundaries of the lands dedicated; the concluding lines are in Pāli and describe the method of distribution by monks among themselves of the produce of the land, namely: paddy, sesamum, millet, etc. This stone bears no date; if there was any it has now been effaced; but on palæographical grounds it may be placed in the 17th century A.D.

"Besides the lithic inscriptions mentioned above, some old Indian characters or numerical symbols were found inscribed on some of the terracotta plaques excavated by this department at Kyontu near Waw in the Pegu District during the year under report. These plaques are being dealt with under the heading "*Exploration*" in this same report. It may, however, be mentioned here that the characters or numerical symbols found inscribed on them are similar in character to those found in Old Prome in 1924.[1]

"The translation of the two long inscriptions engraved on the large bell cast by King Sin-byu-shin (A.D. 1551-81) and placed near the Shwezigon Pagoda at Nyaung-U near Pagan, has been prepared and completed. Of these, one is in Burmese and the other in Môn (Talaing); they record exactly the same events,

[1] See *Report of the Superintendent, Archæological Survey, Burma*, for the year ending 31st March 1924, p. 26, para. 31.

that is, the progress of the King in his conquest of the Shan States, his establishment of the true form of Buddhism in those states, his abolition of the hecatombs that regularly took place at the death of a Shan Chief (Sawbwa), his erection of numerous pagodas and repairs to many more in the same states, etc.

"In 1926-27 there was found at Hmawza (Old Prome), a manuscript inscribed on twenty gold leaves, measuring $6\frac{1}{2}'' \times 1\frac{1}{4}''$. The writing is in Old Pyu characters. The Manuscript consists of numerous excerpts from the Pāli Scriptures, but without any indication as to their provenance; the source of each excerpt has now been settled. Their translation and the transliteration of Pyu text are now nearly completed and these two works will be sent to the press during the course of the present official year."

Indian Museum, Calcutta.

Mr. N. G. Majumdar, the Superintendent of the Archæological Section of the Indian Museum, brought to my notice two sets of copper plates which are being edited by him in the *Epigraphia Indica*. One of them is a single plate, now in the possession of Mr. Ganapati Sarkar of Calcutta and is stated to have been found at the village of Nandapur near Surajgarhā in the Monghyr District of Bihār. The script of the record belongs to the Eastern variety of the Gupta alphabet, its language being Sanskrit. The plate which was issued from a village called Ambila, records the purchase of four *kulyavāpas* of fallow land in the village Jaṅgōyikā at the rate of two *dīnāras* a *kulyavāpa*, by the District officer (*vishayapati*) Chhattramaha, which he made over as a gift to a certain Brahmin who was an inhabitant of Nanda-*vīthī* (modern Nandapur) and Khaṭā-pūraṇa-*agrahāra*. The date of the record is the 8th day of the bright half of Vaiśākha of the year 169 and, referring it to the Gupta era, would correspond to A.D. 488. The other plate which is also a single sheet of copper is now preserved in the *Vaṅgīya-Sāhitya-Parishat* of Calcutta. It was discovered in 1929 at the village of Mallasārul in the Burdwan District of Bengal. It has a circular seal soldered to the left side of the plate, which bears in relief the standing figure of a two armed deity with a wheel at its back. The legend which is partly defaced reads *Mahārāja Vijayasēnasya*. The script belongs to the Eastern variety of the Gupta alphabet as was prevalent in Bengal in the 6th century A.D. and resembles that found in the Faridpur plates of Dharmāditya and Gōpachandra. The object of the record is to register a grant of land by the *Mahārāja* Vijayasēna, probably a vassal of Gōpachandra whose name is partly preserved in l. 2 of the inscription and who in l. 11 is mentioned as the *Paramabhaṭṭāraka*. The land measured 8 *kulyavāpas* in area and was situated in the village of Vēttragarttā within the Vakkattaka-*vīthī* of the Vardhamāna-*bhukti*. Mr. Majumdar identifies Gōpachandra of this record with the *Mahārājādhirāja* Gōpachandra mentioned in one of the Faridpur plates and his vassal the *Mahārāja* Vijayasēna with the *Mahārāja Mahāsāmanta* Vijayasēna, the *Dūtaka* of the Gunaighar plate of Vainyagupta. He has also drawn attention to the occurrence of the name Vardhamāna in the present record as being the earliest reference to this name in an epigraphical record.

Besides the two grants mentioned above the same officer reports the acquisition for the Museum of three Brāhmī inscriptions from Kosam in the Allahābād District. "The earliest of them" says he "is a fragment perhaps dating from the latter part of the second century B.C. It mentions the gift of a lady in connection with a gateway (*toraṇe ayāye Nā[ga]—*)". In another fragmentary inscription which is not earlier than the 1st century A.D., only the following words are legible: [*p*]*r*[*i*]*yatāṁ Bhagavā* (May the lord be pleased). The third inscription belonging to about the 1st century B.C. seems to be a complete record. It is in three lines and reads:—

1 Sidha [l*] Jeṭhamitasa putasa Hāritiputasa
2 dhata-kitakasa duvi-go-sahasa-padayisa
3 Goṭhanadisa

Mr. Majumdar interprets the expression *dhata-kitakasa* as 'adopted son' and takes Goṭhanadi (Gōshṭhanandī) as the son of Jeṭhamita (Jyēshṭhamitra) and the adopted son of Hāritiputa (Hāritiputra). But it is also possible that Hāritiputa is only a metronymic of Gōshṭhaṇandī and that he himself took a son in adoption and the gift in question was made to mark the occasion. If my interpretation is correct, the inscription may be translated as follows: "Success. (*This is the record of*) Goṭhanadi, the son of Jeṭhamita, a Hāritiputa, who has taken a son in adoption (*and*) has given away two thousand cows".

Rajputana Museum, Ajmer.

The Curator reports to have copied 19 inscriptions. Among them are four sets of copper plates which are particularly interesting. They were found at the village of Nānāṇā about 3 miles from Bhagwanpur Railway Station on the B. B. & C. I. Railway. One of these is a complete record of Kumārapāla of the Chaulukya family of Aṇahilapāṭaka of whom it gives the following genealogy in the order of succession: *Paramabhaṭṭāraka Mahārājādhirāja Paramēśvara* Mūlarājadēva; *P. M. P.* Chāmuṇḍarājadēva; *P. M. P.* Durllabharājadēva; *P. M. P.* Bhīmadēva; *P. M. P.* Trailōkyamalla *alias* Karṇṇadēva; *P. M. P.* Jayasiṁhadēva with the *birudas Avantināth*a, *Tribhuvanagaṁḍa*, *Barbarakajishṇu* and *Siddhachakravartin*; and *P. M. P.* Kumārapāladēva 'who had defeated in battle-field by the prowess of his arms the king of Śākambharī'. The charter records a gift by the king on the occasion of a lunar eclipse of one *dramma* per day from the custom house situated outside Nāḍūla (*Nāḍūla-talē saṁsthitamāna*) to the god Lākhaṇēśvara established in the precincts of the temple of Tripurushadēva by Lākhaṇadēvī, the daughter of the Chāhumāṇa Rāṇaka Kuntapāla. It was issued from Aṇahilapāṭaka in *Saṁvat 1212 varshē Śrāvaṇa-śudi 5 Sōmē*. Taking the year to be Kārttikādi, the date, which is given both in words and in figures, would correspond to Monday, the 23rd July A.D. 1156 when the *pañchamī* had already commenced. But as the nearest lunar eclipse before this date occurred in Vaiśākha (7th May) only, the actual grant must have been made on this date. The inscription was written by the *ṭhakkura* Mahādēva, son of the *Mahākshapaṭalika ṭhakkura* Lakshmaṇa and born in the Gauḍa-Kāyastha lineage. The *Dūtaka* was the *Mahāsandhivigrahika ṭhakkura* Dēlhaṇa. The record bears the

sign manual of the king at the end. It may be noted here that in ll. 18-19 of this record the phrase *Āsalēśvara-jagatyāṁ* was originally engraved which was afterwards put between two *kākapada* signs to show that a mistake had been made, and the correction *Śrī-Tripurushadēva-jagatyāṁ* written in the same hand on the right hand margin. Of the remaining three records, all of which belong to the Chāhamānas of Nāḍol, the first is an incomplete grant consisting of the second plate only. All the grants and donations mentioned here seem to have been made either to the god Tripurushadēva or to some of the subordinate deities established within the precincts of the same temple. At the beginning are mentioned several minor donations made by some private individuals and also the grant of the village of Bhīṁṭalavāḍā to Chandalēśvaradēvī. Among the grants made by the members of the ruling family we find that the *Mahārājādhirāja* Āsarāja made a grant on the 3rd day of the dark half of Kārttika, V. S. 1173 and that the queen Chaṁdaladēvī also caused some donations to be made to the temple of Chaṁdalēśvara. It is next recorded that on a previous occasion, on the 10th day of the dark half of Pausha, Saṁvat 1171 the *M.* Āsarāja granted a village called Piṁchchhavallī when he went to see the house of Mēhari Śōbhikā. Of the other royal grants, *M.* Ratnapāla seems to have made certain donations and in *Saṁvat 1192 Kārttika-vadi 5 Śanau* (=probably 28th September, A.D. 1135, Saturday, taking the month to be *pūrṇimānta*) the *Mahārājaputra* prince Sāhaṇapāla made a grant (*śāsana*) to Tripurushadēva. Lastly the record appears to mention that Friday, the 5th day of the dark half of Bhādrapada in Saṁvat 1205 (=Friday, the 6th August A.D. 1148) the *Mahārāja* Ālhaṇadēva recognised the grant of the village Naṁdāṇā. The second is a complete set consisting of two plates the writing on the first of which is very much obliterated. At the commencement the inscription mentions the date *Saṁvat [12]19 Pausha vadi 3 Sōmē* (=Monday, the 26th November A.D. 1162, the month being *pūrṇimānta*) and refers itself to the reign of Kumārapāla, 'the conqueror of the lord of Śākambharī' and of his feudatory Ālhaṇa of Nāḍol. The record then gives the following account of the rulers of Nāḍol, which contains some new historical information. In the Chāhamāna family was born Lakshmaṇa; his son Sōhika; his son Balirāja, who was followed by Mahīṁdra. Mahīṁdra's son was Aṇahila after whom came Jēndrarāja. Then in course of time Jēndrarāja's son Āśarāja became the ruler, in fear of whom (the Paramāra) Naravarman took to his fortress. His son was Ālhaṇa who seems to have saved the army of the lord of Gurjjara by destroying the warriors of the ruler of Ilāchala. The inscription then furnishes a detailed account of the mother's family of Ālhaṇa. In the solar lineage was born king Dhūḍa who was an ancestor of Ālhaṇa's maternal grandfather (*mātāmaha-pūrvvajaḥ*). Then came kings Vishṇūddhāra, Haradatta and Kumārapāla. The son of the last mentioned chief was Kīrttipāla who lived at a place called Vardhanapura (?). His brother was Haripāla who is said to have caused fear in the heart of Hammīra. Kumarapāla had a brother called Ratnapāla who was the ruler of the holy land of Sārasvata (?). Ratnapāla's daughter was Dēlhaṇadēvī who became the mother of Ālhaṇa. Afterwards mention is made of Kēlhaṇa, the son of Ālhaṇa. The principal object of the grant

seems to be the restoration of the Naṁdāṇā village to the god Tripurushadēva. Next to this are found several lines written in bolder characters which state that the village Bhīṭalavāṭaka, which originally belonged to Chaṁdalēśvaradēva, was restored to the god and that Ālhaṇadēva granted in addition four *drammas* per month to the goddess Gaurī whose image was set up by the queen Śaṅkaradēvī in the temple of Chaṁdalēśvara. The grant was written by one Khēlāditya. The last three lines of the inscription which seem to constitute a separate grant, state that on *Saṁvat 1220 Āshāḍha sudi 11 Guru-dinē* the *M.* Ālhaṇadēva granted 3 *halas* of land in the Chāṁvaḍī village to the god Tripurushadēva. The corresponding date in the Christian era would be 14th June A.D. 1163. The date is slightly irregular as the week day was Friday on the 11th *tithi* which, however, began on the previous day. This grant was written by the *ṭhakkura* Śrīdhara by the order of the king. The third record is only the first plate of a set which was originally made up of two plates. Though it is not possible to determine in whose time the grant was issued, incomplete as it is, it is none the less interesting because it throws fresh light on certain points in connection with the history of the Nāḍol Chāhamānas. The record mentions that in the great Chāhamāna family was born Lakshmaṇa who built a temple of Vishṇu at Naḍḍūla. His son was Śōbhita and the latter's son Balirāja. Balirāja was followed by Vigrahapāla whose son was Mahēndra. Mahēndra's son was Aṇahilladēva who at Pratishṭhānaka (modern Paiṭhān) killed the best elephants of Bhīma, apparently the Chaulukya Bhīma I. A conflict between these two rulers is referred to also in the Sundha hill inscription of V. S. 1319 of the Songirā Chāhamāna Chāchigadēva. Aṇahilladēva is said to have destroyed the army (?) of king Bhīma and confiscating the villages which belonged to the latter turned the country of Saptaśata (lit. consisting of 700 villages) into one consisting of seven thousand (*dēśaḥ saptaśatō yēna sapta-sāhasrikaḥ kṛitaḥ*). There is a Saptaśata-*vishaya* mentioned in the Sevadi Copper plates of Ratnapāla and it is not unlikely that this part of the country has been alluded to by Saptaśata-*dēśa*. Aṇahilla had two sons Bālaprasāda and Jēndrarāja. The latter is stated to have acted as 'the marine fire in the sea of the army of Bhīma' (the Chaulukya ruler) at Shaṇḍēraka (modern Sāṇḍērāv in Jodhpur State, south-west of Nāḍol). This information is important as the Sundha hill inscription which also mentions this fight omits the name of the defeated prince. Jēndrarāja's son was Pṛithvīpāla who, in the fight at Rōhaḍavāpikā, is said to have destroyed the feudatories of Karṇa, undoubtedly the Chaulukya prince of that name. Pṛithvīpāla had two brothers Jōjaka and Āsarāja. The last named prince killed the Turushkas, *i.e.*, the Muhammadans with a scanty army when Pṛithvīpāla was besieged (?) by them. It is also mentioned that when his relative (*dāyāda*) captured the fortress of Māṇḍavya (Mandor), Āsarāja went there with his army and vanquished his enemies. The last few lines of the plate record that towards the west of the fortress at Mandor he built a big tank and also constructed (?) a *Dvāravatī* endowed with a *maṭha*.

Of the remaining 15 inscriptions copied by the Curator, 11 come from the Sirohi State, 3 from the Jaipur State and 1 from Ḍungarpur. Only a few of these may be noticed here, omitting most of the Jaina votive or commemorative

inscriptions which do not contain much information of general interest. The earliest record from the Sirohi State is found on the pedestal of one of the two standing Jaina images at Pindwārā. It is dated Saṁvat 744 (A.D. 687). Part of the inscription is obliterated but from what is legible we find that Drōnōvaka Yaśōdēva had this beautiful pair of images made by the architect Śivanāga. The Curator points out that this is the oldest Jaina inscription found in Rājputānā till now. The second is also engraved on the pedestal of an image of Mahāvīra at Varkānā. It is dated the 6th day of the bright half of Āshāḍha, Saṁvat 1024 (=16th June A.D. 967) and records that during the reign of Kṛishṇarāja this image was set up by one Vardhamāna of the Vēshṭika family, the architect being Narāditya. The ruler mentioned here is to be identified with Kṛishṇarāja, the son of Āraṇyarāja of the Paramāra family of Mārwār and the record therefore happens to be the earliest inscription known of this branch. The third is engraved on a pillar in front of the temple of Madhusūdana near Girwar. It is dated *Saṁvat 1245 Bhādrapada sudi 1 Budhē* (=24th August A.D. 1188, Wednesday) and mentions the *maṇḍalika* Dhārāvarsha, apparently of the same Paramāra family as noticed above. This inscription has already been noticed by Bhandarkar in *P. R. A. S.*, W. C., 1906-07, p. 26. The fourth is a late inscription dated Monday, the 13th day of the bright half of Māgha, Saṁvat 1736 (*Āshāḍhādi*), Śaka 1601, when the *nakshatra* was Pushya (=Monday, 2nd February, A.D. 1680) of the reign of Vairīsāla of Sirohi. It is engraved on a marble slab built into a step-well at the village of Sindratha. The inscription provides the following genealogy of the rulers of Sirohi: At the great city of Śivapurī (Sirohi) in the Dēvḍā branch of the Chāhamāna lineage, the lord of Arbuda, the *M.* Suratrāṇajī and his wife Bāī Sushā(khā) of the Sisodā family; their son *Mahārāja* Rājasiṁha and his wife Bāī Rambhāvatī of Vīrī(ra)pura; their son *Mahārāja* Ashē(khē)rāja and his wife Bāī Sadākumārī of the Rāṭhōr family of Muḍāsanā (?); their son *Mahārāja* Udibhāṇajī and his wife Bāī Ratnakumārī of the Sisodā family; their son *Mahārāja* Vairisāla. The inscription records the construction of a well by Sadākumārī at Sīdhaṇuta (modern Sindratha). The chief mason was Dudā, son of Śivadāsa.

All the inscriptions from the Jaipur State are late records and come from Toḍā Rāyasiṁha. One is engraved on the wall of a step-well called Chakravāya and records that the well was built by the *Purōhita* Chakrapāṇi and his two sons during the time of *Rājā* Rāmachandra, probably a local ruler, son of *Rājā* Pṛithvīrāja and grandson of *Rājādhirāja* Sūryaśrēṇī. The date of the record is the 2nd day of the dark half of Magasara (Mārgaśīrsha), Saṁvat 1604, Śaka 1469. The inscription also records that at the time Pātiśāha Asalēmasāhi (Emperor Salim Shāh, son of Sher Shāh Sur) was the ruler (of Delhi) and Rāṇā Udayasiṁhadēva, son of Saṁgrāmadēva, was the ruler of Kumbhalgaḍh. The second inscription found in another step-well is dated Sunday the 6th day of the bright half of Śrāvaṇa, Saṁvat 1654, Śaka 1519 and records that *Rājā* Jagannātha (son of *Rājā* Bhāramala) belonging to the Kūrma family had the well constructed. The third inscription also found in a step-well is dated Thursday, the 2nd day of the bright half of Vaiśākha, Saṁvat 1661, Śaka 1526 and records

that during the reign of *Rājā* Jagannāthadēva, Sāha Khētasī commenced the construction of the well and after his death Ākhā and others completed it. Ākhā appears to have been the son of one *Sādhāḍa* Pṛithvīrāja who held a high position at Chitor.

The record from Ḍungarpur is found on a single sheet of copper and is written in a vernacular dialect. It records that at Giripura (Ḍungarpur) the *Rāyārāya Mahārāval* Āsakaraṇa granted a village called Hāṁsala to Dube Lashamaṇa (Lakshmaṇa), Dube Vanayaṁga and Dube Anaṁta while stopping at the Vaṇēśvara temple and performing the *suvarṇabhūmidāna* ceremony on the occasion of a lunar eclipse on the 15th day of the bright half of Asō (Āśvina) in Saṁvat 1634. The date corresponds to 26th September, A.D. 1577 when there was a lunar eclipse.

Government Museum, Madras.

Four sets of copper-plate grants were acquired by the Museum during the year. The earliest of them is a record of Pṛithvī-Mahārāja of Pishṭapura (Piṭhāpuram in the East Godavari District) and is dated in the 46th year of his reign. It has been reviewed in the *Madras Epigraphical Report* for 1917 (p. 130) and is now under publication in the *Epigraphia Indica* (Vol. XXIII, pt. iii). Next in chronological order comes the grant of the Eastern Gaṅga King Anantavarman Chōḍagaṅga dated Śaka 1040. It has already been noticed in the section on Epigraphy of this report for 1935-36 and, I am told, also in the *Annual Report on South-Indian Epigraphy* for that year. The third set contains an inscription of Kāpa-bhūpati, successor of Prōlaya-bhūpa, who was ruling 'the entire earth' from Ēkaśilānagarī (Warangal in the Hyderābād State). After tracing the genealogy of the chief for four generations, the document states that Kāpa, 'who was equal in prowess to Pratāparudra' granted the village of Prōlavaram to Kandaya Peddibhaṭṭa on the occasion of a solar eclipse in *Śaka 1267, Pārthiva, Māgha* (=A.D. 1346, February 22). The record is interesting as it shows that Kāpa was the political successor of the Kākatīyas of Warangal. In the Kaluvachēṟu grant of Anitalli 'mention is made of a Kāpaya-Nāyaka, the successor of Prōlaya-Nāyaka, who rescued the country from the Muhammadans immediately after the death of Pratāparudra'. The latest known date of Pratāparudra is A.D. 1330. As the donor of the grant under review was having Warangal as his capital in A.D. 1346 and was also the successor of a chief named Prōlaya it is not unlikely that he is identical with the Kāpaya-Nāyaka of the Kaluvachēṟu grant. I learn that this inscription also has been noticed in the *Annual Report on South-Indian Epigraphy* for 1934-35. On the fourth set is engraved an inscription of the Vijayanagara king Kṛishṇarāya dated Śaka 1432 (A.D. 1510). It records that the king granted the village of Polipāḍu to the Brahmin Chandramauli and does not add anything to our knowledge of the history of the period. It has been published in the Telugu journal *Bhāratī* (Vol. XIII, part ii, pp. 78 ff.).

Curzon Museum of Archæology, Muttra.

The Curator reports the acquisition of two fragmentary stone inscriptions in Kushāṇa characters. On one of them is visible only the word *Sohitena* 'by

Sohita (Śōbhita)' and on the other *bhāgineyiyenā[ma]*. He also reports a further acquisition of 16 clay seals some of which are inscribed. Of these the two that are in Brāhmī characters have the legends *Pusadevasa* 'of Pusadeva (Pushyadēva)' and *Dapasa* 'of Dapa (Darpa)'. An oval clay seal bears the *triśūla* and *jyōti* (flame) above a horizontal line and in the space below is written *Śivaskanda* in early Gupta characters. The Curator suggests that the *triśūla* represents Śiva and the flame Skanda, the son of Agni. Other seals contain the legends, *Rudito, Sarvakasa, Aśvasēnasya, Vasukasa, [Ha]stibalasya* and *Sarudvare* (?) in the Kushāṇa script.

Prince of Wales Museum of Western India, Bombay.

The Curator of the Archæological Section informs me that two sets of Kadamba grants—one belonging to the 30th year of Ravivarman and the other to the 19th year of Kṛishṇavarman II—were acquired for the Museum. Both these records have already been published in the *Epigraphia Indica.*

Central Museum, Nagpur.

The Curator states that the Añjanavatī Plates of the Rāshṭrakūṭa king Gōvinda III of Śaka 722 which were recently edited in the *Epigraphia Indica* have now been purchased for the Museum. The Deotek stone slab, which was noticed by Cunningham long ago as containing two inscriptions, one in Brāhmī and the other in Gupta script, has also been removed to the Museum.

Dacca Museum.

The Curator reports the acquisition of two copper-plate inscriptions, *viz.*, (1) the Madanpāḍā plate of Viśvarūpasēna and (2) the Sāmantasār Plate of Harivarmadēva. It may be noted that the former which is already published, was originally in the collection of the Asiatic (now Royal Asiatic) Society of Bengal from where it was lost a long time ago. The latter was noticed by Mr. N. N. Vasu in his *Vaṅger Jātīya Itihāsa* (in Bengali), Vol. II, p. 215. It could not, however, be properly edited as the writing on the plate is very much effaced and hardly decipherable.

Victoria Hall, Udaipur.

The Superintendent, Mewār Archæology, has discovered three new inscriptions at Dabhoka, a village 11 miles to the east of Udaipur. Two of these, both fragmentary, were found fixed in a small platform built round the worship-stone known as Rāḍājī. One of them which contains 20 lines of writing, belongs to the Paramāra rulers of Mālava of whom the following names are mentioned: Sindhurāja; his son Bhōjadēva; Udayāditya and Naravarman. The names of Lakshmadēva and Jayasiṁha, respectively the immediate predecessor and successor of Udayāditya, have been omitted in the present record. In l. 9 is introduced one Rudrāditya who is described as 'the pre-eminent Kāyastha' (*kāyastha-kuṁjara*). The next line seems to have described his son whose name is completely lost and from l. 12 it appears that the latter had a son named Mahīpati. The object of the record is to mention the building of two Śaiva temples apparently by a member of this family. The second inscription is a

fragment in 31 lines. It seems to have contained a long genealogy of a Chāhamāna family of which the following names are now preserved: Mahēndrapāla, Suvarṇapāla, Mathanasiṁha, Matidhavala, Dāṁdaka, Vāpula, Kshētrasiṁha, Bhuvaṇiga, Sōmasiṁha, Samarasiṁha, Arisiṁha, Tribhuvanapāla, Bhīmasiṁha, Arju[nasiṁha*] and Lakshaṇapāla. Many ot these seem to have been officers under the rulers of the various Chāhamāna dynasties. Durlabharāja mentioned in l. 16 as *bhūmi-vallabha* 'lord of the earth' may be one of the Chāhamāna rulers of Śākambharī bearing the same name, probably Durlabharāja II. In l. 23 some one, probably a son of Bhuvaṇiga, whose name is lost, is mentioned as being appointed an officer (?) of the 'lord of Naḍḍūla-nagara'. His brother, whose name is also lost, was the *talāraksha* of the same ruler. Only the last syllable of the name of this ruler is preserved which is *ha*. Naḍḍūla-nagara is certainly to be identified with Nāḍol but who this ruler was cannot be ascertained. He should not be identified with Jayantasiṁha (A. D. 1194), the son of Kēlhaṇa, as Arṇōrāja (A. D. 1139), one of the earlier kings of the Śākambharī branch, is mentioned subsequently in the same inscription. In l. 27 Lakshaṇapāla is stated to have died in a conflict between Arṇōrāja and another prince of whose name only the last three syllables, *viz.*,....*ladēva* remain. It may not be too hazardous to suggest that this opponent of Arṇōrāja was Kumārapāladēva of the Chaulukya dynasty of Aṇahilapāṭaka as the Jaina chronicles inform us of the struggle Kumārapāla had with the Chāhamāna Arṇōrāja. Ll. 28-30 seem to suggest that the son of Lakshaṇapāla, whose name is lost, constructed a temple of Śiva. The last line mentions Bhuvanachandra-Sūri, 'the sun of the Chaitra-*gachchha*' who was probably the composer of the *praśasti*. The Superintendent, who has sent me the impressions of these records along with a note on them, thinks that both these inscriptions must have been brought from outside, probably by Col. Tod, the ruins of whose residence in Mewār are situated quite close to the place where the stone slabs have been found. The third inscription at Dabhoka is found on the left wall of the Chārabhujā's temple. It is in 9 lines, the language being incorrect Sanskrit with an admixture of local dialect towards the end. The date of the record is *Vikramakālāt Saṁvat 1663 varshē Vaiśā[kha] māsē su(śu)kla-pakshē tṛitīyā-tithau* in the reign of *Mahārāṇā* Amarasiṁha. As the name of the week-day is not given it is not possible to verify the date. The object of the record is the construction of a temple in the village of Vāsāpanamōka (?) in Mēdapāṭa (Mewār) by the potter Kṛipā, his wife Nūjā, their sons Dhanā and Jetā and their wives both called Nāthī. The name of the *sūtradhāra* was Bhīṇā.

MUSLIM EPIGRAPHY.

By Mr. G. Yazdani.

During the year under review some sixty new inscriptions were discovered, which are being studied for publication in the next number (1937-38) of the Epigraphia Indo-Moslemica. The most important of these are as follows:—

(i) *Two inscriptions of Firoz Shah Baihmani of Gulbarga.*—The inscriptions have been discovered at Firozabad, a town built by this king

on the bank of the river Bhima, in the south of Gulbarga. The town is in ruins now but can be approached from Shahabad a station on the G. I. P. Railway between Gulbarga and Wadi junction. The inscriptions are interesting both from the palæographic and historic points of view as they represent a beautiful style of writing and contain the regal titles of the king and also the dates of the building of a mosque and a tomb.

(ii) *Two inscriptions of 'Alāu'd-Dīn Baihmanī from Bidar.*—One of them has been found carved over the doorway of a tomb at Nabuād in the suburbs of Bidar. The inscription contains the genealogy of a divine named Shamsu'd-Dīn who enjoyed considerable fame for his piety and learning during the reign of 'Alāu'd-Dīn Baihmanī, and whose name is mentioned by Firishta. The other inscription records the building of a well as an act of charity by a royal lady who is referred to as the mother of the exalted Maḥmūd Khān. This inscription has also a Sanskrit version inscribed below the Persian text.

(iii) *The inscription of Muḥammad 'Ādil Shāh of Bijapur from Mudgal.*—This record is in verse and it refers to the construction of a marble palace, styled the Gagan Maḥall, in the Mudgal Fort. Muḥammad 'Ādil Shāh was fond of architecture and the famous Gol Gumbad at Bijapur was also built by him. The marble palace does not exist now but the inscriptional tablet was lying near the ruins of a pavilion on the Bālā Ḥisār. The ruins of the pavilion show no traces of marble work. The inscription is dated 1053 H. (1643 A. D.).

(iv) *The inscription of Aurangzeb from the Bidar district.*—This inscription is carved on a mosque at Chandapur, a village some ten miles from Bidar. It refers to the justice and equity of Aurangzeb's administration and is dated 1084 H. (1673 A. D.). The style of writing is *Nastā'līq*.

(v) *Two inscriptions of Quṭb Shāhī Kings from Hyderabad.*—These inscriptions belong to the reigns of Muḥammad Qulī Quṭb Shāh (1580-1612 A. D.) and 'Abdulla Quṭb Shāh (1626-72 A. D.) and are very pleasing specimens of the *Thulth* style of writing. The inscription of Muḥammad Qulī Quṭb Shāh contains the name of the calligraphist, Jamālu'd-Dīn ibn Ḥusain Muḥammad Shirāzī. There are several other inscriptions written by this calligraphist in Hyderabad, the most notable among them being the prayer-niche inscriptions of the Jāmi'Masjid and the Sājida Khānam mosque in Mughalpura.

(vi) *An inscription of 'Abdulla Quṭb Shāh from Golconda.*—The slab on which the inscription was originally carved, was through some mishap broken into three pieces which were scattered. I recovered two of them in 1914 and published the text in the *E. I. M.*

1913-14. The third piece has recently been found in clearing the plinth of the Musa Burj for purpose of repairs. In editing the text of the first two pieces of the tablet I had offered the guess that the peace between the royalists and the Quṭb Shāhī king was declared not on account of the weakness of the latter but on account of the panic which had been caused in the Mughal army by the death of Mīr-i-Mīrān, a Mughal general, by a shot from the Quṭb Shahi gun.* The missing piece of the tablet which has been recovered now confirms this guess.

(vii) *Inscription of Neknām Khān from Mangalwāram in the suburbs of Hyderabad.*—Neknām Khān was the Governor of Carnatic during the reign of Abu'l Ḥasan Quṭb Shāh (1672-87 A. D.). Regarding this officer Talboy Wheeler has made an interesting note on page 18 of his book "Madras in the Odlen Times". He writes:—

"For more than a century and a half, Golconda has been ruled by a dynasty of Mussulman kings, known as the Kuttub Shahs; but the Commander-in-Chief in the Carnatic appears to have been a man bearing the title Niknam Khan. To this Commander-in-Chief, the Presidency at Fort St. George gave the title of Nabob; *and it was from him that they obtained the cowle for the district of Madraspatam after the flight of the Raja of Chandragheri.*"

The present inscription records the grant of the village, Mangalwaram, for the maintenance of the tomb of Neknām Khān which still exists at Golconda. The epitaph on the tomb of Neknām Khān has been published before in the *Epigraphia Indo-Moslemica* for 1915-16.

During the year under report the 'Supplement' to the *Epigraphia Indo-Moslemica* for 1933-34 has been issued and the number for 1935-36 is in the press and will be issued shortly.

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* *Epigraphia Indo-Moslemica*, 1913-14, pp. 51-52.

SECTION IV.—MUSEUMS.

INDIAN MUSEUM, CALCUTTA.

By the late Mr. N. G. Majumdar.

Acquisitions.

The chief event of the year, so far as additions to the Archæological Section are concerned, was the acquisition of a large number of objects belonging to the prehistoric site of Nal in the Kalat State of Baluchistan. These comprise the finds retrieved by Mirza Sher Muhammad in 1903 from the Sohr Damb mound at Nal and also a part of the collection made by Mr. Hargreaves in course of his excavations at the same site in 1925-26. The objects had been kept up till now in the McMahon Museum at Quetta which was completely destroyed in the recent earthquake. The Baluchistan administration decided to discontinue the Museum and handed over the collections, most of which had been luckily salvaged, to the Government of India for custody elsewhere. I was deputed to Quetta in August, 1936 to make a selection and remove such antiquities as were worth preserving, partly to the Indian Museum, Calcutta and partly to the Central Asian Antiquities Museum, New Delhi. As there was already a good collection of Nal antiquities in the latter Museum the additional group of objects from this site was sent down to Calcutta. A few specimens out of those collected by Sir Henry McMahon in Seistan [1] and over two thousand coins representing the Cabinet of the Quetta Museum were also taken to Calcutta. The Nal and Seistan antiquities have since been arranged in the Prehistoric Gallery in the New Hall of the Indian Museum.

The bulk of the Nal collection comprises painted pottery vessels having thin walls and bearing geometric patterns executed in polychrome on cream or buff ground. Many of the vessels were found deposited in the burials opened by Mr. Hargreaves. Along with the pottery were found copper implements, stone beads and other objects which have also been exhibited in the Prehistoric Gallery. The peculiar Nal ware was first described by Sir John Marshall [2] whose account was based on the materials discovered by Mirza Sher Muhammad, while the later finds were described by Mr. Hargreaves.[3] Since then it has received further attention from scholars in connection with the discoveries at Mohenjo-daro and other sites of the Indus valley. Polychrome 'geometric' vases akin to Nal examples have been discovered also elsewhere in Baluchistan and at some of the sites explored by me in Western Sind.

To an earlier phase of the prehistoric culture are to be attributed the objects from Seistan including painted pottery vases and potsherds, and seven leaf-shaped stone arrow-heads (Plate XXXIV). The pottery bears geometric pat-

[1] *Geographical Journal*, 1906.
[2] *A. R., A. S. I.*, 1904-5, p. 105.
[3] *Mem. A. S. I.*, No. 35.

terns and animal motifs of a very much conventionalized character but the decoration is not executed in polychrome like that of Nal. One of the arrow-heads has serrated edges (Plate XXXIV, 1) and all of them show flakings on both sides. The materials of which the arrow-heads are made are chert, agate, horn-stone, jasper and chalcedony. At some of the sites in North Baluchistan, Sir Aurel Stein came across similar examples of arrow-heads and elongated vases like those (Plate XXXIV, 17) from Seistan.[1] One such arrow-head was also collected by me from a site in Western Sind.[2] Stein brought back from his Third Central Asian Expedition (1915-16) a large collection of Seistan pottery and stone arrow-heads described and illustrated in his "Innermost Asia,"[3] but McMahon's collection has never been published.

During the year under report Mother Burke of the Calcutta Loreto House, presented at my request six Babylonian clay tablets (circa 2240 to 1750 B. C.), collected from Mesopotamia. These were sent for examination to the Department of Egyptian and Assyrian Antiquities, British Museum. Mr. C. J Gadd of the Museum who examined the tablets has kindly furnished a description of their contents which is reproduced below. The tablets will be exhibited in the Prehistoric Gallery of the Indian Museum :—

"1. Accounts of a herdsman named Enlilzisagal, from the 15th of the month of Ezen-Ninazu to the 13th of the month Akiti (6 months) in the 3rd year of Gimil-Sin, king of Ur, about B. C. 2200. It shews the numbers of oxen, asses, sheep, 'mountain-sheep', and gazelles which were received from various sources during this period, and the numbers of the same despatched on demand of authorities; concluding with totals of the various animals in hand at the time of accounting.

"2. List of valuables, comprising a weight of silver and gold, and six objects and vessels of bronze, brought to a temple by a certain Ningirsu-isag. Received from Naram-ili by Lukuzu. Dated in the "year when he appointed the high priest of the Moon God by divination", *i.e.*, the 44th year of Shulgi, king of Ur, about B. C. 2240.

"3. Note of a quantity amounting to one and a fraction *gur*-measures of barley distributed out of a loan of barley for various recipients who received the quantities entered to them. Undated: period of 3rd Dynasty of Ur, about B. C. 2300-2100.

"4. Note of one goose (?) brought to the temple of a deity by Ili-idinnam (partly illegible). The date is illegible, but probably belongs to the period of the First Dynasty of Babylon, about B. C. 2050-1750.

"5. Partly illegible. Note of 16 asses brought in from Hamanie (?) and taken in charge by a temple-officer. Dated in the first year of Bur-Sin, king of Ur, about B. C. 2200.

[1] *Mem. A. S. I.*, No. 37.
[2] *Mem. A. S. I.*, No. 48, p. 93 and Pl. XL, fig. 6.
[3] Vol. II, pp. 957 *ff.*

"6. List of sheep, goats and asses, with numbers of each, received from Nalul by Shulgiuru(?)-mu. Dated in the 4th year of Bur-sin, King of Ur, about B. C. 2200."

Quite a large number of antiquities of the historical period were also added to the Indian Museum during the year. These represent mostly objects found in departmental excavations, which have been already noticed and described in the Annual Reports. A bare mention of the various important acquisitions may however be deemed necessary. From Taxila was received a representative group of pottery, beads, terracottas, etc., which together with those already exhibited in the Museum will give a fair idea of the portable remains of the different phases of culture represented at Taxila. The most interesting are the beads of agate, cornelian, jasper, chalcedony and other semi-precious stones, as well as glass and chank shell. They are divisible broadly under two groups according as they come from the Bhir Mound (at least 4th-3rd century B. C.) representing the earliest city of Taxila, and Sirkap and other sites (1st century B. C. onwards) representing the cities that flourished during the rule of the Śaka-Pallava and Kushāṇa dynasties. A difference in technique as well as in type is discernible between the beads from Bhir mound and Sirkap. A corresponding difference can also be detected in the pottery vases, those from Sirkap definitely showing a Hellenistic influence which is absent in the potteries from the earlier city.

Among other antiquities added to the Museum may be mentioned the terracotta plaques from the Main Temple at Paharpur in the Rajshahi District of Bengal of which hundreds have been discovered in course of excavation. It has been possible to accommodate in the Museum only a fraction of this collection. The rest will be kept at Paharpur itself or distributed to other museums of India. A number of objects recovered from excavations at Pagan and Hmawza were also received from the Office of the Superintendent, Archæological Survey, Burma Circle, some of which have been exhibited in the galleries. This collection includes inscribed votive tablets in terracotta with figures of Buddha, a beautiful collection of beads of crystal, cornelian, amethyst, etc., and silver and gold objects including a silver stūpa and images of Dvārapāla and Buddha which are likewise executed in silver.

Another important acquisition was a stone image of Sadāśiva (height 3′-2″) which comes from Rajibpur in Police Station Gangarampur in Dinajpur District, where it was dug out by some labourers engaged by the local Roman Catholic Mission. Enquiries go to show that it was found within the area covered by the mounds, which together with Bangarh, the principal one of these, are protected under the Ancient Monuments Preservation Act. I saw the image in December, 1936 in a thatched hut near Bangarh, belonging to the Kutchery of the zemindar, Babu Nrisingha Charan Nandy Chowdhury. Recognizing the importance of the sculpture I recommended its acquisition under the Treasure Trove Act and through the good offices of the Collector of Dinajpur had it removed to the Indian Museum.

The image (Plate XXXV, *a*) is a ten-armed representation of the god Sadāśiva of which there are several examples in the Rajshahi Museum and in the

Museum of the Sāhitya Parishat in Calcutta. This is however the only figure of Sadāśiva in the Indian Museum collection. As is well known, Sadāśiva was the tutelary deity of the Sena kings of Bengal and is figured on the seal attached to their copper-plate charters in which it is described as the *Sadāśiva-mudrā* or 'the seal of Sadāśiva'. In representations of this particular type, which are not known outside Bengal, the deity is seated cross-legged on a lotus in meditation, holding a number of weapons and attributes in his hands. His three out of the five right hands carry respectively, *śakti*, *śūla* and *khaṭvāṅga*, while another hand is extended below in the gift-bestowing attitude. The corresponding four left hands carry respectively the blue lotus (*Nīlotpala*), *ḍamaru*, snake and *vījapura*. The remaining two right and left hands which almost touch the breast in front and are placed close to one another, are partially broken; but judging from other images in which the hands are intact there is no doubt that the right one shows the *abhaya* pose while the left one carries the *akshamālā*, traces of which are still visible on the original stone. These features of Sadāśiva fit in well, as I have shown elsewhere, with this description given in the *Uttara-kāmikāgama*.[1] Usually in such images not more than three out of the five faces of the deity are represented. This sculpture however shows an extra head which is added behind, the back portion of the image being treated in the round (Plate XXXV, *b*). On the pedestal below the lotus seat appear two other male figures, evidently the attendants of Sadāśiva, of which the right one carries a staff and a *kapāla*, while the left one carries a *triśūla*. To their left is Śiva's bull and to their right are two kneeling persons who are evidently devotees. The back slab is fully covered by foliated patterns and scroll work. It is pointed at the top where it is decorated with a *Kīrtimukha* ornament. Below it on two sides are two flying *Vidyādharas*, each carrying a garland. The treatment of the back slab which shows a profusion of ornaments suggests a later date for the sculpture as compared to the sculptures of the Middle Pāla period (tenth-eleventh century A. D.), for instance the Baghaura image of Vishṇu of the time of Mahīpāla (1st quarter of the 11th century). On stylistic grounds the sculpture should be assigned to the 12th century A. D. This date, as we shall see presently, is also corroborated by an inscription in proto-Bengali characters engraved on the pedestal of the image.

The inscription (Plate XXXV, *c*) consists of three lines, two of which are clear and there are traces of a few letters of the third line, but this portion cannot be restored. The inscription reads as follows :—

1 *Oṁ*[2] *Parameśvar-ety-ā(di)-śrīmad-Gopāladeva-pādānām—viṁjaya(vijaya)-rājye śrī-*

2 *mat-Sadāśivapādāḥ san(dh)i-[sa]-śrī-Purushottamena pratishṭhitāḥ saṁ*14

3....*dā -i*....

It thus records the erection of the image of Sadāśiva in the 14th regnal year of Gopāladeva by one Purushottama, who is described as *sandhi-sa*. In my

[1] *Inscriptions of Bengal*, Part III, p. 81, n. 1.

[2] Expressed by symbol.

opinion it stands for *sandhivigrahī sachiva, i.e.*, the 'Minister of Peace and War' in the same way as *mahāsā* in some of the Sena Copper-plates stands as an abbreviation for *Mahāsāndhivigrahika.* As the characters of the inscription cannot be earlier than the 12th century A. D., this Gopāla should be identified with Gopāla III, the grandson of Rāmapāla and son of Kumārapāla. One of the verses in the *Rāmacharita* refers to him, but its interpretation has given rise to much conjecture. According to R. D. Banerji, Gopāla was still an infant when he succeeded his father and "seems to have been murdered very soon after his accession."[1] The latter part of the statement is based on the same verse of the *Rāmacharita*, which runs as follows :—

Api Śatrughn-opāyād=Gopālaḥ svar=jagāma tat-sūnuḥ | hantuḥ Kumbhīnasyās=tanayasy=aitasya sāmayikam=etat ||

Mr. R. Chanda takes the passage to mean that Gopāla died in battle or in the hands of a murderer.[2] In this connection it should be noted that as the verses of the *Rāmacharita* have a double meaning, applicable to Rāmapāla and his family on the one hand and to Rāma and his associates of the *Rāmāyaṇa* on the other, we should try to understand the passage from this twofold point of view. The superficial meaning no doubt is that Gopāla went to heaven due to the expedient or stratagem (*upāya*) of 'Śatrughna,' but what connection has it with the latter part of the verse in which the killer of *Kumbhīnasyāḥ tanaya, i.e.*, 'the son of Kumbhīnasī' is stated to have adopted a similar timely expedient? The son of Kumbhīnasī was the demon Lavaṇa whose story is given in the *Rāmāyaṇa, Uttara-kāṇḍa.* Śatrughna, the fourth brother of Rāma, who volunteered to destroy Lavaṇa, was advised by Rāma (Chapter 63, Vv. 28-31) and also by the sage Chyavana (Chapter 67, Vv. 23-24) to attack the demon only when he was unarmed, as otherwise if he had with him his miraculous weapon, the *śūla* which he inherited from Śiva, he would be invincible. Śatrughna following this advice placed himself bow in hand, at the gate of Lavaṇa's palace, when the latter had gone out to the forest in quest of food, having left the *śūla* in his residence. Lavaṇa returned carrying on his person a large number of animals killed by him and was about to enter the palace, when Śatrughna challenged him to a duel fight and prevented him from going in to fetch the *śūla.* Like a true hero Lavaṇa accepted the challenge and being quite unarmed fought with trees, stones, etc. At last he was completely overpowered by Śatrughna who was fully armed and had at his disposal a special arrow given to him by Rāma, the same that was used by Vishṇu in slaying Madhu and Kaiṭabha. In the verse of the *Rāmacharita* the allusion evidently is to the stratagem employed by Śatrughna in killing Lavaṇa with whom evidently Gopāla is here compared. In the second half of the verse the allusion is made more clear by the statement that a similar trick was also employed against Kumbhīnasī's son (*i.e.*, Lavaṇa) by his enemy. It seems that like Śatrughna, the enemy of Gopāla played a foul trick on him and attacked him when he was unarmed.

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[1] *Mem. A. S. B.*, Vol. V, No. 3, p. 102.

[2] *Gauḍarājamālā*, p. 53.

It is difficult to say how exactly Gopāla died and whether he died while fighting with his enemy. A passage in the stone slab inscription of the same king discovered at Māndā in Rajshahi District which is now kept in the Indian Museum, says, *Śrīmad-Gopāladevas=tridivam=uparataḥ svechchhayā tyakta-kāyaḥ*, *i.e.*, "the illustrious Gopāladeva went to heaven having left his body of his own accord." This passage is not really contradictory to the statement in the *Rāmacharita*. For, even if Gopāla was killed in battle while fighting with his enemies he might be said to have chosen to end his existence in this way, as a hero. It is, however, not known who his enemy was. Some scholars have put forward the suggestion that his uncle Madanapāla who ascended the throne after his death was involved in a conspiracy against him. But there is nothing definite in support of this conjecture. There is also no evidence to justify the statement that Gopāla ascended the throne as an infant or that his reign was merely ephemeral. If there be any such suspicion it is completely removed by the present inscription, which mentions his regnal year 14, showing that Gopāla had a reign of at least 14 years.

Three Brāhmī inscriptions from Kosam in Allahabad District were presented to the Indian Museum by Baron Ow Wachendorf, late Consul-General for Germany, who acquired them at the site. The earliest of the inscriptions is a fragment dating from about the latter part of the second century B. C. It mentions the gift of something by a lady relating to a gateway (*toraṇe Ayāye Nāga.....*). In another fragmentary inscription which is not earlier than 1st century A. D. only the following words can be read: (*Prī*)*yatāṁ Bhagavā* (May God be pleased). The third inscription, which seems to be complete, although somewhat worn out at places, mentions the name of a person Goṭhanadi (Goshṭhanandin) which occurs in the genetive case. He is stated to have given away two thousand cows in charity, and is described as the adopted son (*kṛitaka*) of Hāritīputra, son of Jyeshṭhamitra. The object of the inscription is not however stated. The stone looks like a pavement slab and the purpose of the inscription was probably to record the gift of it by Goshṭhanandin. The inscription seems to date from the 1st century B. C. It reads as follows:—

1 *Sidha*(*ṁ*) (*J*)*eṭhamitasa putasa Hāritiputasa*
2 *dhata-kitakasa d*[*u*]*vi-go-sahasa-padāyisa*
3 *Goṭhanadisa*

Work in the Galleries.

The antiquities from Nal and Taxila were arranged in three show-cases in the New Hall, and the arrangement of smaller sculptures in nine show-cases in the Long Gallery was completed during the year. Eight of the latter cases occupy the middle of the Gallery, placed in a row between the Bays, extending from east to west. Care has been taken to bring the cases as near as possible to the sculptures of the different Schools in the respective Bays with which they are related. With the limited space at our disposal in the galleries this appeared to be the only means of exhibiting the smaller sculptures, which for obvious reasons

cannot be left in the open. One of the cases containing Jaina bronzes has been kept in the Bay set apart for sculptures connected with this faith.

An important work that was taken up and completed during the year was the thorough overhauling of the Inscription Gallery at the southern extremity of the New Hall. In the year 1926-27 the Hindu Inscriptions, that had been hitherto exhibited in the room at the eastern end of the Long Gallery, were brought over here as that room had to be converted into a Moslem Gallery. The rearrangement of the stones in the New Hall left, however, much to be desired as the exhibits were huddled up within a narrow space and very few of them could be studied in proper light. To remove these defects and to ensure a better display, some additional masonry benches have now been provided, some of the pedestals which stood in the way of visitors in the eastern section of the Gallery have been pulled down and the inscriptions so rearranged as to enable scholars to study them with greater ease. Steps have also been taken as far as possible to divide them into different groups, regional as well as chronological, prominence being given to those that are really important. Copper-plates and smaller stone inscriptions, which were never exhibited before and so long had to be kept in the Strong Room of the Museum, have now been put up in this Gallery in three show-cases specially designed for the purpose.

North of the Inscription Gallery in the same Hall, a good deal of rearrangement was in progress at the close of the financial year, for the exhibition of prehistoric objects, and also minor objects like pottery, terracotta, beads, etc., of the historic period. The northern half of the Hall has been set apart for the prehistorics and the southern half excluding the Inscription Gallery for the minor objects of the historical period. In two of the wall-cases near the Inscription Gallery have been arranged terracotta plaques and carved bricks from North Bengal (circa sixth to tenth century A. D.). The earliest ones among these, which belong to the 6th-7th century A. D., come from Mahāsthān in Bogra District, while the later ones, from Paharpur in Rajshahi District. The rearrangement of objects in the show-cases of the New Hall which is demanding much care and attention, is expected to be finished during the next financial year.

CENTRAL ASIAN ANTIQUITIES MUSEUM, NEW DELHI.

By Dr. M. A. Hamid.

Addition and registration of antiquities.—1129 antiquities from the McMahon Museum, Quetta, which was destroyed by the earthquake of May 31st, 1935, were brought to this Museum. No descriptive list of these objects could be recovered and these antiquities have now been registered.

1114 prehistoric antiquities from Chanhu-daro excavated by Dr. E. J. H. Mackay for the American Expedition being part of the share of the Government of India have been systematically registered.

Of the total number of antiquities brought by Sir Aurel Stein from various chalcolithic and other sites of Baluchistan numbering 7,604, approximately 2,000

antiquities have been described by him in his Memoirs, the rest not having been recorded. A list containing 497 pages has been prepared and regular registration of these antiquities started.

4 boxes containing archæological specimens (mainly pottery fragments) collected by the Yale-Cambridge Expedition in course of their work on the stone age cultures of Northern India were received in this Museum.

Exhibition and labelling.—Printed labels have been provided for the following exhibits. 24 silk paintings from Tun Huang representing Sukhavati, the Paradise of Amitabha, the Paradise of Bhaishajyaguru, Eleven Headed and Thousand armed Avalokitesvara, Series of Buddhas and Bodhisattvas and Manjusri on Lion and 32 miscellaneous antiquities from Sind.

71 silk banners representing Bodhisattvas, scenes from Gautama Buddha's life and Dharampala Vajrapanis in room No. 4 Museum Annexe have been supplied with wooden frames.

6 large pottery jars and vases from Tharro Hill and Gorandi in Sind have been added to the long gallery in the Annexe.

A new show-case has been provided round the central column in the minor antiquities gallery in the Museum Annexe. This is devoted to Block prints, drawings and textiles from Central Asia (Plate XXXVI, *a*).

The middle room in the Annexe formerly used as office is now assigned to prehistoric antiquities from Chanhu-daro in three show-cases (Plate XXXVI, *b*). The more noteworthy amongst these antiquities are (1) clay head rest, (2) copper chariot with drivers (3) seals, particularly round, (4) scale bars, (5) copper implements, (6) chips from a bead-making workshop, including stones in every stage and the steatite drills in use, (7) polychrome potsherd, (8) incised and inscribed potsherds.

Weather bars were fixed on windows of the long corridor of the Museum Annexe to prevent rain spoiling show-cases.

Preservation and Research.

The following antiquities were chemically treated during the year:—

1. Stone, pottery and metal objects from north and south Baluchistan	2,590
2. Stone and pottery from Seistan	1,156
3. Stone and pottery objects from Chanhu-daro in Sind . . .	836
4. Stone and pottery objects from the defunct McMahon Museum .	480

Besides these, 10 vases and jars were repaired on the lines suggested by the Archæological Chemist. Three frescoes in the Mural painting galleries were repaired. 285 copper antiquities from Chanhu-daro were treated by the Archæological Chemist. 31 shell objects from Chanhu-daro were sent to the Zoological Survey of India for identification and the result showed that they are either Gastropods and Marine species which are fairly widely distributed in the Indo-Pacific waters or Pelecypods and fresh water mussels, the source of which is probably some tributary of the Indus.

All the blocks of plates published by the Department are preserved here and have been properly registered and labelled.

Museum publications.

The following books are on sale at the Museum :—

(1) Catalogue of paintings recovered from Tun Huang by Sir Aurel Stein by Waley—Price Rs. 27/10.

(2) Catalogue of Wall Paintings from Ancient shrines in Central Asia and Seistan by F. H. Andrews—Price Rs. 5/6.

(3) Descriptive Catalogue of Antiquities recovered by Sir Aurel Stein during the Exploration in Central Asia, Kansu and Eastern Iran by F. H. Andrews—Price Rs. 6.

Educational Facilities.

Parties of students from the local schools and colleges were given special facilities to study the Museum at regular intervals. Most prominent among these have been from the Hindu College, Commercial College, Arabic High School and M. B. High School.

Every facility was accorded to Dr. Rowland of the Harvard University, U. S. A., in taking photographs of the frescoes. Dr. Timuri, a scholar from Bhopal State studied the exhibits of the Museum and was shown the methods of cleaning and preserving the antiquities.

DELHI FORT MUSEUM.

By Khan Bahadur Maulvi Zafar Hasan.

The new acquisitions added to the Delhi Fort Museum during the year were 15 miscellaneous antiquities and 60 coins. The former included 5 Mughal documents called *Sanads*, 2 stone inscriptions of the Emperors Jahangir and Aurangzeb respectively, 3 miniature paintings, 3 specimens of Muslim calligraphy, a Persian book cover, and a manuscript copy of the holy Quran dated 1682 A.D. Of these the following deserve notice.

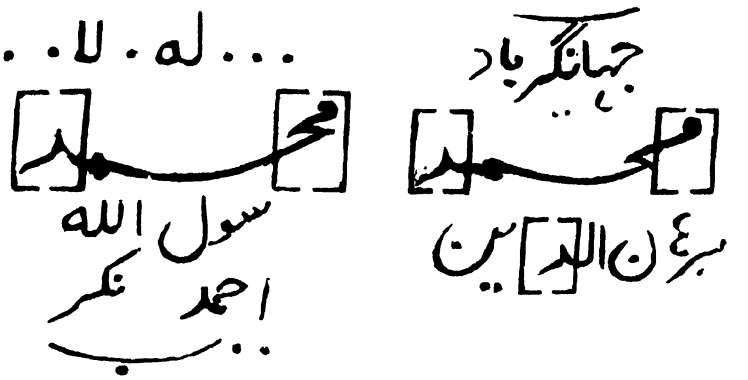
Persian book cover.—Like calligraphy, the art of book-binding received special attention of Muslims, who made use of papier maché in preparing cardboards for book covers, which treated with a pigment were artistically ornamented with geometrical and floral patterns in gold and various colours. The art flourished in Persia, wherefrom it was introduced into India, and the cover under notice, which consists of two separate leaves, is a fine specimen of its kind of work. The ground of its outer and inner faces is black and blue respectively, and both sides are fantastically ornamented with floral decoration in gold.

The portrait of Shahjahan.—The Emperor dressed in broçade (*kimkhwāb*) tunic has a pearl necklace on his neck, and his head dress which is a Rajput turban is embellished with strings of pearls and precious stones and crowned with a plume (*kalghī*), a sign of royalty. In the right hand he holds a long spear, while a golden hilted dagger is on his waist. The face is surrounded with a golden halo, and over the head are hovering four angels: one of them holding a coronet, the other a garland, the third a trumpet and the fourth an article resembling a bag. Behind the central figure of the emperor stands an attendant holding an umbrella, and another in front of his well caparisoned horse in a sup-

pliant posture, seemingly making a request. The portrait is an excellent specimen of the Mughal school of painting, and is probably contemporaneous with the scene depicted. *Sanad* issued under the seal impression of Nimat Yar Khan, an official of the Emperor Muhammad Shah, in favour of one Shaikh Muhammad Iwaz appointing him in place of Salamat Singh to collect from Chaudhris, Qanungos and Zamindars of the Sarkar of Sambhal the tribute which had been in arrear from the time of Khuld Makani (Aurangzeb) and Shahid Marhum (Farrukhsiyar). It is dated the 14th of the month of Muharram, the 23rd year of the reign of Muhammad Shah.

Among the coins acquired a silver rupee of Jahangir possesses great numismatic value. It is an issue from the mint of Ahmadnagar, but curiously bears the name of the ruler as Burhan-ud-Din Muhammad Jahangir instead of Nur-ud-Din Muhammad Jahangir, which is generally found on the coins of Jahangir. The legend on the coin is incomplete, and as much of it as is readable is given below :—

Obverse Reverse



Jahangir is not known to history to have ever assumed the title of Burhan-ud-Din, and in this respect this coin is unique. It was discovered as a Treasure Trove find in the village of Lakhanpur, Police Station Nawabganj, District Allahabad, and presented by the Government of the United Provinces.

As regards the work carried out in the Delhi Fort Museum, the Archæological Chemist treated chemically during the year 47 paintings, which have been displayed on wall show cases furnished with short descriptive labels. A few masonry stands have been erected in the verandah for the accommodation of stone inscriptions which were previously placed on the floor, and various other antiquities have been grouped and arranged in show cases according to their different classes. The articles discovered in the excavations at Bijai Mandal, Jahanpanah and Qila-i-Raipithura in Delhi during the year 1931-35 and placed in the Delhi Fort Museum have been disposed of, the important ones of them being exhibited in the table show cases and the others stored in the cupboards of them. The want of space in the museum building, which is an old Mughal palace, is a great handicap in the proper arrangement of exhibits, but it is made use of as best as possible. No record of visitors is maintained in the museum, but the sale of admission tickets to the Delhi Fort indicates that as many as 1, 77, 747 persons visited it, including 650 students who made educational trips to Delhi from various parts of the country.

TAXILA MUSEUM.

By Mr. M. N. Dutta-Gupta.

Taxila Museum continued to maintain its usual popularity and attracted a large number of visitors both foreign and Indian. The sale-proceeds of admission tickets to the Museum and the sites at Taxila amounted to Rs. 1,414-1-0; while those of photographs, guide-books, etc., to Rs. 414-1-9.

Out of the antiquities unearthed by the Excavation at Bhir Mound and the Dharmarājika Stūpa the following selected objects were added to the spare collection of the Museum :—

1. Metal antiquities	49
2. Terracotta and Pottery	167
3. Stone objects	38
4. Shell and bone objects	31
5. Beads and Gems	85
6. Glass and miscellaneous	13
7. Copper coins (6 punch-marked, 10 local Taxilan and 2 illegible)	18

A detailed description of the finds is given in the Exploration Section at page 39 *supra*. A number of antiquities exhibited in the Museum and those brought to light during the year were chemically treated. The listing of antiquities other than terracotta and pottery has been completed and about 254 drawings of selected specimens of copper, bronze and stone objects were made during the year. Of these 144 were inked in to illustrate Sir John Marshall's forthcoming volume on Taxila. Out of the spare collection certain coins and antiquities were loaned to the Archæological Section, Indian Museum, Calcutta.

HARAPPA MUSEUM.

By. Mr. H. L. Srivastava.

Altogether 840 persons visited the Archæological museum and the sites at Harappa during the year under report. Prominent among the visitors from abroad were Dr. V. D. G. Ratan of Bangkok, Messrs. Chikyo Yamamoto and Shodo Taki, two Japanese scholars G. Fuzil and G. Maruyama, Buddhist monks from Tokio, besides some tourists from Japan and Formosa, and a number of American Missionaries.

Of about 300 finds unearthed during the year 34 which required elaborate chemical treatment were sent to the Archæological Chemist in India at Dehra Dun for cleaning, while the rest received simple washing treatment in the museum laboratory.

The Custodian was engaged in the completion of the comprehensive list of about twenty-five thousand antiquities prepared last year, in which the particulars of date, depth and findspot were inserted by consulting the original field registers, identifying about one thousand antiquities of the time of Rai Bahadur Daya Ram Sahni, C.I.E., which had lost their numbers.

MOHENJO-DARO MUSEUM.

By Mr. K. N. Puri.

The Mohenjo-daro Museum has been well patronized during the year under report and besides many distinguished visitors several parties of students from different parts of the country visited it.

After the close of the large scale operations in November 1931, excavations were conducted on a restricted scale during 1933-34 and 1936-37 and resulted in the addition of 1182 antiquities to the Museum.

The Museum building which has a very limited accommodation had hitherto been packed up with antiquities discovered since 1924-25. In view of the impending publication of Dr. Mackay's work on the Further Excavations at Mohenjo-daro the proposal to distribute the duplicate antiquities from Mohenjo-daro to various museums in India was mooted. Dr. C. L. Fabri and Mr. U. C. Bhattacharya were temporarily engaged on the work of sorting out, selecting and listing the antiquities. In the first instance 7 representative sets were prepared and listed, two sets being fuller than the rest, one intended for the Central Government's Museum and the other for the Bombay Government. These sets have been distributed as follows:—

Collection No. 1	Government of Bombay, Prince of Wales Museum, Bombay.
Half of collection No. 2 . .	Indian Museum, Calcutta.
Half of collection No. 2 . .	Central Asian Antiquities Museum, New Delhi, Govt. of India.
Collection No. 3	Government Museum, Madras.
Collection No. 4	Reserved for the proposed Provincial Museum of Sind.
Collection No. 5	Provincial Museum, Lucknow.
Collection No. 6	Patna Museum, Patna.
Collection No. 7	Central Museum, Nagpur.

The above sets being fully representative and well-balanced will indeed be great assets to the respective institutions and have immense educative value. As a result the congestion at the Mohenjo-daro Museum has been relieved.

NALANDA MUSEUM.

By Dr. M. Nazim.

During the year under report, 9,363 persons visited the Nalanda site and the Archæological Museum at Nalanda and a sum of Rs. 1,102-4-0 was realised by the sale of Admission Tickets to the visitors. The visitors included a number of foreigners from abroad of whom mention may be made of Dr. and Mrs. Hermann Goetz of the Kern Institute, University of Leyden, Holland; Mr. and Mrs. St. Nihal Singh; Mr. Albert Theblou S. J., Lonvain, Belgium, S. Yamamoto Kenshin—Jakuen, Kyoto of Japan. The Indian visitors included a party of Professors from the Patna College and Science College of Patna;

a party of students under the guidance of Dr. B. M. Barua of the Calcutta University.

The antiquities so far discovered at Nalanda and Rajgir have been exhibited at the Nalanda Museum. Cards giving general descriptions of different groups of antiquities are being maintained now and it is hoped that when the present Museum building is extended they will be exhibited in show-cases with proper labels, etc.

At the instance of the Director General of Archæology in India, eleven important Museums in India and the British Museum, London, were each presented with a set of 20 duplicate clay sealings of two different types discovered from the Nalanda excavations.

During the year under report, only a handful of antiquities, comprising fragmentary stone images and sculptures, a few terracotta *ushṇīshas* and a figure of Kubera; two fragmentary brick inscriptions; glazed potsherds, and certain objects from the smelting furnace, as already described above, were recovered from the Chaitya Site No. 13 and removed to the Museum. Of the fragmentary stone images, three are crudely carved, and two of them represent a standing male figure, while the third represents two female figures standing side by side. The above three antiquities are 4″; 3½″; and 3½″ high and are red, greenish, and grey in colour respectively. The remaining images comprise (1) an exquisitely carved fragmentary standing image of Tārā, 8½″ high, with a lotus stalk winding round the arm and ending in a flower and four Dhyāni Buddha figures seated in different attitudes on the upper part of the back ground of the image. (2) A fragmentary sculpture, 12″×3″ in size, showing a lotus pedestal, with only the feet of a standing image and of two attendants on the two sides, and a male and a female devotee in kneeling attitude with folded hands at the left and right ends respectively of the pedestal. An inscription in two lines written in Pāla script is engraved on the pedestal front below the double lotus. (3) A fragmentary image of a Bodhisattva, 7½″ high, seated on a lotus in *lalitāsana* with the Buddhist creed *Ye dharmā*, etc., engraved on the pedestal front in the script of the 8th-9th century A.D.

The terracotta objects added to the Museum comprise (*a*) a figure of Kubera, 1¾″ high, seated on a pedestal and (2) Twelve *Jaṭās* or *Ushṇīshas* of the average diameter of 1¼″.

The two fragmentary brick inscriptions already referred to above were discovered at Site No. 3 from the core of a votive stūpa, situated on the east front of the south-east corner tower of the stūpa of the 5th period. The fragmentary tablets measure 1′-7″×10″ and 1′-7½″×8½″ respectively. The former is oblong in shape and contains 15 lines of writing (Plate XII, *d*).

SARNATH MUSEUM.

By Khan Bahadur Maulvi Zafar Hasan.

The Museum at Sarnath has been well patronised by scholars and not less than 11,360 people visited it during the year. The antiquities exhibited in

the Central Hall (Room I) are properly labelled and arrangements have been made to provide suitable captions to those displayed in the side galleries. Less important sculptures are stored in the godown and steps are being taken to distribute them to other museums in India.

MUSEUMS IN BURMA.

By M. Chas. Duroiselle.

One standing and two seated Buddha images and a lotus pedestal all in bronze, a stone slab inscribed on one face with 21 lines of writing in Burmese dated 609 *sakkaraj* (A.D. 1247), two small stone images of the Buddha, a stone figure with a shaven head and protuberant belly and a small square pillar of stone with the figures of a Hindu god sculptured in relief one at each corner were found at Myinpagan and Pagan and deposited in the Pagan Museum.

Four marble images of hermits were found under the four western posts of Pyatthat No. 48 over the South Main Gate of Fort Dufferin, Mandalay, in excavating the brickwork for reconstructing the Pyatthat, and these were labelled and exhibited in the Palace Museum at Mandalay.

SECTION V.

ARCHÆOLOGICAL CHEMIST.

By Khan Bahadur Mohammad Sana Ullah.

During this year 720 antiquities of various kinds were received by the Archæological Chemist for preservative treatment. These include 47 Mughal paintings which were chemically treated and mounted, as mentioned in the former reports, at the Fort Museum, Delhi.

The specimens received for chemical analysis or examination numbered twenty-five. Two punch-marked coins of debased silver from Taxila were found to contain 40·3 and 75·3 per cent. of silver respectively. An Andhra coin contained a large amount of lead (which appears to be their characteristic) besides a little tin and nickel. Two specimens of mortar received from Harappa were composed of gypsum almost free from lime, besides sand, etc. The analyses of the decaying stone samples from Amaravati, Nagarjunikonda, etc., are of special interest and will be discussed further.

A few specimens from an old mound in Rohtak district were also examined for Dr. Birbal Sahni of the Lucknow University ; but none of these revealed any similarity with the Indus materials as it had been suspected. For instance, the black powder which appeared to resemble *śhilājit,* turned out to be carbon ink and a white vitreous body was porcelain and not faience.

In the two previous reports the problem of the decay of rock-cut monuments in the Bombay Presidency, has been discussed and it was pointed out that the temples at Jogeshwari and Elephanta Island, near Bombay, were heavily impregnated with sea-salts which were the principal cause of their decay. The experiments which were carried out by the Archæological Chemist at Elephanta Island, last year, proved beyond doubt that the paper-pulp method furnished a very efficient and convenient means for the elimination of sea-salts from the sculptures there. It was, therefore, proposed to subject the affected sculptures at Elephanta to the paper-pulp treatment several times, until the concentration of the salts was reduced to a nominal degree. Plain walls and pillars were to be simply washed with water, repeatedly. Finally, the surface will have to be coated with paraffin wax or vinyl acetate, in order to render it impervious. The progress of this treatment will be verified by chemical tests. However, the execution of this scheme had to be held in abeyance, this year.

Unfortunately, the benefits of the preliminary measures, which the Archæological Department had initiated at Elephanta last year, were misunderstood and formed the subject of hostile attacks in the Bombay press. Consequently, the Government of India appointed the Elephanta Enquiry Committee in order to re-examine the problem of the decay of this monument and to recommend suitable measures for its preservation. In the course of their report the Committee have generally approved of the preliminary measures mentioned above and have

also testified to the soundness of the scheme of preservation proposed by the Archæological Chemist. It has now been decided to carry out this scheme at Elephanta without further delay.

In January, the Archæological Chemist visited the monuments situated at the Seven Pagodas, Amaravati, Nagarjunikonda and the inscriptions at Dharnikota in order to study the problem of their decay. He found that the marble sculptures from Amaravati which are now preserved in the Madras and Calcutta Museums, were suffering from a peculiar disease which makes its appearance in the form of white spots which gradually spread over the surface, while working deeper into the stone and converting it into a soft chalk-like mass. This form of deterioration has, in fact, assumed alarming proportions in the Madras Museum Collection. The chemical analyses of the specimens given below leave no doubt that the presence of certain soluble salts is responsible for these changes :—

Analyses of specimens of Amaravati sculptures.

Constituents.	Sculpture, Madras Museum.		Decayed specimen. Indian Museum.
	Sound specimen.	Decayed specimen.	
SiO_2	6·80	6·51	6·30
Fe_2O_3	0·80	0·96	0·85
Al_2O_3	1·30	1·21	0·94
CaO	51·60	51·57	51·92
MgO	0·29	0·30	0·25
Na_2O	*nil*	0·12	0·10
H_2O	0·28	0·06	0·12
CO_2	39·60	39·49	39·90
Cl'	tr.	0·06	0·03
SO_3''	*nil*	tr.	0·06
NO_3'	*nil*	*nil*	*nil*
Total	100·67	100·28	100·47
Soluble salts	0·05 %	0·27 %	0·28 %

It is possible that the sculptures became contaminated with the salts in the course of their transportation or storage, or by exposure to coastal atmosphere. It has been recommended to eliminate the injurious salts by soaking the objects in water. The sculptures at Amaravati and Nagarjunikonda have been executed out of the same material which is a variety of marble occurring in the Guntur district. It has a schistose structure which accounts for the splitting and exfoliation from which some of these are suffering. The effects of weathering due to their long exposure to rain water and atmospheric influence are also evident in varying degrees at both these sites. The analyses of decayed specimens from

Nagarjunikonda given below leave no doubt that their corrosion is due to the solvent action of meteoric waters.

Analyses of specimens from Nagarjunikonda.

Specimen.	SiO_2	Al_2O_3 + Fe_2O_3	CaO	MgO	CO_2	H_2O	Total.
Sound stone	25·19	2·37	40·64	0·17	31·09	*nil*	99·46
Decayed scales	68·13	17·89	6·91	0·80	2·91	3·23	99·87

It is evident that most of the calcium carbonate, which constitutes about 72 per cent. of the entire rock, has been lost by this process. It is, therefore, necessary to keep them in a covered building. The preservation of these sculptures will be taken up when the proposed sheds at these sites are ready.

The investigation of the problems of the decay and preservation of the monuments at the Seven Pagodas and the inscriptions at Dharnikota will be taken up shortly.

At the special request of the Trustees of the Brihadesvara temple at Tanjore, the Archæological Department has taken up the question of the preservation of the unique mural paintings belonging to 12-17th Century A.D., which adorn the inner walls of the passage surrounding the main shrine in this temple. Consequently, Mr. S. Paramasivan, the Chemist of the Government Museum, Madras, was deputed to study these paintings and to report on their present condition, technique and measures necessary for their preservation. He has submitted a comprehensive report dealing with the art, technique as well as the various methods which have been recommended by certain experts, or employed in Europe, for the removal and preservation of frescoes. Mr. Sana Ullah has scrutinized this report and formulated suggestions for the removal and preservation of these paintings. However, it is clear now, that this problem is beset with considerable practical difficulties. In this temple, there are, in fact, two layers of plaster (less than 3 mm. thick) each bearing paintings belonging to the Chola and Nayak periods respectively. It is, therefore, necessary, at the outset, to remove the upper, or Nayak, layer of plaster intact, without damaging its paintings, and to provide it with a permanent backing and fixtures. The next step would be the preservation of the lower or Chola paintings on the walls. The cleaning or renovation and re-fixing of the pigments and plaster are other aspects of this problem. Unfortunately, the pigments of the upper series of paintings are readily softened by the action of water; therefore, the methods which have been employed in Europe for the removal of frescoes (using glued paper and linen) cannot be adopted here without radical modifications. However, it is suggested that the technique developed by Stout and Gettens at the Fogg Art Museum, in U. S. A., for the preservation of Chinese *tempera* paintings might be helpful. It is, therefore, intended to carry out preliminary experiments shortly and to undertake the work on the actual paintings when a successful technique has been evolved.

A worm-eaten wooden shrine in the Indian Museum, Calcutta was fumigated with carbon disulphide vapour in order to kill the injurious insects with which it was infected. It is considered worthwhile to identify and to know something about the life history or habits of such pests. Therefore, the remarks of Dr. H. A. Hafiz, Entomologist, Zoological Survey, who kindly examined these, will not be without interest.

"A dead specimen of *Gibbium sp.* very probably *scotias F.* belonging to the family anobiidæ (Ptinidæ) was collected from the drawer immediately below the perforated shelf of the case containing the wooden shrine. In the tunnels of the infected woodwork of the shrine was also found a dead larva of the same insect in a hard white cocoon, along with other empty cocoons. *G. scotias* is a cosmopolitan species and is a household pest of a very destructive nature, and the larvæ eat tunnels in woodwork and pupate there. The beetles on emergence couple and lay eggs soon after.....It is also known to be capable of breeding rather quickly." Remains of a Dermestid beetle were also found.

The use of iron dowels for the repairs of stone sculptures etc., has been condemned as the expansion caused by the rusting of this metal causes the splitting of the objects in course of time. Copper and bronze are more suitable for this purpose provided that these are not exposed to the action of excessive damp or soluble salts. However, they are liable to oxidize rapidly in marine or saline conditions, which may bring about the splitting of the sculptures besides staining due to the formation of copper salts. Under these circumstances, the Archæological Chemist has recommended the use of a nickel-iron-chromium alloy for dowels and cramps. Messrs. Henry Wiggin & Co., Ltd., of Birmingham have introduced an alloy of this type, called "Glowray", which has been employed extensively in the repairs of old monuments in England and has given very satisfactory results.

At the special request of the Keeper of Records to the Government of India, Mr. Sana Ullah was deputed to the Records Department at Calcutta in order to examine the brittle records and to suggest measures for their safe transportation to New Delhi. He attended also the session of the Indian Science Congress held at Hyderabad (Deccan) in January 1937.

SECTION VI.

TREASURE TROVE.

United Provinces.—18 numismatic finds from the districts of Aligarh, Allahabad, Almora, Cawnpore, Etah, Lucknow, Mirzapur, Moradabad, Rae Bareli, Sitapur and Unao were examined by the Secretary, Coin Committee, United Provinces. They consisted of 6 gold *mohurs*, 713 silver rupees, 270 billon pieces and 1,624 pieces representing the issues of Kushāṇa rulers, Sultans of Delhi, kings of Jaunpore, Mughal emperors and a few miscellaneous coins.

Punjab.—Three finds of coins were dealt with in the Punjab. One hoard consisting of 22 silver and 7 copper coins was found in the land occupied by the North Western Railway Golf Club, Lahore. It includes 18 silver issues of Shahjahan, 3 of Aurangzeb and one unidentified; while the copper pieces were of Akbar. The second find of five copper coins was found by Mr. J. D. Penny, Commissioner of Multan. On examination one was found to be the issue of Muhammad bin Tughlaq, one of Muhammad bin Farid, the Sayyid king, two of Akbar and the fifth piece was a Bahawalpur State coin. The third treasure was an earthen jar containing 425 silver coins found by one Ibrahim while making a bank for his field in the village of Rasulpur, Gurdaspur district. The find consisted of 7 issues of Aurangzeb, 2 of Farrukhsiyar, 1 of Rafiuddarajat, 258 of Muhammad Shah, 56 of Ahmad Shah and 100 of Alamgir II. The hoard, excepting a defaced coin of little numismatic value, was acquired at a cost of Rs. 247-8-0.

The fifteen coins from Pakpattan Tahsil noticed in last year's report (p. 134) were acquired at a cost of Rs. 9-9-0.

Bihar.—The year under review was very rich in treasure trove finds. The three finds of coins reported during the year are of little importance, but the following treasure troves not consisting of coins deserve special notice:—

1. 5 carved pieces of stone belonging to a Hindu temple of late Gupta period were brought to light by a contractor while digging the foundation of a building to the north of the Jail compound at Monghyr.
2. 8 stone sculptures belonging to a Hindu temple of late Gupta period were found by a contractor employed for the construction of the new building of the Town High School, Monghyr.
3. A well-carved standing Vishṇu image ($3' \times 1\frac{1}{2}'$) was dug out from a graveyard by two Musalman inhabitants of village Amoljhori, P. S. Thakurganj. The deity has four hands with Lakshmī and Sarasvatī standing on either side.
4. An interesting find, made at Datiana, in the Patna district, consisted of 16 stone sculptures, namely, figures of (1) Pārvatī, (2) Simhavāhinī, (3) Mother and child (birth of Kṛishṇa), (4) Vishṇu. (5-16) Siva-liṅgas and various fragmentary images.

5. 2 Jaina images with Mauryan polish, but without hands and legs, were found at the village Lohanipur, Chamaritola, P. S. Pirbahore, P. O. Bankipore.

Orissa.—Nine cannon discovered in 1935-36 at Mauza Arang in Khurda subdivision of the Puri district were acquired at a cost of Rs. 24.

Bengal.—An inscribed image of Sadāśiva was found within the protected area of the Bangarh mounds of Rajibpur in the Dinajpur district (see p. 130).

Southern Circle.—Treasure-trove in the Madras Presidency is dealt with by the Superintendent, Government Museum, Madras and the following information is taken from his Report :—

Eight finds of coins were reported. The five important of these comprise—(1) 83 gold fanams found in Meikkilarpatti village of Tirumangalam Taluk of Madura District ; (2) 16 gold fanams from Yadamari village of Chittoor Taluka, Chittoor District ; (3) 2 gold coins of Krishnadevaraya of Vijayanagar, 10 pagodas and 1 half-pagoda of Krishna Raja of Mysore Odeyars, 70 gold coins of Mughal Emperors, Muhammad Shah and Alamgir II and 2 of Haidar Ali of Mysore found in Kurugodu village of Bellary Taluk, Bellary District ; (4) 25 silver coins—4 of Muhammad Shah, 6 of Ahmad Shah, 3 of Alamgir II and 12 unidentified pieces—found with a gold nose-ring in an earthen pot while dismantling the floor of a house in North Konthalapad village of Kurnool Taluk, Kurnool District ; (5) a hoard of 1,300 copper coins found in the Varakaripudi village of Nellore Taluk, Nellore District. Besides these no less than 14 finds other than coins were reported during the year. Of these, six important finds are detailed below :—

(1) A brass couchant Nandi found in Bhadrachalam Taluka. East Godavari District, height 8·5 cm. and length 9·2 cm.

(2) A metal seated Skanda as a baby with lotusses in both hands found in Andipatti village, Periyakulam Taluk, Madura District ; height 16 cm. ;

(3) Bronze figures of Naṭeśa ; Śivakāmasundarī ; Somāskanda seated with Umā and baby Skanda ; Pārvatī ; Gaṇeśa ; Skanda ; Chaṇḍikeśvara ; Appar and *Śūlam* (trident) with the three prongs resting on a dome-shaped lotus '*pīṭham*' found in Kodiakkadu village, Tiruturaipundi Taluk, Tanjore District ;

(4) Bronze images of Gaṇeśa ; Pradoshamūrti (Śiva) standing on an oval *padmāsana* in *tribhaṅga* pose embracing Pārvatī ; and Skanda, as child, dancing with lotus in both hands found in Tribhuvanam village, Papanasam Taluk, Tanjore District ;

(5) Bronze images of Śiva and Pārvatī, seated, found in Kilayur village, Tirukkoyilur Taluk, South Arcot District ; and

(6) Beautiful images of Vishṇu, Śrī and Bhūdevī found in Sonallur village, Chingleput Taluk, Chingleput District. These were acquired for the Indian Museum, Calcutta.

Burma.—The bronze figure of Jambupati (Buddha in regal dress) mentioned in the last year's report, p. 135 was acquired for the Phayre Museum, Rangoon

SECTION VII.—MISCELLANEOUS NOTES.

JAICHANDI MOSQUE.

By Khan Bahadur Maulvi Zafar Hasan.

The Jaichandi Mosque at Hathgaon, district Fatehpur, and a ruined mosque at Sakit, district Etah, in the United Provinces were inspected during the year under review by the Superintendent, Archæological Survey, Northern Circle, Agra, and steps have been taken to protect them. The Jaichandi Mosque lies within a walled enclosure on an elevated piece of ground representing the ruined site of an ancient fort, locally known as Hathi Khana or Jaichandi. The enclosure, which is entered by an ancient gate on the east, measures 70′ north to south by 68′ east to west. The main building consists of a prayer chamber 42′-5″ by 25′-7″, preceded on the east by an open platform, measuring 43′-6″ by 19′-9″. The prayer chamber, which is four aisles deep, had originally seven bays, opening to the east, thus containing 28 compartments, but a row of four compartments at either of its north and south ends together with the side walls has disappeared, leaving at present only 20 compartments. In the centre of the back wall of the prayer chamber is a deep *mihrab* or an arched recess, representing the *Qibla* and projecting much beyond the surface of the wall to the west. The building is constructed of the spoils of old Hindu structures, probably temples. It is covered with a flat roof supported on stone columns, which are ornamented with carvings of Hindu pattern as well as images, the latter being, however, mutilated (Plate XXXIX, *c*). These columns, which include several pilasters, are of different designs and dimensions, and are set up promiscuously. Many of them have their shafts indiscriminately composed of blocks of stone of different nature, and the capitals of some of them are carved with images, while those of others are blank devoid of any ornamentation. Old columns and pilasters are also utilized as lintels (Plate XXXIX, *a*) supporting the roof slabs, which too are of incongruous character. Apparently the mosque was hurriedly constructed, and no discrimination seems to have been made in the use of the old Hindu material available at site, inasmuch as a few of the columns are found erected upside-down. The date of its construction is not known, but it is believed to have been built by one of the Sharqi kings of Jaunpur.

The mosque is used for religious purposes, but except the whitewash, little additions or alterations have been made in the main structure. Certain repairs were, however, executed to it about the year 1886 by Mr. Growse, the then District Officer, who reconstructed the roof of four compartments which had collapsed. He is also related to have enclosed the site with a low masonry wall, but this seems to refer to the repair or the rebuilding of the enclosure wall to a certain height, as the entrance gateway, which is furnished with an ancient

door-frame of stone profusely ornamented with Hindu sculpture (Plate XXXIX, *b*), stands at its original position and points out the previous existence of such a wall. The enclosure wall, built by Mr. Growse, has been further raised by the local Muslims, who have also rebuilt the gateway and have relaid the floor of the mosque proper with cement concrete.

Mosque at Sakit.—The mosque at Sakit occupies the centre of a raised ground marking the site of a ruined Hindu fort, which has already been protected under the Ancient Monuments Preservation Act. It is in a dilapidated state and has three stone inscriptions of Ghyas-ud-Din Balban, Sher Shah Suri and the Emperor Akbar respectively, built into its west wall. It seems to be an *Idgah*, and consists of an open courtyard in two terraces, one higher than the other, and extending from east to west. The upper terrace, which measures 38′-8″ north to south by 19′-8″ east to west, is surrounded by walls on the north, south and west, constructed of block kankar in lime, but against the usual practice there is no *mihrab* recess or *Qibla*, although there exists a pulpit or *mimbar*, built of block kankar and containing three steps, at the centre of the west wall. Originally the north and south walls further extended to the east to enclose the lower terrace which measures 38′-8″ by 18′-5″, but they have almost entirely disappeared. Each of the three inscriptions mentioned above refers to the erection of a mosque, but none of them seems to allude to that under notice. It appears that they had been found in the locality, and were built into this mosque for preservation. Unfortunately the ruined condition of the building has again exposed them to danger. The stone slab bearing the inscription of Balban is broken into two pieces, one of which has fallen down. Akbar's inscription has also fallen down, but that of Sher Shah is *in situ*. At the back of the last inscribed slab there are images carved in relief, but they are badly mutilated and decayed. The mosque is an insignificant structure having no architectural pretensions, but the inscriptions which it bears lend an archæological importance to it. It may be noted that these epigraphs have been published, that of Balban in the Epigraphia Indo Moslemica, and those of Sher Shah and Akbar in the Proceedings of the Asiatic Society of Bengal for the year 1874.

AN UNIDENTIFIED SCULPTURE IN THE SARNATH MUSEUM, BENARES.

Mr. M. M. Nāgar, Custodian, Sarnath Museum.

Of the 24 Brahmanical sculptures discovered at Sarnath B (h) 1[1], (Plate XXXIX, *d*) exhibited against the west wall of Room No. 3 of the Sarnath Museum, is a 'colossal figure of Śiva in relief, measuring 12′-1½″ high × 3′-11″ broad and 1′-10″ thick. The god is represented spearing his adversary Tripura (?) on his trident which he holds with one left and one right hand. A second right hand holds a sword; a third holds two arrows and a fourth his *ḍamarū*, while the fifth grasps an uncertain object which is broken at the

[1] S. M. Cat., p. 165, Pl. XVIII.

upper end. The second left hand holds the mace, adorned with a skull (*khaṭvāṅga*); the third grasps a shield, the handle of which is visible; the fourth supports the bowl for catching the blood of Śiva's enemy; and the fifth holds a bow of double flexure (*Pināka*)'.

'The demon Tripura grasps a sword in his right hand; his left forearm is broken. Beneath Śiva's left foot is another figure, fighting upwards, with sword in right hand and shield in left and by the side of the last-mentioned, a buffalo (? bull) head looking upwards.'

'The carving of the sculpture was never finished and the ornaments which the god wears on his body and upper part of the legs are incomplete'[1]. The learned author of the catalogue of the Sarnath Museum[2] does not propose himself any identification of this sculpture but only quotes the above given account of Dr. Marshall in his valuable book. The proposed identification of Marshall, though with a query, that the image represents 'Śiva spearing his adversary Tripura' is the only one which has so far come to us. The sculpture is a subject of further study and I venture to offer the following:

The Purāṇas which give the story of Śiva's Tripura-Vadha, describe how the god overpowered his enemy (*Maya*) and reduced his three cities (*tripura*) to ashes by his destructive arrow. The Matsya Purāṇa[3] states that 'in the meantime the asterism *Puṣhya* came in course of conjunction with the Moon over the Tripura fort when it was doomed to destruction. Then the three-eyed Śiva quickly shot the destructive arrow, the potency of the three devas and the three fires (*tejas*), on the fort Tripura. The arrow burnt the three cities as fire burns heaps of straw. The Tripura fort looked then like a good family brought to ruin by a wicked son'. The Śiva Purāṇa[4] tells us that the Lord wanted to burn the three castles of Tripura by an arrow. When the time of their destruction, therefore, drew near, He shot an arrow containing fire with a loud roar, which burnt all the demons residing therein.

In his 'Elements of Hindu Iconography'[5] T. A. Gopinath Rao remarks that the Mahābhārata, the Commentary on the Vājasaneyi Saṁhitā of the Yajurveda, the Śatapatha and the Aitareya Brāhmaṇas, and the Taittarīya Saṁhitā mention the three castles of the *asuras* destroyed by the arrow of Śiva. He also adds that the Tripurāntakamūrtti is described in almost all the Āgamic authorities, and cites no less than eight forms of it from the Aṁśumadbhedāgama alone. It will surely be out of place to give here the details of all these various forms; but suffice to state that while most of these agree in representing Śiva holding his bow and ready to discharge an arrow, none depicts him using a trident (*triśūla*).

So far as the literary evidence goes, there is nothing on the contrary to show that in overpowering his adversary Tripura, Śiva made use of his trident and speared the demon as is represented in the image under examination. The

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[1] *A. S. R.*, 1907-08, p. 52.
[2] *Op. cit.* B (h) 1, p. 165.
[3] S. B. H., Vol. XVII, pp. 30.
[4] Yu. Kh. 5, Ad. 11, Vv. 24-27
[5] Vol. II, Pt. I, pp. 164-166.

deviation of the sculptor in this case from this essential characteristic seems to be inexplicable if he at all meant to represent Tripuravadha.

Turning now to the sculptures which were portrayed by the ancient artists, we find that these are very much in keeping with the descriptions of the texts. Of the four[1] illustrations that have been reproduced by Gopinath Rao two[2] of the Ellora Caves best suit our purpose. In one[3] besides various other weapons Śiva is represented as carrying a bent bow and an arrow fixed on to the bow-string focusing at the three castles which he is going to destroy; the second[4] depicts him with two hands—the right holding an arrow and the left a bow. The attitude of the god in both these sculptures is *pratyālīḍhapada* (the attitude of an archer).

A careful comparison of the Ellora Tripurāntaka-mūrttis on the one hand with the so-called Sarnath Tripurāntaka-mūrtti on the other will reveal that there is no common feature between them. It must, therefore, be admitted that the sculpture in review is not a Tripurāntaka-mūrtti but that of Andhakavadha-mūrtti.

The episode of Andhakavadha is to be found in several Purāṇas. The Matsya Purāṇa[5] informs us that in ancient times there was a demon, as black as soot, who was known Andhaka by name. He was invulnerable by the devas and was constantly engaged in penances. Seeing one day the Lord Śiva and Pārvatī enjoying themselves, he wished to snatch away the latter from the Lord, when a most fearful battle ensued between the two. When the Lord was very much oppressed by the demon, Rudra discharged a missile called Pāśupata. From the blood gushing out of the body of that demon, scores of Andhaka demons sprang up and similarly multiplied themselves into hundreds of demons. When they were killed the blood from them again produced thouands of Andhakas of formidable appearance. In this way innumerable demons spread all over and the Lord then created the Divine Mothers to drink off their blood....Afterwards when Śiva was about to pierce Andhaka, the primary *asura*, with his trident, the demon appeased the lord and was thereby granted *sāmīpya*. The Liṅga Purāṇa[6] states that Andhaka was speared with his trident by Śiva. The Śiva Purāṇa[7] tells us that Andhaka was speared by *Pramathapati* (Śiva) who at the end of the battle transfixed the demon to his trident and held him high in the air. From another source[8] also we learn that 'Śiva thrust his trident through the body of the Andhakāsura and began to dance'.

The above-mentioned account is further corroborated by the contemporary sculptural evidence as well. Three[9] Andhakavadha-mūrttis have been exemplified by T. A. Gopinath Rao. Of these one[10] is from Elephanta and the other

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[1] Op. cit., Vol. II, Pt. I. Pls. XXXVII-XL.
[2] *Op. cit.*, Pls. XXXVII-XXXVIII.
[3] *Op. cit.*, Pl. XXXVII.
[4] *Op. cit.*, Pl. XXXVIII.
[5] *Op. cit.*, pp. 154-155.
[6] Venkateśvara Press, Bombay edition. Saṁ., 1963, Ch. 93, V. 12.
[7] Yu. Kh. 5, Ad. 46, Vv. 33-37.
[8] *Elements of Hindu Iconography*, Vol. I, Pt. II, p. 350.
[9] *Op. cit.*, Vol. II, Pt. I, Pls. XLV-XLVII.
[10] *Op. cit.*, Vol. II, Pt. I, Pl. XLVI.

two[1] from Ellora Caves. These sculptures, perhaps belonging to one school, bear a strong family likeness, as the artists have dwelt with the subject in exactly the same manner.[2] We find in them multihanded Śiva holding with his two hands the trident at the end of which is pinned the body of a demon.

Now in the Sarnath sculptures the God is portrayed as standing, facing to left, having ten hands, in two of which he holds a trident pinning a demon.[3] He bears a cup (*Kapāla*) in one of his left hands, resting on his knee, below the body of the demon, to collect the oozing blood of wounded Andhaka, so as not to let it fall off on the ground and thus prevent the further multiplication of secondary Andhakāsuras.[4] Down below we notice the God trampling upon another demon who is trying to hit him with a sword fully drawn.[5] This demon is a replica of the original and real Andhaka, and is produced out of his blood which had fallen on the ground. To the right of this demon is shown the head of the bull Nandi, Śiva's Vehicle, looking upwards. It will thus be observed that the above facts show that the demon whom Śiva speared in this case was Andhaka and not Tripura as suggested by Marshall.[6]

The slight deviation of the sculptor from the canons in not portraying the goddess Yogīśvarī or Kālī[7] who was created to drink the blood of Andhaka here, should not stand in the way of the proposed identification. Perhaps the sculptor, like his brethren at Elephanta and Ellora, did not feel its necessity at all.[8] The sculpture dates back to the 10th Century A.D. when Hinduism was once again re-established in Northern India and even a Buddhist centre like Sarnath had some devotees of the Brahmanical faith, for whom such images were made.

A NOTE ON TWO IMAGES OF UNUSUAL TYPE FOUND IN THE BOMBAY PRESIDENCY.

By Mr. Q. M. Moneer.

(1) An image of Paraśurāmā showing Vishṇu symbols in addition to his own.

In a minor shrine No. 68 of the group of Ramalinga temples at Aiholi in the Bagalkot taluka of Bijapur District now lies dismantled from its original place a stone image of Paraśurāma which by reason of certain peculiarities of symbolism associated with it calls for notice. Types of this image hitherto familiar are either two-armed or four-armed, carrying in the former case a *paraśu* (axe) in one hand and a flower or a bow in the other and in the latter an axe, an arrow, a bow and a *kamandalu* ordinarily occupies each of the four hands. The Aiholi image under notice which is made of dark bluish schist of soft grain and is 35 inches high, 21 inches wide and 9 inches thick, is a four-armed sculpture showing

[1] *Op. cit.*, Vol. II, Pt. I, Pls. XLV and XLVII.
[2] *Elements of Hindu Iconography*, Vol. II, Pt. I, pp. 192-3.
[3] Cp. Pls. XLV-XLVII of *Hindu Iconography*, Vol. II, Pt. I.
[4] Cp. Pls. XLV-XLVII of above.
[5] Cp. Pls. XLV and XLVII.
[6] *A. S. R.*, 1907-8, p. 52.
[7] Cp. Pl. XLV where she is portrayed.
[8] Cp. Pls. XLVI-XLVII where she is not portrayed.

in the upper right hand a *paraśu*, in the lower right hand a *pāśa* (noose), in the upper left hand a *dhanu* (bow) and in the lower left hand which is now missing was probably a *kamandalu* or may be an arrow. So far as all this goes, the image follows the familiar type but the presence on the back rest of the image of a *śankha* (conch shell) directly above the upper right hand and of a *chakra* (wheel) above the upper left arm and a *gadā* (mace) adjacent to the lower left hand (Plate XXXVII, *c*) invest this image with a feature which makes it a unique if not a rare example of its type. These three symbols are peculiar to Vishṇu and their occurrence in association with this image of his sixth incarnation which Paraśurāma is, is intelligible as reminding us of that connection, but this occurrence has rarely, if ever, been noticed in the familiar examples.

(2) *A six armed image of dancing Gaṇeśa carrying a sword.*

A six armed image of dancing Gaṇeśa carrying withal a sword aloft in one of its hands has hitherto remained undiscovered in an ancient temple in Western India. Lately, however, an image of this god with these characteristics has come to light in a panel on the wall immediately adjoining the left side of the entrance of the mandapa of Trikūṭeśvara temple (11th century, A. D.) at Gadag in the Dharwar District (Plate XXXVII, *d*). The image carved on a panel of dark greenish schist is about $9\frac{1}{2}''$ in height and nearly 8″ in width. It is exquisitely ornamented with an elaborate *mukuṭa* on head, garlands and necklaces round neck, wristlets, armlets and anklets on the respective limbs concerned. In upper right hand it carries aloft a sword—middle part of the sword having broken, the end part of its blade is still visible little higher up , in middle right hand is seen a paraśu (axe) held upright, the lower right hand shows a mutilated object which was either a *danta* (tooth) or *pāśa* (noose). In the left hands, the upper one carries a shield, middle one a cobra and the lower indicates a pose in keeping with the dancing movement of the whole body. Its peculiar *vāhana* the mouse is absent from the picture, and instead two coiled cobras appear each in the right and left bottom corner of the sculpture.

A Gaṇeśa image with two or four arms is a common enough type in Western India, but neither type has yet been known to carry a sword among its weapons. The six-armed Gaṇeśa sculpture from Gol in the Rajshahi District of Bengal and reproduced by Mr. R. D. Banerji in Plate LX (*c*) of his *Eastern Indian School of Mediœval Sculpture* also does not show a sword in its symbolic equipment.

Instances of six-armed Gaṇeśa carrying a sword in one of its hands, are met with, however, in certain Nepalese and Japanese paintings. The type of six-armed dancing Gaṇeśa appearing in the upper left corner of the Nepalese painting of Nritta-Gaṇapati reproduced as Plate 20 (*a*) in Alice Getty's Gaṇeśa, shows a sword held upright in the middle right hand. The kakemono from the Monastery of Koya-san in Japan reproduced in Plate 37 of the same work shows in the bottom right corner a seated six-armed Gaṇeśa carrying a sword in the middle left hand. Discovery of a Gaṇeśa type so rare as the one found at Trikūṭeśvara temple at Gadag derives additional interest from the fact that its equivalents occur in the ancient paintings of such distant lands as Nepal and Japan.

TWO SCULPTURES AT LAKKUNDI AND A RELIEF AT BADAMI.

By Mr. M. S. Vats.

Against the west wall of the *maṇḍapa* of the Jain Basti at Lakkundi in the Dharwar district are placed a standing image of Brahmā in the round (Plate XXXVII, *a*) and a seated image of Padmāvatī in high relief, both fixed on pedestals other than their own (Plate XXXVII, *b*). The image of Brahmā standing on a lotus is 4 ft. 5 in. high and 2 ft. 2 in. broad: it has four faces and four hands, each head being uniformly crowned by a *Jaṭāmakuṭa* surmounted by a common five-pointed conical headdress. The ears of the front and back faces are adorned with rings but the side ones have bud-shaped pendents. The front figure, with *akshamālā* in one right hand and *kamaṇḍalu* in one of the left hands, is profusely ornamented, the other two hands and the *prabhāvalī* above the heads of attendant figures being broken. Round the neck of Brahmā is first a close fitting torque, then a multi-stringed broad necklace adorned with several clasps which are rectangular, rectangular with triangular ends, and of the form of double intersecting squares, and lastly a still longer necklace reaching down to a little above the navel. Above the *yajñopavīta* is worn a garland of *champaka* flowers and another garland which goes down to a little below the knees. The *kaṭisūtra* (girdle), worn above the drapery, is very elaborate and schematic with five ornamental knots of sizes each ending in a tassel. The figure also wears bracelets, anklets and rings on all fingers of the hands and feet. All the fore-arms are broken, but judged from their upward bends at the elbow they were presumably held aslant upwards.[1] It may be added that the expression of all the four faces is almost alike, but the back face is distinguished by the addition of a prominent beard and moustache. Though four faced, the body, as usual, is of the front figure only, and yet there is an easy transition from the front to the side faces and thence to the back face, all this being cleverly achieved by filling the corners of the coif and with the help of ear-ornaments. On the right and left respectively of Brahmā stand Sarasvatī and Sāvitrī each holding a *chauri* in one hand and a *mahalung* fruit in the other. These figures are also haloed and profusely ornamented.

According to Hemachandra's Abhidāna Chintāmaṇi I, 42 Brahmā is the name of a *yaksha* who acts as a guardian to the church of the tenth Tīrthaṅkara Śītala. The Brahmeśvara and Brahmayaksha figures illustrated by Burgess in his article on Digambara Jaina Iconography[2] depict the former "with four heads and eight arms—six holding symbols and with the lotus-bud for a cognizance" and the latter "Though the special attendant of Śītala the tenth Jina is also represented separately as mounted on horseback, with four heads, holding whip, sword and shield". The sculpture being described differs not only from the above representations, but has all the attributes of the Brahmanical

[1] The standing Hoysala image of Brahmā at Halebidu, which is very similar in detail, has a *pāśa* and *sruk* and *sruva* in the corresponding hands which are missing in this figure. *Cf.* T. A. Gopinatha Rao, *Elements of Hindu Iconography*, Vol. II, Pt. II, Pl. CXLVII, fig. 2.

[2] *Indian Antiquary*, Vol. XXXII, 1903, pp. 459-64 and Pls. II and IV.

god who in this case has Sarasvatī and Sāvitrī on either side and in point of detail is very similar to the Halebidu Brahmā referred to above. The fact that many of the favourite Brahmanical deities are included in the Jaina pantheon may explain the presence of the above image in a Jaina temple, although this is likely to have come from one of the Hindu temples at Lakkunudi. I learn from Rao Bahadur K. N. Dikshit that in the Jaina temple at Taundi near Nipani in the Belgaum district of the Bombay Presidency the image of Brahmā is being worshipped under the popular name of Bharamappā.

The image of Padmāvatī—Digambara Jaina yakshiṇī of the twenty-third Jina Pārśvanatha—seated in *līlāsana* is 3 ft. 8 in. high and 2 ft. 10 in. broad (Plate XXXVII, *b*). She has four hands: the upper right holds the *aṅkuśa*, the lower right is in the *varada* pose; the upper left holds a *pāśa* and the lower left a conical (*citrus*) fruit. She has long, curly, flowing locks of hair falling on the shoulders and wears a high beaded crown which shows a *dhyānī* figure in front. Profusely ornamented all over, her divine rank is marked by a halo round the head over which the crown is shaded by a five-headed cobra. Her expression is fierce, mark the high arched eyebrows and staring eyes.

The illustration of Padmāvatī given by Burgess[1] shows that the lower left hand, which in the present sculpture holds a *citrus* fruit, is held in the *abhaya* pose and this agrees with the painting reproduced opposite page 12 of the second series of Gujarātī articles in the Ātmānand Jaina Śatābdī Volume 1936, in respect of other hands the above two illustrations agree with the sculpture being described. But whereas the figure in the Ātmānand Jaina Śatābdī volume is canopied by a three-headed snake, the former has a five-headed cobra. In both cases, however, the cock is shown as her *vāhana*, but in *stotras* she is described as **कुर्कुटोरगवाहना**. In this sculpture the *vāhana* portion is worn out. The following *stotra* copied from a manuscript in the Jain Bhandar at Zira, District Ferozpur speaks of her fierce character, profuse ornamentation and great importance :—

श्रीमद् गीर्वाणचक्रस्फुटमुकुटतटी दिव्यमाणिक्यमाला ।
ज्योतिर्ज्वाला कराला स्फुरितमुकुरिका धृष्टपादारविन्दे ।
त्वां वन्दे देवि पद्मे धरणिधरयुते पार्श्व मां रक्ष पद्मे ।
आह्वानं नैव जानामि नैव जानामि पूजनम् ।
विसर्जनं नैव जानामि क्षमस्व परमेश्वरि ॥

On the south-east face of the large rock standing on the east bank of the Bhutnath tank at Badami in the Bijapur District is a rock-cut panel 5 ft. 9 in. long and 3 ft. 4 in. high which was covered later by a mediæval shrine. It depicts *Seshaśāyī* Vishṇu with four hands, the upper left holds a lotus and the lower one rests on the hip; the right lower supports the head, while the upper one is held in the *dharmachakramudrā* above the navel. The right leg of the god is being pressed by Lakshmī who is seated on a separate pedestal. Behind his head is another seated goddess presumably *Bhūmi Devī*, while Brahmā is shown seated on a lotus issuing from his navel. Below Vishṇu are his emblems the *śaṅkha*, *chakra* and *gadā*, and in the upper field his ten incarnations each

[1] *Op. cit*, Pl. IV, 23.

standing on a lotus which from left to right are *Matsya*, *Kūrma*, *Varāha*, *Narasiṁha*, *Vāmana*, *Parśurāma*, *Rāma*, *Kṛishṇa*, *Buddha* and *Kalki*. The figure of Garuḍa, the vehicle of Vishṇu is shown standing with folded hands at the extreme right of the panel. Between Garuḍa and Lakshmī on one side and above Bhūmidevī on the other are male figures riding *makaras* which emit lotus stalks. The panel is presumably co-eval with the reliefs on the north-east face of the same rock close to which is the only Pallava inscription in the locality, and is remarkable for the presence of the *daśāvatāras* and the unusual wealth of detail.

SHORT SURVEY OF THE RELIGIOUS ASPECT OF THE HISTORY OF BURMA PRIOR TO THE 11TH CENTURY A. D.

By M. Chas. Duroiselle.

It is now a well established fact that the Hīnayāna, or, as it is often, though less correctly called, the Southern Buddhism, with Pāḷi as its sacred language, already existed in Lower Burma (Old Prome and Thaton), from the early centuries of our era. This fact is attested, for Thaton the capital of Rāmañña or Talaing country, by several passages in the commentaries[1] which, in their Pāḷi recension are dated about the Vth century A.D., and by tradition[2]; for Prome, the capital of the Pyū country, by several records on stone and gold leaves which on epigraphical grounds, belong to the Vth--VIth centuries and perhaps somewhat earlier,[3] as well as by other finds and some monuments. But its history up to the XIth century is wrapt in uncertainty due to the almost total absence of contemporary historical or ecclesiastical accounts of its vicissitudes; this applies more especially to Prome. It was introduced in Pagan, Upper Burma, in 1056-57A. D. from Thaton; from that time upwards documents of every kind become numerous and the history of its evolution presents no difficulty.

I do not intend writing a prècis of the history of Hīnayānism in Burma, but rather to shew that, prior to the XIth century, it was not the only form of religion known over the greater part of the country. Of late years, a number of finds have been made, especially in Prome and Pagan, which clearly establish the fact that some form of Mahāyānism (above all in Pagan) Vaishṇavism, and to a much lesser extent, Śaivism, had also their devotees. A good number of notes on these finds are scattered in the pages of the Provincial Annual Reports of Burma and Archæolcgical Survey of India. The intention of this short note is, by grouping together the principal of these finds, to give a succinct review of religious condition of Burma prior to the XIth century.

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[1] *V. Infra*; also Tāranatha *infra*.

[2] *V. Dīpavaṁsa* VIII. 12; *Mahāvaṁsa* XII. 6. 44. The Môn(Talaing) tradition as recorded in late chronicles based entirely on these two Ceylonese histories, ascribe the introduction of Buddhism in the eastern maritime provinces of Burma to the mission of two theras, Soṇa and Uttara from the Council of Pāṭaliputra. But this mission is unknown to the oldest Pāli document and ignored in Aśoka's edicts, and its validity is still a moot point.

[3] *V. Infra.*

Śrīkshetra, or as the Burmese write it, Sarekhettarā, often called Old Prome to distinguish it from the town of Prome, which was founded very much later on the Irrawaddy river some six miles away from it, covers a very large area; in many places, the ruins of the brick walls which surrounded it and the moat at their foot can still be traced. The whole area both within and without the walls was, not so many years ago, covered with jungle which has now to a great extent disappeared before the ploughs of the villagers. It is studded with numerous shapeless mounds, big and small, which are the ruins of ancient stūpas, temples and monasteries; there may also be seen, here and there, old buildings still standing, but they are mostly in a ruinous condition. Śrīkshetra is the site which has yielded the oldest, the most valuable finds, which have enabled us to push back somewhat the history of Burma, however slightly, beyond the XIth century, and have enabled us to get a glimpse of the culture and of the religious sects in the early centuries of the Christian Era, in this Hinduized capital of the Pyū people. It is impossible to fix the exact date of the colonization of Śrīkshetra with any certainty: but it must have taken place very early, about the first or second century A.D., and not improbably even before that. The Indians always were great sailors, and their traders, not content with trading in their own country, ventured themselves on the high seas in search of gain, even before the Christian Era and colonized Indo-China; they travelled from the Gulf of Bengal to Champā (Annam); to Java and Sumatra, and even, in due course, reached the oriental coast of Africa. Such is the opinion of M. G. Ferrand, based on far-reaching researches on early navigation in the East.[1] Lower Burma is much nearer the oriental coast of India, and we may, therefore, presume that Old Prome (as well as Thaton) were colonized very early, and if we put the date down to the 1st century or so, we keep well within reasonable limits. Nothing, it is true, has yet been found which can be dated so far back; but the colonization, at that time, of a far away country could be accomplished but slowly. These merchants brought with them their customs, their arts, and no doubt later on, their priests brought their religion and learning. The early settlers came from the Coromandel coast; this is attested by the alphabet, used on the earliest inscriptions and manuscripts discovered at Śrīkshetra, which was derived directly from the Old Telugu-Canarese alphabets of South India, and more closely allied to the Kadamba alphabet of Vanavāsī, the capital of the Kadambas in North Canara.[2] There is no doubt that Śrīkshetra was also deeply influenced by the culture of Kāñchīpura (Conjeeveram) which was a great centre of Hīnayāna Buddhism in the Vth century.[3] The documents on which those derivations are based are, for the Pyū, the two gold plates found at Maunggan, near Hmawza (VIth century) and the Bawbawgyi inscription (VIth century) also found at Hmawza (Old Prome),[4] for the Talaing or Môn, the inscription found at Lopbouri in Siam.[5] Over a

[1] "Le Malaka, le Malayu and le Malayur", Journal Asiatique, Juillet-Aout 1918, p. 11. *V.* also, by the same author, "Le Kouen-Loven et lés anciennes navigations, Journal of Asiatique Juillet-Aout, p. 37.

[2] *See* Buhler's "Indische Paleographic", Pl. VII.

[3] The Môn alphabet was derived directly from that of the Pallavas of Kāñchīpura.

[4] *V.* Finot, Unnouvean document sur le Bouddhisme birman; Journal Asiatique, Juillet-Aout 1912, pp. 121 ff. These documents are in Pāḷi.

[5] Letter from Mr. G. Coede's in this office.

century ago, King Bodawpaya collected a large number of inscriptions which are now gathered at Amarapura; among them is a Pyū epigraph. Mr. Venkayya, late Epigraphist to the Government of India, in a letter to my predecessor (Mr. Taw Sein Ko) says that, after studying the impression sent him, he is of opinion that it is older than the Maunggan gold plates, and he dates it about the IVth century or somewhat later; but he gives no details as to how he came to form that opinion. If this date can be accepted, which I am inclined to doubt, the date of Pyū culture would be pushed back one or two centuries earlier. Besides the Maunggan plates and the Bawbawgyi inscription just mentioned, another manuscript inscribed on twenty gold leaves was also found; like the other two documents, the language is Pāḷi and it consists of a collection of excerpts mostly from the *Abhidhamma*; the characters are the same, and its date is probably also the VIth or VIIth century. These three documents by themselves suffice to establish the fact that Buddhism was flourishing early in Śrīkshetra and had been brought over from Kāñchīpura at some undetermined time previous to the dates assigned to those documents.[1] But there have also been found inscribed some in Pyū, others in North Eastern characters, with the opening words of the famous act of faith—"*Ye dharmā hetuprabhavī*....", which is Sanskrit; a large statue of Buddha was also discovered, on the four sides of the square pedestal of which is a Sanskrit inscription intermixed with what appears to be a Pyū translation. These inscriptions suffice to shew that not only the Pāḷi and Sanskrit flourished in Śrīkshetra, but also that, besides the Hīnayāna Canon in Pāḷi, some other Canon written in Sanskrit was also known; this was probably the Canon of the Mūla-Sarvāstivādins, who also belonged to the Hīnayāna and were widely diffused over the Far-East. Again, a certain number of finds evidence the existence in the same locality of Mahāyānism, Vaishṇavism and to a much lesser degree, Śaivism. They are the documents we shall now shortly review. Only the most interesting ones are chosen and which leave no doubt as to their origins.

In the cold season of 1911-12, was found, at a short distance from the Bawbawgyi pagoda, a statuette of Avalokiteśvara, which is probably not later than the VIth-VIIIth century. Unfortunately, it is somewhat damaged; the two feet are missing and the left arm with the second one which was protruding from the back is broken off above the elbow, so that the attributes held in the two hands have been lost. But the Dhyānī-Buddha Amitābha which can be seen in the elaborate headdress, stamps it without any doubt as Lokeśvara. The first right arm, bent upwards, seems to be in the *abhaya-mudrā*, and the second right hand holds what appears to be *pustaka* that is, a small bundle of palm leaves tied round with a string. The forehead is marked with the *ūrṇā*. It wears a necklace, armlets and a girdle below which a sash, gracefully tied in a knot on the left hip, falls along the leg down to the ankle. This statuette is of superior workmanship.

[1] From the time of the introduction of Hīnayāna in Upper Burma in the XIth century, the monks have, up to the present day, had a strong predilection for the study of the *Abhidhamma*; monks from Ceylon and North Eastern India used to come and study it in Burmese monasteries. It is interesting to note that the monks in Old Prome seem already to have favoured its study.

In a small brick chamber excavated in the locality known as Yindaik-kwin, was found, among other objects, a small figure ($2\frac{7}{8}$″) of Avalokiteśvara; it is made of gold plate, from which the mould has not been removed. Two of the hands are in the *Vitarka-mudrā*, and in the others can be discerned respectively, a lotus with stalk, a *chowrie*, a trident and a rosary. The Lemyethna temple at Old Prome consists of a central square masonry pillar supporting the roof, and surrounded by a small corridor with a doorway at each side. This central pile bears traces of having once been adorned with sculptures on its four sides; but on two sides only are there some remnants, rather damaged. On the side facing south is found a Buddha; he is flanked by two figures, one of which is much disfigured; it was at first taken to be a female, but on close examination it rather seems to be a Bodhisattva; the other figure, better preserved, leaves on doubt as to its being a Bodhisattva, and from certain details appears to be Lokeśvara. Thus, the sculpture doubtlessly represented the Buddhist trinity. Buddha, Avalokiteśvara and Maitreya. It is in this trinity that the Avalokiteśvara is often found.

Some years ago Mr. Taw Sein Ko mentioned to me that he had found a stone sculpture at Prome: the Buddha flanked by two personages; Mr. Sten Konow, then officiating Director General of Archæology in India, identified these two figures as Lokeśvara and Maitreya. I do not know what has become of this important sculpture. A good number of votive tablets, which it would be too long to enumerate here represent this trinity; they bear inscriptions either in Pyū or early *Devanāgarī*.

Of Maitreya, as far as can be judged from identified figures, only one example was found. It is a bronze statuette in the round. It bears an inscription in Pyū which is not all legible; but on the proper left side can still be read the words —*ba*: *Maitreya ba*:; these words leave no doubt as to the nature of the image.

Besides the above, there are very many fragments of sculptures and votive tablets which undoubtedly represented figures of Bodhisattvas, but their condition does not allow any identification.

Up to now only two examples of the goddess Tārā have been found at Prome; each has an inscription in *Devanāgarī*; they probably are not of local make, but were brought over from India.

Another Tārā was found while digging near the Manawgon village in the Magwe District about one hundred miles above Śrīkshetra. It is of bronze. She is seated cross-legged on a lotus throne, her right hand in the charity or *varada-mudrā*; the left hand, in the *vitarka-mudrā*, is holding the stem of a lotus. She is decked with anklets, armlets, bracelets, necklace and earrings, and wears a crown; her hair is done up into a knot at the back of the head. It was imported from India, as her slender waist and well developed bosom indicate. From its style, it may be dated about the IXth-Xth century A. D. It is now in the local museum at Pagan.

Near one of the old city gates, were found two fragments of a stone image. The attitude of the figure and its distended abdomen point this out to be Jambhala. This sculpture also probably belongs to the IXth-Xth century.

Prome at one time bore the name of Pissanu-myo, the town of Vishṇu which seems to indicate that, at some period, Vishṇuism was well known there, but whether the Pyū people had embraced it, or whether it was the Indian colonists cannot be ascertained now; but it was probably the latter. The preponderance of Buddhist images and temples is so great that we cannot but come to the conclusion that the aborigines were Buddhists, though, no doubt, influenced by the cults of the Hindu colonists. Images of Vishṇu are very few in Prome, but they ante-date the XIth century. One was found by the late General de Beylie during his second visit to Prome.[1] It is a stone bas-relief of Vishṇu Chaturbhuja standing on Garuḍa.

In 1920, an iguana, pursued by a Burmese hunter, led to the discovery in its lair of two stone sculptures of Vishṇu. One is a Chaturbhuja; the two upper hands hold, the left one, the conch, and the right one, the discus; the lower left hand rests on the club, while the right is brought up before the breast; he is resting on Garuḍa, the outlines of which can be seen, though it is much damaged. The stone is 16″ in height and 9″ in breadth at the bottom. The second sculpture measures 15½″ in height and 14½″ in breadth at the bottom. He is represented as reclining on the serpent Ananta floating on the waters; Ananta is damaged, but can be distinguished under him. From his navel issued a three-fold lotus stalk on the flowers of which are seated the three gods of the Hindū trinity. On the right is Brahmā with his four heads; he has four arms, the hands of the two lower of which are folded before the breast; the upper right hand is broken, and the object he holds in the left is indistinguishable. The two other figures, also with four arms each, are Vishṇu and Śiva, but the attributes they hold are spoiled and unidentifiable. A very similar sculpture was found at Thaton, as will be seen lower down. These images may be attributed to the VIIIth or IXth century or perhaps a little earlier.

As has already been said, traces of Śaivism in Old Prome are extremely scarce, and this may be applied to whole of Burma, which tends to shew that, although this cult was not unknown, it did not make much headway among the people and influenced them but little. There is an old legend recorded in most Burmese histories, but which is probably a Pyū legend,[2] which says that, among other personages, Chaṇḍī and Parameśvara[3] or Śiva, assisted at the foundation of Prome. I have explored Prome and the countryside and excavated there for many years, and I have never found anything that could be positively pronounced as Śaivite. The late Mr. Taw Sein Ko, however, while excavating in 1911 not far from the Bawbawgyi pagoda, found "exquisitely shaped terra-cotta plaques, various animals and a trident, and in addition, a clay seal bearing the liṅga on its obverse face." There were also found some very old coins of a type pretty well distributed in Central and Upper Burma, which were at a time thought to bear

[1] *V.* Prome et Samara.

[2] The Pyū became completely amalgamated with the Burmese only in the XIIIth or XIVth century: after that date they disappear.

[3] This is the name altered to forms Paramesu or Paramesva, by which Śiva is generally referred to in Burmese and Môn literatures.

Śaivite symbols; but they have not yet been explained satisfactorily and expert numismatists appear doubtful on this point.

At the beginning of this note, the Hindu colonization of Thaton (Sudhamma) has been epitomized. It has been shown that this part of Lower Burma, known as Rāmañña, the Môn country, derived its alphabet, culture and the Hinayāna Buddhism it professed from Kāñchī, now Conjeeveram, in Southern India; in the early centuries, it was also influenced by Ceylon with its Theravāda School. According to native chronicles there was, about the VIIIth century a strong recrudescence of Hinduism (which was already there long before that) and the supremacy of the two religions, Buddhism and Hinduism, was for a time in the balance; the first prevailed and, with the decline of Buddhism at about that period in India, the Theravāda of Ceylon became the prevalent religion in the land. There can be no doubt that another Hīnayāna School with a Sanskrit Canon was also known there; this is borne out, for instance, by the Sanskrit words found not only in the Môn epigraphs of the XIth century, but also in the subsequent Môn literature, practically all of which is of a religious character. Mahāyānism must also, as a matter of fact, have been imported from India, just as it was in Prome. Nothing, however, of a specific and undisputable North Buddhist character has been found in Thaton, as far as my knowledge goes; this applies to Thaton and not to the whole of Rāmaññadesa. About the only evidence we have of the early presence of Mahāyānism in Thaton, besides the passage in Tārānātha's *Tibetan History of Buddhism*,[1] and on which not too much reliance should be placed, in which he tells us that up to the time of Vasubandhu (IVth century) Hīnayānism reigned supreme in the Koki countries, in which he includes Pagan, Arakan and Hamsavati (Pegu in the Rāmañña country), but that after Vasubandhu, the Mahāyāna, introduced in those countries by his disciples, absorbed completely the Hīnayāna, and the two Schools became undistinguishable, the only evidence we have besides this is the passage concerning Dīpaṅkara Śrījñāna Atīśa in "Indian pandits in the land of Snow."[2] The learned author of this interesting work tells us that Dīpaṅkara was born in 980 A.D. in Bengal. He was accounted to be one of the greatest scholars of his time; he had mastered the *Tripiṭakas* of the several schools of Hīnayāna as well as the *Piṭakas* of the Mahāyāna; the metaphysics of the Mādhyamika and Yogāchāra Schools, the four classes of *tantras*, etc., later on he was initiated into the mysteries of esoteric Buddhism; he became a *bhikshu* of the highest order. He was one of the greatest expounders of Northern Buddhism. Not satisfied, he went to Suvarṇadvīpa, that is, Thaton, which was then a great centre of Buddhism, to learn the pure teachings of the Buddha, that is, the Theravāda, at the feet of Chandrakīrti, the High Priest of Rāmaññadesa, and dwelt there twelve years. However, as has been said above, nothing specifically Northern Buddhist has yet been found in Thaton itself, excepting perhaps a small votive tablet representing the Buddha seated in European fashion flanked by two personages which may be

[1] Schiefner's translation "Geschichte des Buddhismus in Indian", p. 262.

[2] By Sarat Chandra Das, pp. 50 ff.

Avalokiteśvara and Maitreya,[1] and this was found in a cave in the Amherst District, some 60 or 70 miles from Thaton in a bee-line.

Hinduism is illustrated by three stone sculptures.[2] One is a figure of Vishṇu with four arms; his symbols are distinguishable; there is a figure on his left which seems to be an attendant. The other two depict Vishṇu Chaturbhuja reclining on Ananta with Brahmā, Vishṇu and Śiva, the Hindū triad seated on lotuses issuing from his navel.

Haṁsavatī or Pegu, about 70 miles from Thaton, as the crow flies, which became the capital of Rāmaññadesa after Thaton, must also have early been colonized by Hindus. It was well known to the Buddhist world, at least to the Hīnayānists as far as at least the IVth-Vth century. It is mentioned in the Jātaka[3] as "*Nagaram Padumuttar-Buddhassa*", the birth-place of the Buddha Padumuttara. It is very often mentioned in the *Manorathapūraṇi*, the Commentary on the *Aṅguttara Nikāya*.[4] For instance, Sujātā, the first of the lay women to be converted was, in a previous existence, born in Haṁsavatī.[5] Similarly, the Upāsaka Chitta, the greatest of lay teachers;[6] a large number of the more important personages of Buddhism are said to have been born there.[7] The religious condition which obtained in Prome and Thaton, no doubt obtained also at Pegu in the early centuries of our era up to about the XIth century more or less. But, as is the case for Thaton, antiquarian objects antedating the XIth century are scarce. This dearth of antiquities may perhaps be attributed to the destructive climate of the region or to wilful destruction actuated by religious feeling; but the latter hypothesis is very doubtful. A thorough exploration, however, of the Thaton and Pegu Districts—which hitherto has been made on a very small scale owing to paucity of funds may bring much to light that will give some solution to this question.

Mr. Taw Sein Ko[8] mentions finding in the Shwenatha pagoda, an image sculptured in relief on a block of sandstone 5½′ in height. It has Indian features and though somewhat mutilated and even altered in some particulars, he recognized it as a figure of Avalokiteśvara.

Mr. J. A. Stewart, who was deputed by this department in November and December 1913 to carry on some exploration and research in Pegu and its countryside[9] mentions the finding, in an ancient and ruined Śaivite temple, of several large stones each with a circular depression in their centre, and which are what appears to be *yonis*; but not having found any *liṅgas*, he makes the statement with a reservation; a reproduction of two of these stones is shewn in plate I, fig. 2 of his account. The *liṅgas* may, however, in the course of time, have been

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[1] R. C. Temple, "*Notes on the Antiquities of Rāmaññadesa*", Pl. XVI, fig. B.
[2] *Op. cit.*, Pls. XIIIa, XIV and XIVa.
[3] *Avidūra Nidāna*, p. 37, Vol. I.
[4] Singhalese edition, 1904.
[5] P. 239.
[6] P. 229.
[7] Pp. 197, 199, 203, 205, etc.
[8] "*Notes on an Archæological Tour through Rāmaññadesa*", 1891 p. 8.
[9] *V.* Burma Research Society Journal, 1917, Vol. VII, part I, pp. 13 ff.

destroyed or removed. The stones appear certainly to be *yonis*, and their having been found among the débris of a Śaivite temple, leaves no doubt of their being so.[1]

While visiting, near the village of Kambe, 5 miles to the south of Twante,[2] the Sudaungpyi monastery, the resident monk showed and made over to me a stone sculpture he had found under some bushes a short time previously. It is interesting in as much as it belongs to the Northern School, and may be dated about the IXth-Xth century. It represents the Buddha with his right hand in the *abhaya-mudrā* and his left in the *varada*, and is flanked by two Bodhisattvas. Both are in the same posture, holding a full blown lotus in their left hand, while the right is in the *varada-mudrā*; there is a total absence of any characteristics, except the lotus which stamps them as Bodhisattvas. They are doubtless Padmapāṇi and Maitreya.

Pagan received its alphabet and the Pāli Canon of the Theravāda from the Môn, when the Burmese conquered their capital, Thaton, in 1056-57 A. D. Culturally they are, therefore, very much younger than their two neighbouring people the Môn and the Pyū. This may be attributed to the fact that the Burmese were relatively late comers in the valley of the Irrawaddy, and do not appear to have become settled as a united nation long before the VIIIth-IXth century.[3] The little that is known of the history of Upper Burma before the XIth century is found in Pelliot's "*Deux itineraires de Chine en Inde a la fin du VIIIth Siecle*;"[4] that is mostly based on Chinese histories and documents and refers principally to the Pyū with their capital at Prome, for the Chinese do not seem to have then known much of the Burmese; as far as I am aware, they mention them by name only in the XIth-XIIth century. From the statement of the Burmese historians themselves the Hīnayāna was not known at Pagan before the XIth century.[5] They say that, before that, they professed the religion of the Arī. The Arī ministered to the superstitions of the people, and were the priests of the Nāga and spirit-worship, then prevalent in the land; but in time this was superimposed by Buddhism, brought over by a sect belonging to the Northern School who came from Bengal or Northern India in the VIth-VIIth century. They were, about the VIIIth century profoundly influenced by Tantrism, (whose rapid encroachment about that time is a feature common to Hinduism and Buddhism) a system of sorcery and witchcraft which, among the Buddhists, had for its aim the attainment, by spiritual means, of desired objects, whether material or otherwise, and by means of *mantras*, charms and alchemy sought to realize dreams of invulnerability, invisibility, etc. They were also addicted to immoral practices resembling those of the "left hand" or Vāmāchāra, owing to *Śākta* influences generally and perhaps more particularly to intercourse with the

[1] I have found, at Pagan, several of what are called "ablution stones"; at first sight, they might be taken for *yonis*, but the absence of the round depression in their centre suffices to show they are not.

[2] Twante is a small town a few miles from Rangoon on the other side of the Irrawaddy river.

[3] Pagan was founded in 849 A.D., by King Pyinbya. This date probably marks the final unification of the nation.

[4] *Bulletin de l'Ecole Française d'Extreme-Orient*, 1904, pp. 131 ff.

[5] Mahayazawañ-taw-kri.

Vajrayānists and *Sahajiyas* of Bengal and Nepal.[1] Since the time when the paper on the Arī was written, numerous important discoveries were made in Pagan which amply confirm what precedes. Votive tablets, impressed with the figure of the Buddha and bearing short sentences in Sanskrit, testify also to the existence in Pagan of some School of Hīnayānism with Sanskrit as its sacred language.

The discoveries just referred to were made in three principal centres: *Thamati*, which according to the Burmese chronicles and old legends is the place where the Arī religion arose; it is situated some four miles to the south-east of the city of Pagan; the remains there are not very numerous. *Min-nan-thu*, a little over one mile to the west of *Thamati* and about four miles to the south of Pagan, and *Myin-Pagan*, situated one mile to the south of Pagan. All the area covered by these three localities and their vicinity is studded with numerous temples in a large number of which several paintings of Mahāyānist and Tāntric character may still be seen. The frescoes in all these temples, excepting a very few are not Burmese, but Indian and belong to the Bengal-Nepalese School of painting. In the *Paya-Thon-Zu* and the *Nandamañña* temples at *Min-nan-thu*, they are mostly very well preserved; they represent the Buddha, his birth in the Lumbini, several episodes of his career, Padmapāṇi, numerous Bodhisattvas embracing their Śaktis; figures of horrible monsters and personages of a decidedly Tāntric nature.[2]

But the two most important temples are in the village of *Myin-Pagan*: the *Abeyadana* and the *Kubyaukkyi*, quite close to each other. They form a veritable store-house, so to say, of Hīnayānist, and Mahāyānist, Tāntric and Hindū frescoes, and leave absolutely no doubt as to the religious condition obtaining in Pagan before and some time after the XIth century.[3] Hīnayānism has then just been introduced from Thaton, and it is evident from some inscriptions, and numerous votive tablets bearing the name of *Aniruddha*, the then ruling monarch, that it was the state religion, he having cast from him all that was not Theravāda. Mahāyānism and Tāntrism as well as Hinduism were adhered to by their Indian devotees, who were then numerous in Pagan. The paintings in the *Abeyadana* represents numerous divinities of the Mahāyāna pantheon, such as Avalokiteśvara, Maitreya, Mañjuśrī, Tārā and other goddesses both in peaceful or fierce appearance, etc., Brahmā, Śiva and Vishṇu, each on his own mount; Gaṇeśa; hideous Tāntric figures, etc. In the Kubyaukkyi temple, the Hīnayāna and Mahāyāna are found together: "Here, portions of the walls below the frieze are ornamented with figures of Brahmā, and many-armed Bodhisattvas with their Śaktis are guarding the entrances to the temple and sanctum; while scenes from the *Jātakas* and the life of the Buddha as given in the Pāḷi books decorate the walls round the porch and corridor".[4]

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[1] "Chas. Duroiselle's "*The Arī of Burma and Tantric Buddhism*", Archæological Survey of India, 1915-16, pp. 79 ff, to which the reader may refer for a full account of the Arī.

[2] For a description of all these *vide*," The Arī and Tantric Buddhism", *op. cit.* and the accompanying plates.

[3] *V.* the most interesting paper of my pupil and successor U Mya (now retired) in the Archæological Survey of India Annual Report for 1930-34 for a full account.

[4] *Op. cit.*, p. 184.

The Buddhist trinity, Buddha, Avalokiteśvara and Maitreya are quite common, among the frescoes of not only the temples just mentioned, but in not a few other temples, and on a large number of votive tablets manufactured both in Pagan and India. Sometimes, but seldom, they are found sculptured in stone, as at the Taw-ya-kyaung monastery at Thiripyitsaya (Sīripaccayā) near Pagan; and this sculpture on stylistic ground cannot be assigned to a date earlier than the XIth-XIIth century A. D. A figure of Maitreya, in bronze, was found in a chamber built against the plinth of the Pawdawmu pagoda near the Dhammayangyi temple, 6″ in height, which probably belongs to the XIth or XIIth century. Avalokiteśvara and Maitreya, as two members of the trinity, have also been found elsewhere in Upper Burma; for instance at Sameikshe, a small place near Thazi, on the Railway line 80 miles south of Mandalay. Here were discovered several votive tablets impressed with the trinity, and one of which bears a legend in Nāgarī characters in which appears the name of King Aniruddha of Pagan (1044-77 A.D.). Another was found at Tagaung, on the Irrawaddy, 148 miles north of Mandalay. There are not many representations of Brahmā; besides those mentioned above in the frescoes of the Abeyadana, and a few other monuments, it is found also painted on the wall of the *Theinmazi* temple, Pagan. He is represented with four eyes, two noses and two mouths, going on a pilgrimage to worship at the above shrine. In the Nan-paya, at Myin-Pagan, a monument said to have been built by Manuha, King of Thaton, after he had been brought a prisoner to the Burmese capital, the Brahmā Chaturmukha is sculptured in low relief on the four central pillars of the building.

There is within the city walls a distinctly Hindū temple, called in Burmese the *Nat-Hlaung-Kyaung*; dedicated to Vishṇu, which belongs to about the XIIth or XIIIth century. In niches round the exterior walls are stone sculptures representing the ten Avatāras of Vishṇu, most of them badly disfigured, but some still distinct enough to allow the identifications to be made: the Rāmachandra, the Paraśurāma, and the Narasiṁha Avatāras; also the Buddha Avatāra.[1] The principal figure which was in a niche in the central brick pile of the temple supporting the roof was found by H. Yule lying on the floor of the corridor; it is now in the Berlin Museum.[2] It is Vishṇu sitting cross-legged on Garuḍa and holding his usual attributes. Another figure of Vishṇu, cast in bronze, was found by a monk at Myin-Ka-bā, near Pagan, and is now preserved in the local museum at Pagan.

It has already been said that Śiva is figured among the frescoes of the Abeyadana temple. A large sculpture of Śiva was also found in the Nat-Hlaung-Kyaung and placed at the entrance to the museum at Pagan, where is to be seen also another, much smaller, found on the river bank.

Gaṇeśa, in Burma is known as Mahā-Binnè (Mahā-Vināyaka), and has always been popular even among the Buddhist population; his images are often found at Buddhist sites among other purely Buddhist objects; a great festival used

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[1] *V.* Chas. Duroiselle's "*The Nat-Hlaung-Kyaung, Pagan*", Archæological Survey of India Annual Report, 1912-13, pp. 126 ff.

[2] "*Narrative of the Mission to the Court of Ava*" by Col. Henry Yule, Thacker Spink & Co., Calcutta, 1857, p. 34.

to be held at the Court in his honour. The figures of Gaṇeśa in painting, stone and bronze are comparatively numerous at Pagan and its vicinity. The most interesting figure of Gaṇeśa was found in a pagoda at Kyauksauk near Pagan. It is the only figure of its kind I have yet seen. It is of bronze, 1′ 7″ in height. It represents Gaṇeśa with smaller figure of Gavampade (Gavāṁpati) back to back with him. Gavampade is the Buddhist patron saint of the Môn; his cult became known and spread in Upper Burma after the destruction of Thaton; statuettes of his are still used in witchcraft, and confer certain highly desirable worldly advantages, on *mantras* being recited over them. A curious feature of this bronze image is that both figures have their eyes covered with their hands; local tradition in Pagan has it that such images were used by magicians in working charms of different kinds.

The object of this short note is to compress in a few pages the principal references concerning Burma and the principal discoveries which, from their character, give us an insight into the religious life of this country prior to the XIth century, after which date the supremacy of the Pāḷi Hīnayāna became established in the land. To treat this subject in full detail, a good-sized book would have to be written; and it is very desirable that such a book should be written, as a first step to the elucidation of the political, religious, and cultural history of this country, of which very little is really known.

SECTION VIII.

DEPARTMENTAL ROUTINE NOTES.

Ancient Monuments Preservation Act and Listing of Monuments.

In the United Provinces three monuments, *viz.* :—

(1) Monument of Major F. W. Pinkney, Jhansi Cantonment,

(2) Battis Khamba standing in the goods-yard of the Benares City Station, Bengal and North-Western Railway, and

(3) Chauburjî or the temporary burial place of the Emperor Babur, Agra, were declared as protected during the year; while the notifications of protection in respect of the Temple of Devipur, District Nainital, and the tomb of Abu Muhammad, district Meerut, were withdrawn. The Residency at Lucknow and the Aligarh Fort have been transferred to the Defence Department of the Government of India and the Muslim University, Aligarh, respectively. The owners of the tomb of Nawab Sadr Jahan at Pihani, District Hardoi, entered into an agreement under Section 5 of the Ancient Monuments Preservation Act.

In the Frontier Circle traffic in Gandhara sculptures continued and one Jiwan Das of village Garyala, P. O. and P. S. Rustam, Tahsil Mardan, was prosecuted for selling Buddha images and fined Rs. 10 by the District Magistrate, Mardan.

In the Western Circle two monuments—(1) the Temple of Vithoba and Maruti at Deur in the Satara district and (2) Muhammad Tughlaq's Mosque at Khanapur—were added to the List of Protected Monuments. The owner of the Shankarlinga Temple at Nimbal, district Bijapur, signed an agreement under Section 5 of the Ancient Monuments Preservation Act.

In the Central Provinces the inscribed slab of Asoka at Deotak in the Chanda district was removed to the Nagpur Museum.

In Bihar the remains of wooden foundations and ancient Mauryan walls in Survey plots Nos. 698, 699, 700 and 701 in Mahalla Sandalpore, Pargana Azimabad, P. S. Sultanganj, Patna City, were declared as protected; while the old opium building at Gulzarbagh, P. S. Alamganj, Patna City, was protected and transferred to the Local Government under the Devolution Rules.

In Bengal the name of "Dhibar Pillar" at Sapahar, district Dinajpur, was corrected to "Dibar Pillar".

In Assam the "Temple and Mandir" at Khatargaon with its adjacent tank and a boundary consisting of a *garh* and a drain on all four sides was renamed as "Basudev Dal".

Consequent on the transfer of the six Northern Taluks of Ganjam district together with its Agency tracts to the newly created Province of Orissa under the new Constitution, the following ancient monuments have been transferred to the Superintendent, Archæological Survey, Central Circle, Patna :—

1. Asoka Rock Inscriptions at Jaugada (S. No. 1 of Central List),

2. Gangadhara and Jagadisvara temples on Brudhakotla hill beyond the village boundary of Kottakolla (S. No. 2),
3-5. Kointa, Yudhisthira, and Bhima temples at Mahendragiri (S. Nos. 3-5), and
6. Ganjam Fort in Ganjam village (S. No. 341).

Four ancient monuments were added to the List of Protected Monuments in the Madras Presidency. An agreement under Section 5 of the Act executed by the trustees of Cavern with Panchapandava beds on the Western slope of the hill at Tirupparankunram, Madura District, was registered during the year. A revised List of Protected Ancient Monuments (Central) in the Madras Presidency has been drawn up for printing.

In Burma a proposal to protect the remains of an old brick monastery close to the south of the Somingyi Pagoda at Myinpagan, Myingyan district, is under consideration of the local Government.

Publications.

The following publications were issued by the Department during the year 1936-37 :—

1. *Memoir No. 51—Animal Remains from Harappa*, by Dr. B. Prasad.
2. *List of Archæological Photo-negatives of Burma* stored in the office of the Superintendent, Archæological Survey, Burma Circle, Mandalay, corrected up to 31st March, 1935.
3. *Epigraphia Burmanica*, Vol. IV, Parts I-II ; *Mon Inscriptions*, Section II ; the Mediæval *Mon Inscriptions* Nos. 13-18, edited by U Mya.
4. *Annual Report on South-Indian Epigraphy* for the year ending 31st March, 1933 by C. R. Krishnamachàrlu.
5. *List of Archæological Photo-negatives in the Madras Presidency and Coorg* stored in the Office of the Superintendent, Archæological Survey, Southern Circle, Madras, corrected up to 31st March, 1935.
6. *A Guide to Taxila*, Third Edition, by Sir John Marshall.
7. *Annual Reports of the Archæological Survey of India* for the years 1930-34 in two parts, edited by Dr. C. L. Fabri.
8. *A Guide to Sanchi*, Second Edition, by Sir John Marshall.
9. *Memoir No. 49—Bijapur Inscriptions*, by Dr. M. Nazim.
10. *Epigraphia Indica*, Vol. XXI, Part 7 ; Vol. XXII, Parts 4, 5, 6 and 7, edited by Dr. N. P. Chakravarti.

Photographs.

Director General of Archæology.—During the year under review 221 negatives were prepared. They represent views of excavations at Taxila monuments and sculptures at Ajmer and Allahabad. Besides these, one hundred lantern slides were made to illustrate lectures on archæological subjects. Of the prints made during the year, 648 were required for the use of departmental officers, 193 for record in albums maintained at the Taxila Museum and 40 were

supplied to the India House, London. 1,041 prints received from Circle offices were mounted in the albums kept for reference in the Central Archæological Library at Simla. 946 prints were supplied to the public, the sale-proceeds of which amounted to Rs. 518-9-0. A revised list of Photo-negatives stored in the Director General's Office has been passed for final printing.

Northern Circle.—169 negatives were prepared in the Agra Office. Of these, 48 relate to the ancient monuments and sites in the United Provinces, 18 to the buildings in the Delhi Province and 106 represent exhibits in the Delhi Fort Museum. The collection includes the photographs of two medallions of the Stūpa II at Sanchi in the Bhopal State. 659 prints were made, of which 533 were required for departmental use, and the remaining 126 sold to the public for Rs. 173-14-0.

Frontier Circle.—In all 319 plates were exposed during the year. Of these, 12 consist of different views of Harappa and Kamran's Baradari excavations, 26 are of antiquities from the ancient mounds at Kala Shah Kaku, Muridke, Mian Ali Dogran, Khokrakot and Agroha; while 33 negatives illustrate the paintings of Lord Krishna's life at Nau Nihal Singh's Haveli, Lahore; and the rest relate to the conservation work in progress at Attock, Hissar, Karnal, Lahore, Mansehra, Takht-i-Bahi and Taxila. Besides 3 annual sets prepared during the year, prints worth Rs. 149 were sold to the public and 45 supplied to the officers of the Department.

Western Circle.—209 photographs and 1,055 prints were prepared. Of the latter, 318 were supplied to officers of the Archæological and other Departments and 286 sold to the public for Rs. 299-0-6.

Central Circle.—400 negatives were added to the collection of the Central Circle during the year. Of 1,338 prints made, 223 were supplied to the public on payment and the rest required for departmental use. Due to the creation of the new Province of Orissa 24 negatives stored in the Madras Office were transferred to this Circle.

Eastern Circle.—150 photographs were taken in the Eastern Circle, among which 50 are views of the excavations carried out at Mahasthangarh in the district of Bogra and 100 of various ancient sites and monuments in Bengal and Assam. The sale-proceeds of prints amounted to Rs. 245-5-0.

Southern Circle.—206 plates were prepared and 1,615 prints taken during the year. Of the latter, 418 prints were sold to the public at a cost of Rs. 407-14-0, 536 supplied free to departmental officers, etc., and the remaining 661 required for replacing faded prints in the photo-albums maintained in the Southern Circle.

Burma Circle.—94 negatives were prepared in the Mandalay Office. They are views of an old monastery south of the Somingyi Pagoda, Myinpagan, of brick mounds excavated at Myinpagan and Hmawza (Old Prome), of stucco works on a ruined temple at the former place and of Kyontu-Paya (Pagoda) and the excavation site at the pagoda near Waw, Pegu district. They include seated and standing Buddha figures in stone and bronze and stone images of Hindu and Buddhist deities found at Myinpagan, Pagan and Hmawza; terracotta

plaques and votive tablets and figures of lions in laterite and baked clay found at Kyontu, near Waw; the inscriptions on most of the terracotta plaques mentioned above; stone epigraphs found at Myinpagan, Pakhangyi, Myingun and Minbu; the first page of an old manuscript of Kammavācā found in a monastery at Mandalay; figures of hermits discovered under the four western posts of Pyatthat No. 48 over the South Main Gate of Fort Dufferin, Mandalay; a stone figure of Jambupati (Buddha in regal dress) and a stone head of a dragon found at Pakhangyi; and a fresco-painting on a wall of the Kubyaukkyi Temple at Wetkyi-in, Pagan.

In the *Archæological Section of the Indian Museum* 167 photographic negatives were prepared during the year.

Drawings.

Director General of Archæology.—8 plans of ancient sites at Taxila and 254 drawings of selected copper, bronze and stone antiquities displayed in the Taxila Museum were prepared during the year. Of these, 144 were completed. Of the drawings prepared of the monuments at Taxila a conjectural restoration of a *stupa* at Kalawan is worthy of mention.

Northern Circle.—Thirty-six drawings were prepared during the year. They consisted mostly of the plans of ancient sites surveyed and working drawings in connection with the conservation of ancient monuments. Besides, 19 pencil drawings made in previous years have been inked in.

Frontier Circle.—18 drawings were prepared during the year.

Western Circle.—One record drawing and 40 working plans illustrating the conservation work in the Circle were prepared during the year.

Central Circle.—Besides various working plans and sketches required for conservation works in progress in the Central Circle, five new drawings were taken up during the year. Of these, three of Nalanda excavations were inked in and completed. Impressions of 34 inscriptions were also taken, two of which were discovered at Nalanda and four at Rajgir in the Patna district.

Eastern Circle.—Three new drawings were made of the excavations conducted at Mahasthangarh during the year. Besides, a number of sketches and tracings pertaining to various conservation works in the circle and land acquisition were drawn up.

Southern Circle.—Besides the plans required for conservation works no new drawings were prepared during the year.

Burma Circle.—Twenty-seven fresh drawings were prepared by the Mandalay Office. They illustrate paintings on walls within Kyanzittha's Onhmin or cave temple at Nyaung-U; plans, elevations and sections of the remains of an old monastery south of the Somingyi Pagoda at Myinpagan; Buddha's footprint on a stone slab in a small shrine at Thetywa near Pakhangyi; plans and sections of the remains of a temple excavated at Hmawza (Old Prome); sketches of terracotta plaques and of the terracotta figure of a lion found at Kyontu as well as a sketch plan of the site at the Kyontu-Paya (Pagoda) near Waw, Pegu district.

Personnel.

From March 21st, 1937, Mr. J. F. Blakiston having proceeded on six months' leave preparatory to retirement I took over charge of the Office of the Director General and the following arrangements were made in consequence : Mr. M. S. Vats, Superintendent, Archæological Survey, Western Circle, relieved me of my Deputyship with effect from the 22nd March, 1937 and Mr. Q. M. Moneer, Assistant Superintendent, held charge of the current duties of the Superintendent in the Western Circle in addition to his own with effect from the afternoon of the 9th March, 1937.

Mr. M. H. Kuraishi having been suspended under the orders of the Government of India, Mr. H. L. Srivastava, Assistant Superintendent, Rajputana and Central India, was appointed to officiate as Superintendent in the Frontier Circle with effect from the 7th January, 1937.

Mr. M. S. Vats, Superintendent, Archæological Survey, Western Circle, was granted leave on average pay for two months and seven days with effect from the 10th April, 1936 and Mr. Q. M. Moneer, Assistant Superintendent, held charge of the current duties of the Superintendent, Western Circle, in addition to his own, for the period.

Mr. T. N. Ramachandran, Assistant Superintendent, Archæological Survey, Eastern Circle, was granted leave on average pay from the 2nd to the 17th October, 1936 (inclusive).

APPENDIX I.

List of exhibits other than coins acquired for the Indian Museum, Archæological Section, during the year 1936-37.

Museum Register No. | Description.

Presented by the Loreto House, Calcutta.

10370-10375.—Six clay tablets with cuneiform writing from Babylonia.

Presented by Baron Ow-Wachendorf, Consul-General for Germany.

9559-61.—Three fragments of sandstone slabs with Brāhmī inscriptions. From Kosam, Allahabad. 1′-6″×1′-3″, 7″×5″, 9·5″×3·5″.

Presented by Mr. J. F. Blakiston.

10369. Cast of a sculpture representing a Vidyādhara couple, from Ajanta. 1′-3″×1′-1″.

On loan from the Director General of Archæology in India.

FROM SOHR DAMB, NAL, DISTRICT JHALAWAN, BALUCHISTAN.

(1) *Recovered by Mirza Sher Muhammad and presented to the Quetta Museum by Mr. H. Buller.*

9585-9642.—Painted pottery vases and fragments.

(2) *Excavated by Mr. H. Hargreaves.*

9643-9702, 9727-45.—Painted pottery vases and fragments.

9703-04.—Stone grinders.

9746-50.—Copper tools including a saw and a chisel.

9751-56, 9758.—Stone and paste beads.

9757.—Shell bangle.

9759.—Steatite seal.

9760.—Two fragments of worked bone.

FROM SEISTAN. COLLECTED BY SIR HENRY MCMAHON.

9705-16, 9724.—Fragments of painted pottery. From Seistan.

9725.—Stone casket. From Seistan. Ht. 1⅜″.

9726.—Alabaster pot. From Seistan. Ht. 1⅜″.

9717.—Neolithic stone implement. From Shah-i-Mardan. L. 2¼″.

9718.—Neolithic stone implement. From Naluki. L. 2″.

9719.—Neolithic stone implement. From Tarakum. L. 1¾″.

9720-21.—Neolithic stone implement. From Chah Alladad. L. 1¼″, 1¼″.

9722-23.—Neolithic stone implement. From Seistan. L. 2″, 1½″.

FROM TAXILA. EXCAVATED BY SIR JOHN MARSHALL.

(1) *Bhir Mound.*

9796-9820, 9836-39.—Pottery vases and fragments.

9821-23.—Terracotta human figurines.

9824-35.—Terracotta toy animal figures.

9840-43.—Terracotta wheels of toy carts.

9936-10055, 10263.—Beads (agate, cornelian, jasper, chalcedony, glass, shell, etc.).

10282-83.—Fragmentary discs of burnt white agate. L. 1·75″, 1·4″.

Museum Register No. | Description.

FROM TAXILA—*contd.*

(2) *Sirkap.*

9844-72.—Terracotta vases.
9873-74.—Terracotta inkpots.
9875-76.—Terracotta goblets.
9877-78.—Terracotta tumblers.
9879-88, 9890-93.—Terracotta cups.
9889.—Terracotta saucer. Diameter 6″.
9894-96.—Terracotta lids.
9897-98.—Terracotta lamps.
9899-01.—Terracotta human figurines.
9902-04.—Terracotta toy horse and bird.
9905.—Terracotta chamber of an offering tank.
9926-35, 10279-80.—Copper objects: cooking pot, bowl, spoon, mirror, etc.
10056-10216, 10264-66, 10268-69.—Beads, gems and pendants (agate, cornelian, chalcedony, glass, shell, etc.).
10281.—Steatite casket. Diameter 2·5″.
10284-85.—Plano convex boss of banded agate. Diameter 1·7″, 1·65″.
10286-97.—Bone objects (needle, rod, pin, etc.).
10312-13.—Glass bangles. Diameter 2″, 2·5″.

(3) *Other sites.*

9906-21.—Terracotta vases and lids.
9922-24.—Terracotta animal figurines.
9925.—Terracotta vessel with incised zigzag pattern. Diam. 3·4″.
10298-10311.—Fragments of shell bangles.
10314-15.—Fragments of glass bangles.
10217-56, 10258-62, 10267, 10270-78.—Stone beads.
10257.—Bird shaped pendant of shell. L. 1·18″.

FROM PAHARPUR, DISTRICT RAJSHAHI, BENGAL.

9761.—Terracotta plaque with representation of a dog. 10·5″×9″.
9762.—Terracotta plaque with representation of a elephant. 11″×9″.
9763.—Terracotta plaque with representation of a boar. 1′-2″×8·5″.
9764.—Terracotta plaque with representation of a ram. 1′-2·5″×1′-·5″.
9765.—Terracotta plaque with a representation of a man riding a rhino. 1′-1·5″×11″.
9766.—Terracotta plaque with a representation of a lion upon elephant. 9·5″×9″.
9767.—Terracotta plaque with a representation of a lion killing a man. 9″×7″.
9768.—Terracotta plaque with a representation of a fish. 10″×11″.
9769.—Terracotta plaque with a representation of a man playing on tom-tom. 11″×8·5″.
9770.—Terracotta plaque; man playing on *khañjanī*. 13·5″×11″.
9771.—Terracotta plaque; female churning. 11″×11·5″.
9772.—Terracotta plaque; female dragging out from a well a man by means of a chain. 1′-2″×10·5″.
9773.—Terracotta plaque; ascetic carrying a load and an instrument. 1′-2″×1′
9774.—Terracotta plaque; tortoise. 11″×8″.

Museum Register No. | Description.

FROM PAHARPUR, DISTRICT RAJSHAHI, BENGAL—*contd.*

9775.—Terracotta plaque; man standing with upraised hands. 11·5″×8·5″.
9776.—Terracotta plaque; man standing with a bow. 1′-2″×10″.
9777.—Terracotta plaque; man standing with sword and shield. 1′-2″×10″.
9778.—Terracotta plaque; man standing with a female on his left thigh. 1′-2″×10·5″.
9779.—Terracotta plaque; female tearing her own hair. 1′-1″×11″.
9780.—Terracotta plaque; man with a necklace. 1′-3″×10″.
9781.—Terracotta plaque; man with nice head-dress. 1′-2·5″×10″.
9782.—Terracotta plaque; Kuvera. 1′×9·5″.
9783.—Terracotta plaque; man with bow and arrow. 1′-2·5″×10·5″.
9784.—Terracotta plaque; Mañjuśrī? 1′-1·5″×11·5″.
9785.—Terracotta plaque; Bodhisattva. 1′-2″×11·5″.
9786-87.—Terracotta plaque; seated figure with bow. 1′-1·5″×10·5″, 1′-1·5″×11″.
9788.—Terracotta plaque; seated man. 11·5″×9·5″.
9789.—Terracotta plaque; monkey. 1′-2″×7·5″.
9790.—Terracotta plaque; bird with gorgeous tail. 1′-2″×1′-1·5″.
9791.—Terracotta plaque; bird. 11·5″×10·5″.
9792.—Terracotta plaque; plantain tree. 8·5″×8·5″.
9793.—Terracotta plaque; bird holding a flower. 1′-1″×10″.
9794.—Terracotta plaque; bird feeding her young. 1′-2″×11·5″.
9795.—Terracotta plaque; cobra. 1′-2″×9″.

FROM NALANDA, DISTRICT PATNA, BIHAR.

9565-74.—Terracotta sealings depicting nine miniature votive stūpas with the Buddhist creed written below. Diam. 3·25″ to 3·75″.
9575-84.—Terracotta sealings bearing the 'Deer and the Wheel of Law' symbol and the legend *Śrī Nālandāvihārīy-ārya-bhikshu-saṁghasya.*

FROM PAGAN, BURMA.

10316.—Terracotta votive tablet with eight principal scenes in the life of the Buddha and inscription in two lines. 6·5″×4·5″.
10317-21.—Terracotta votive tablets with Buddha figure in various attitudes. 3·5″×2″ to 5·5″×3·5″.

FROM HMAWZA, BURMA.

10322-28.—Terracotta votive tablets with Buddha figure in various attitudes. 3″×2″ to 4·5″×4·25″.
10329.—Terracotta votive tablet with a Bodhisattva figure. 3·5″×1·5″.
10330.—Terracotta tablet with the figure of Tara. 3·5″×2″.
10331-38.—Beads (Crystal, cornelian, glass, etc.).
10339-40.—Silver images of *Dwārapāla.* 7·25″×5″, 7·75″×4″.
10341-42, 10364-67.—Silver images of Buddha. Ht. 3″, 1·75″, 1·75″, 3·25″, 2·25″, 2·25″.
10343-44.—Silver boats. 6·75″×2″, 4·5″×1·25″.
10345.—Silver butterfly. 8″×3″.
10346.—Silver wire.
10348.—Small conical cover for a relic casket; silver. Diam. 2·75″.
10347, 10349, 10363.—Flowers of silver. Diam. 9″, 2·25″, 2·25″.
10353-55.—Silver rings. Diam. $\frac{11}{16}$″, $\frac{9}{16}$″, $\frac{11}{16}$″.

Museum Register No. | Description.

FROM HMAWZA, BURMA—*contd.*

10356.—Silver stupa. Ht. 10″.

10357-60.—Square silver plates. 2″×2″.

10350-52.—Gold rings. Diam. $\frac{1}{2}$″, $\frac{11}{16}$″, $\frac{5}{8}$″.

10361-62.—Gold cups. Diam. 2·75″, 2·75″.

10368.—Gold flowers (3) with six petals each. Diam. $\frac{7}{8}$″.

FROM MULTAN.

9547-53.—Glazed tiles, one with Arabic and another with Persian inscription. 6′-9″× 1′-6·5″ to 8″×8″.

FROM GAUR.

9554.—Basalt slab with Arabic inscription referring to the building of a gate by Nusrat Shah in A. H. 996. 3′-1″×1′-5·5″×9·5″.

9555-58.—Door-jambs. 1′-11″×8·5″×8·25″, 1′-1″×9″×10″, 1′-9·5″×10″×8·5″, 2′-·5″×9″× 7″.

FROM DHOLPUR STATE.

9562-64.—Glazed tiles. 1′-1·5″×1′-·25″, 1′-1″×10·5″, 1′-1″×10·5″.

List of coins acquired for the Indian Museum, Archæological Section, during year 1936-37.

NON-MUHAMMADANS.

Ruler's name.	Dynasty.	Gold.	Silver.	Brass.	Copper.	Total.	Mode of acquisition.
Huvishka	Kushan . .	1	..	..	..	1	Purchased.
Chandragupta II . . .	Gupta . .	2	..	..	..	2	Do.
Skandagupta	Do. . .	..	1	..	..	1	Do.
Vijayasena	W. Kshatrapa .	..	1	..	..	1	Presented by the Junagarh Darbar.
Rudrasena II	Do. .	..	2	..	..	2	Do.
Viśvasiṁha	Do. .	..	1	..	..	1	Do.
Bhartṛdāman	Do. .	..	5	..	..	5	Do.
Svāmi-Rudrasena III . .	Do. .	..	2	..	..	2	Do.
Apilāka	Andhra . .	..	..	..	1	1	Presented by Mahakosala Society, Balpur.
Bhavanāga	Naga . .	..	..	..	3	3	Purchased.
Gaṇapati	Do. . .	..	..	..	1	1	Do.
Devanāga	Do. . .	..	..	..	1	1	Do.
Pumnāga	Do. . .	..	..	..	2	2	Do.
Unassigned	..	..	..	..	4	4	On loan from D. G. A.
Vigrahapāla	..	..	..	..	1	1	Do.
Sallakshaṇavarman . . .	Chandella .	2	..	..	..	2	Purchased.
Jayavarman	Do. .	1	..	..	..	1	Do.
	Pandeya (?) .	..	..	..	1	1	On loan from D. G. A
	E. I. Co. .	..	..	..	1	1	Do.
TOTAL .	..	6	12	..	15	33	

List of coins acquired for the Indian Museum, Archæological Section, during year 1936-37 —contd.

MUHAMMADAN.

Ruler's name.	Dynasty.	Gold.	Silver.	Brass.	Copper.	Total.	Mode of acquisition.
Muhammad-bin-Sam . .	..	1	..	..	..	1	Purchased.
Jalal-uddin Firoz II . .	Sultan of Delhi	..	..	..	1	1	On loan from D. G. A.
Ibrahim Lodi ? . . .	Do. .	..	..	..	1	1	Do.
Blurred pieces	Do. .	..	..	..	2	2	Do.
Jalaluddin Muhammad . .	Bengal . .	..	1	..	..	1	Do.
Ruknuddin Barbak . . .	Do. . .	..	1	..	..	1	Do.
Yusuf Shah	Do. . .	..	1	..	..	1	Do.
Jalaluddin Fath Shah . .	Do. . .	..	3	..	..	3	Do.
Ibrahim Shah	Jaunpur . .	..	..	1	..	1	Presented by U. P. Government.
Muzaffar Shah II . . .	Gujarat . .	..	1	..	..	1	Purchased.
Mahmud Shah III . . .	Do. . .	..	1	..	..	1	Do.
Akbar	Mughal . .	..	1	..	..	1	Presented by U. P. Government.
Do.	Do. . .	..	1	..	..	1	On loan from D. G. A.
Jahangir	Do. . .	..	1	..	..	1	Presented by U. P. Government.
Aurangzib	Do. . .	..	1	..	..	1	Presented by Delhi administration.
Do.	Do. . .	..	1	..	..	1	Presented by U. P. Government.
Do.	Do. . .	..	20	..	..	20	Presented by B. B. R. A. Society.
Do.	Do. . .	..	9	..	..	9	Presented by Director of Industries, C. P.
Shah Alam I	Do. . .	..	1	..	..	1	Presented by Delhi Administration.
Muhammad Shah . . .	Do. . .	..	6	..	..	6	Presented by U. P. Government.
Ahmad Shah	Do. . .	..	5	..	..	5	Do.
Alamgir II	Do. . .	..	2	..	..	2	Do.
Shah Alam II	Do. . .	..	3	..	..	3	Do.
Muhammad Akbar II . .	Do. . .	..	15	..	..	15	Presented by Director of Industries, C. P.
Bahadur Shah II . . .	Do. . .	..	5	..	..	5	Do.
Do. . . .	Do. . .	1	..	..	..	1	Purchased.
Native State	Jodhpur . .	..	..	..	1	1	Presented by Dr. B. Ch. Chhabra.
TOTAL .	..	2	79	1	5	87	
GRAND TOTAL .	..	8	91	1	20	120	

List of coins received in the Delhi Fort Museum during the year 1936-37.

PRESENTED.

Ruler's name.	Dynasty.	Silver.	Copper.	Total.
THE DELHI ADMINISTRATION.				
Aurangzeb	Mughal	4	..	4
Muhammad Shah	Do.	4	..	4
TOTAL	....	8	..	8
THE GOVERNMENT OF THE UNITED PROVINCES.				
Jahangir	Mughal	1	..	1
Muhammad Shah	Do.	4	..	4
Ahmad Shah	Do.	4	..	4
TOTAL	....	9	..	9
THE BOMBAY BRANCH, ROYAL ASIATIC SOCIETY, BOMBAY.				
Aurangzeb	Mughal	10	..	10
TOTAL	....	10	..	10
THE DIRECTOR OF INDUSTRIES, CENTRAL PROVINCES, NAGPUR.				
Aurangzeb	Mughal	10	..	10
Muhammad Akbar Shah II	Do.	17	..	17
Bahadur Shah II	Do.	4	..	4
TOTAL	....	31	..	31
THE GOVERNMENT OF THE PUNJAB.				
Akbar	Mughal	..	1	1
Aurangzeb	Do.	1	..	1
TOTAL	..	1	1	2
GRAND TOTAL	....	59	1	60

APPENDIX II.

Additions to Departmental Libraries.

Name of office.	Books purchased.	Books presented.	Total.
Director General	146	125	271
Northern Circle	33	21	54
Frontier Circle	75	20	95
Western Circle	30	14	44
Central Circle	25	36	61
Eastern Circle	8	15	23
Southern Circle	48	42	90
Burma Circle	42	53	95
Government Epigraphist	169	246	415
Superintendent for Epigraphy	55	36	91
Archæological Chemist	19	5	24
Archæological Section, Indian Museum . .	10	22	32
Central Asian Antiquities Museum . . .	5	15	20

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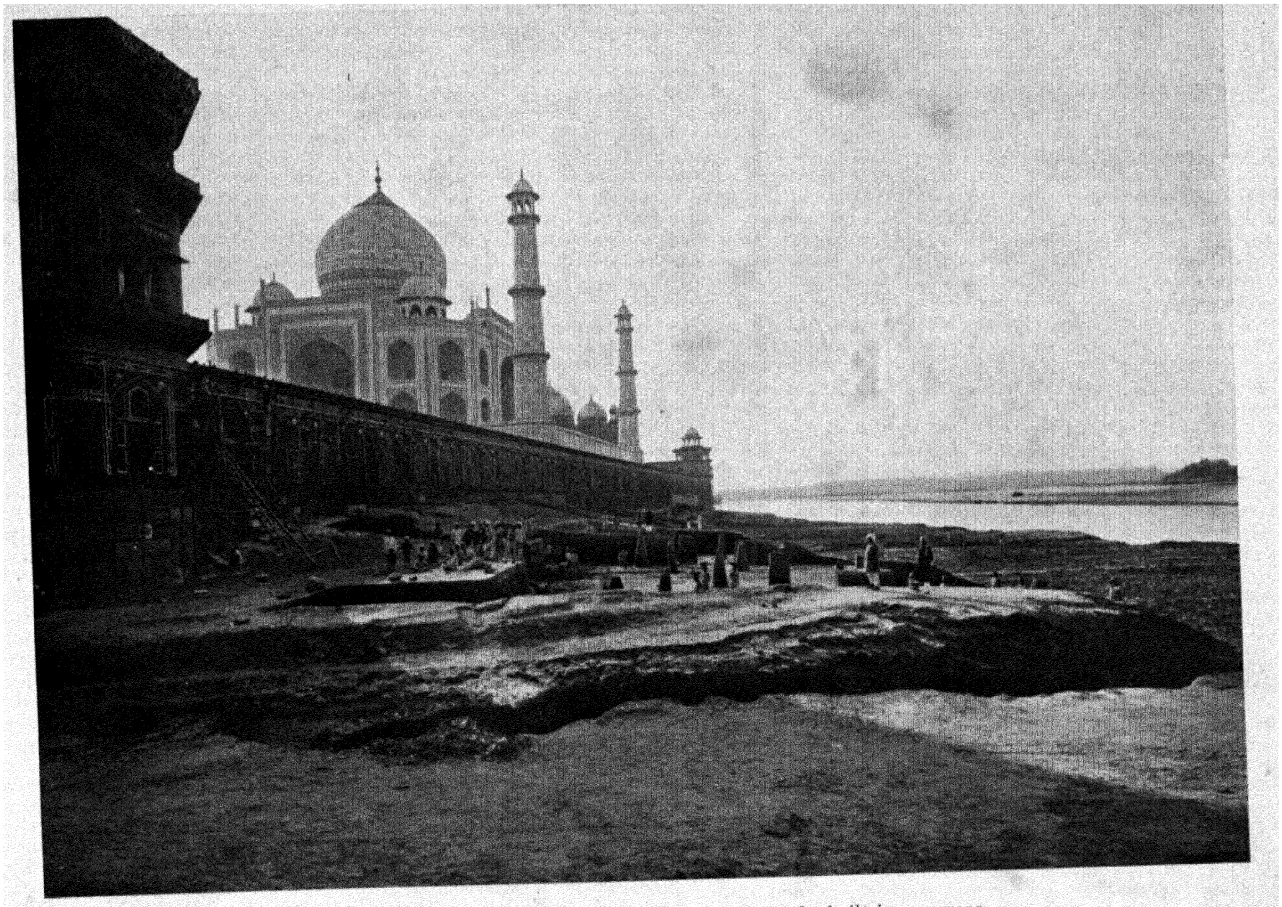
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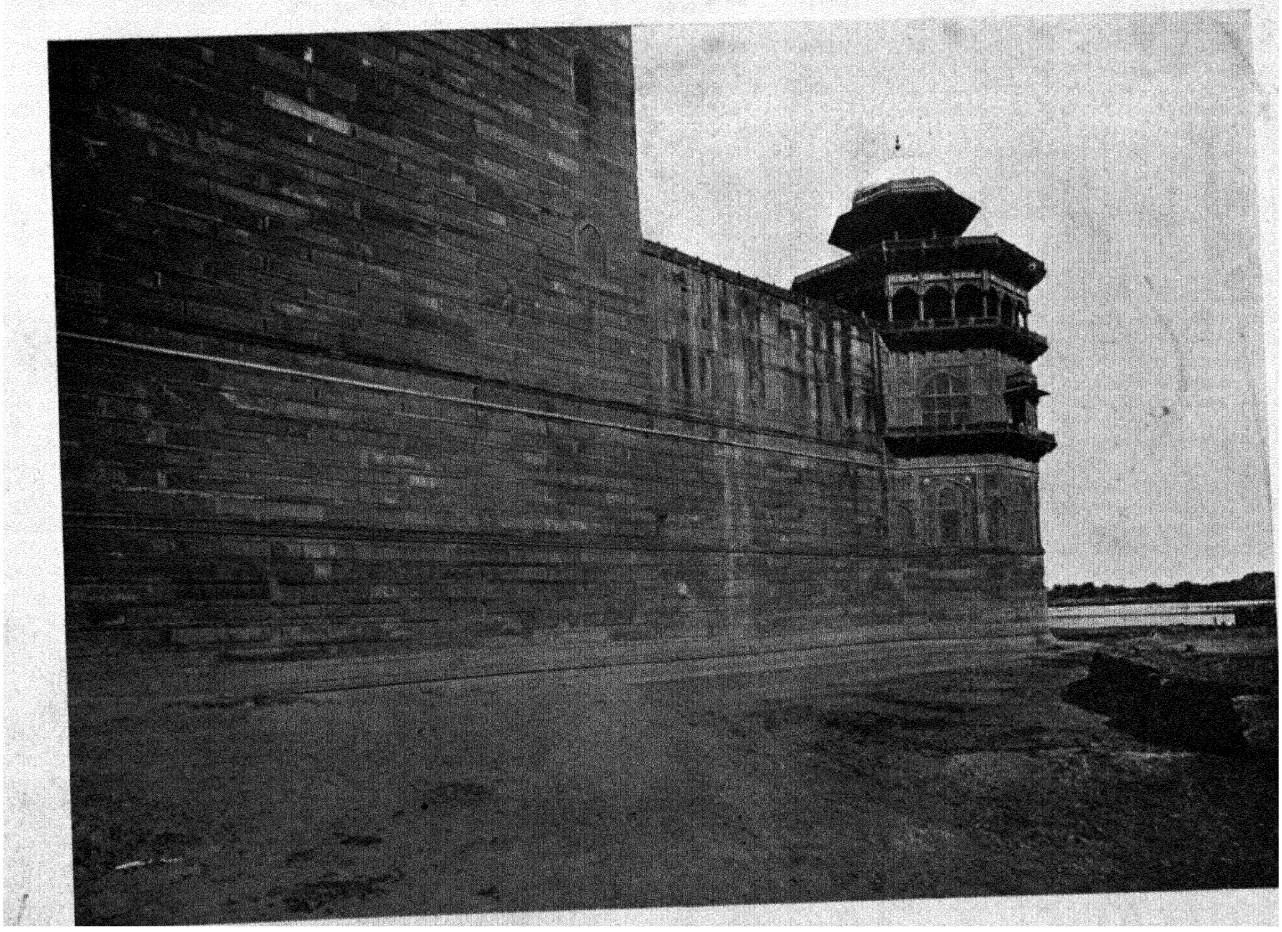
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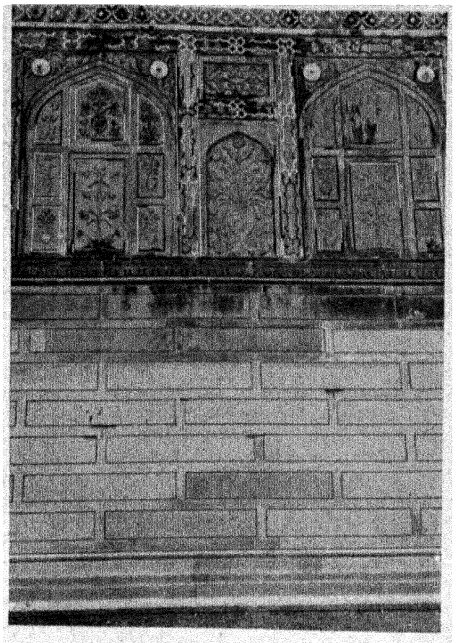
(*a*) The Taj. Agra. North wall showing removal of silt in progress.



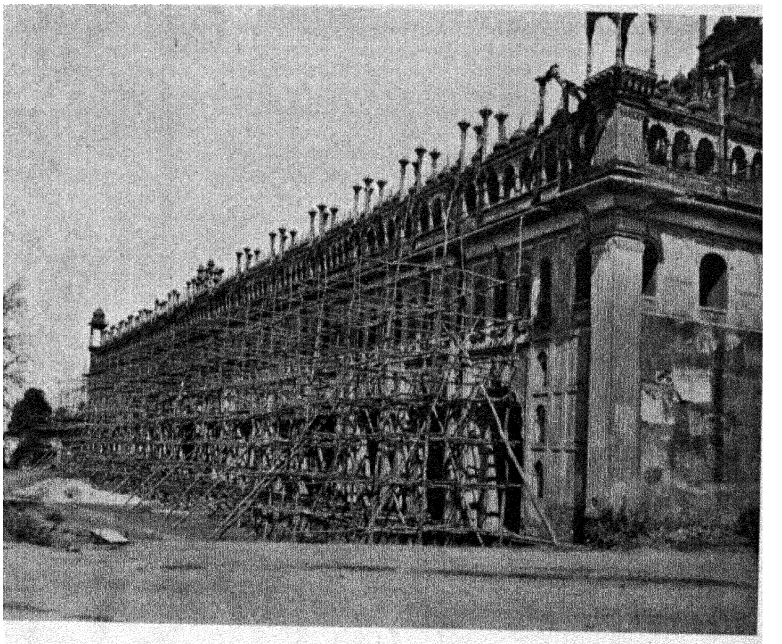
(*b*) The Taj. Agra. East wall after clearance.

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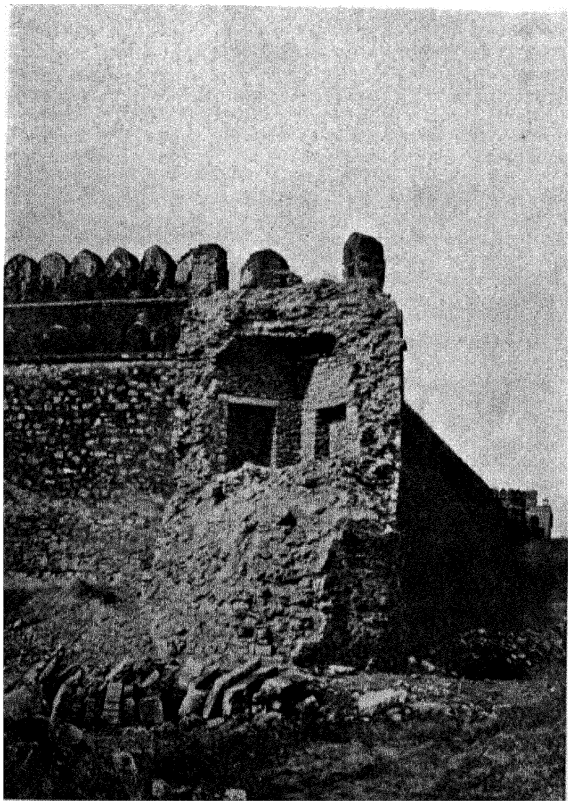
CONSERVATION. AGRA AND LUCKNOW.



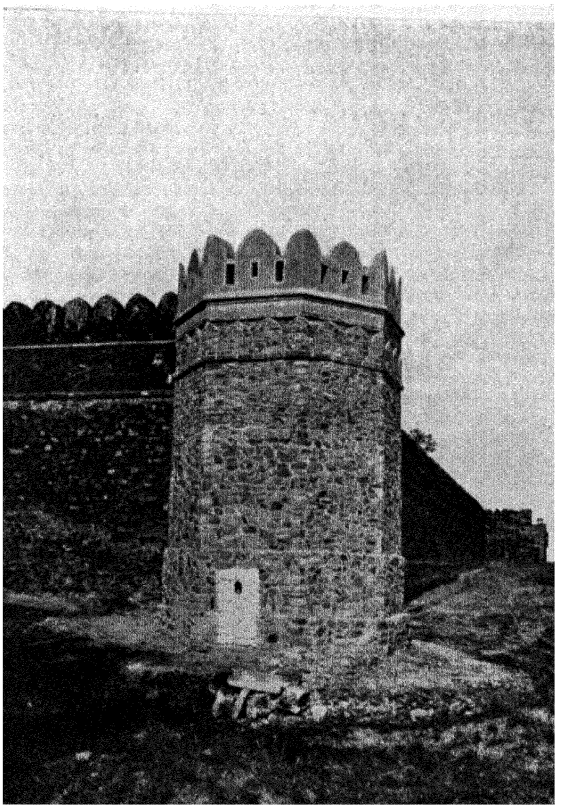
(*a*) Agra. The Taj. Details of north wall showing panels and ashlar masonry.



(*b*) Lucknow. Imambara of Asaf-ud-Daula with scaffolding at the back.



(*c*) Sikandra, Agra. Akbar's tomb. North-east corner bastion, before repairs.

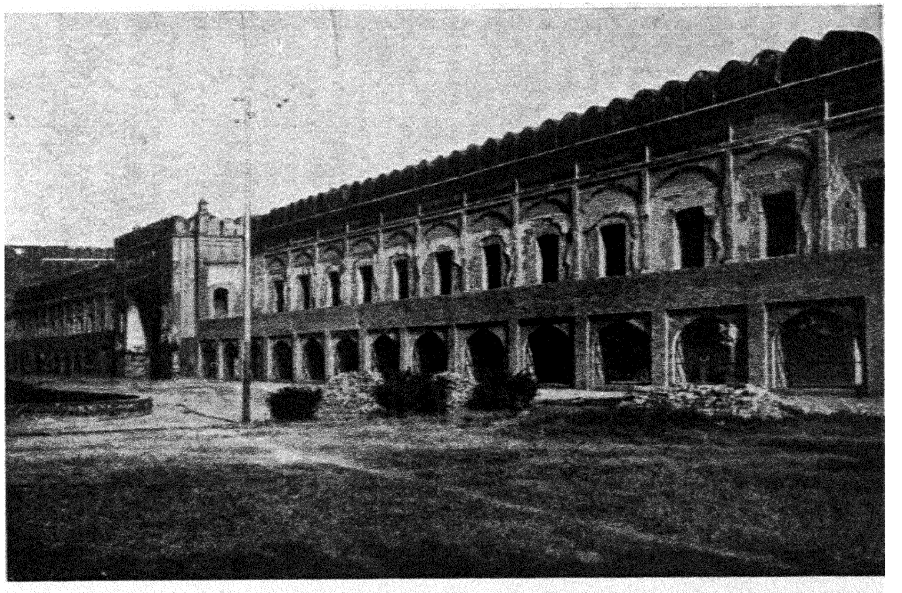


(*d*) Sikandra, Agra. Akbar's tomb. North-east corner bastion, after repairs.

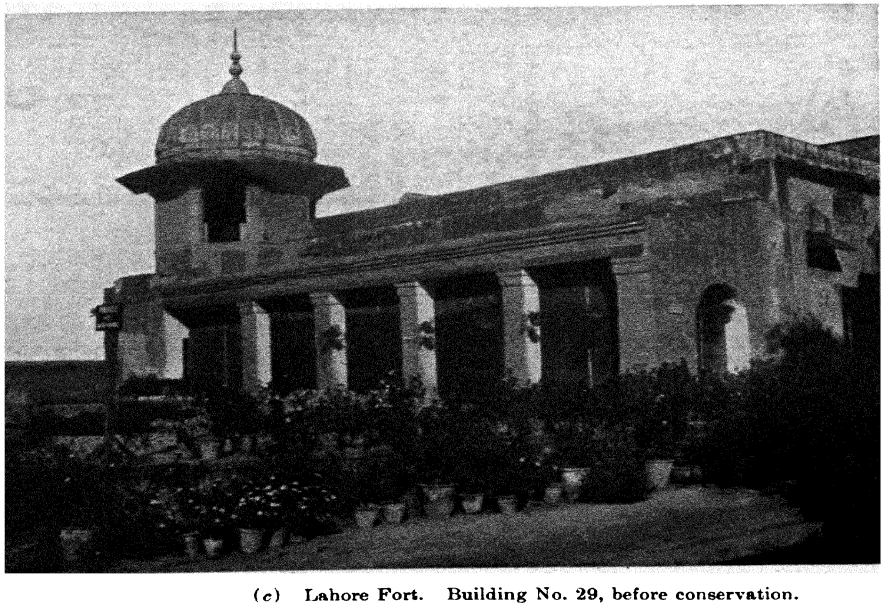
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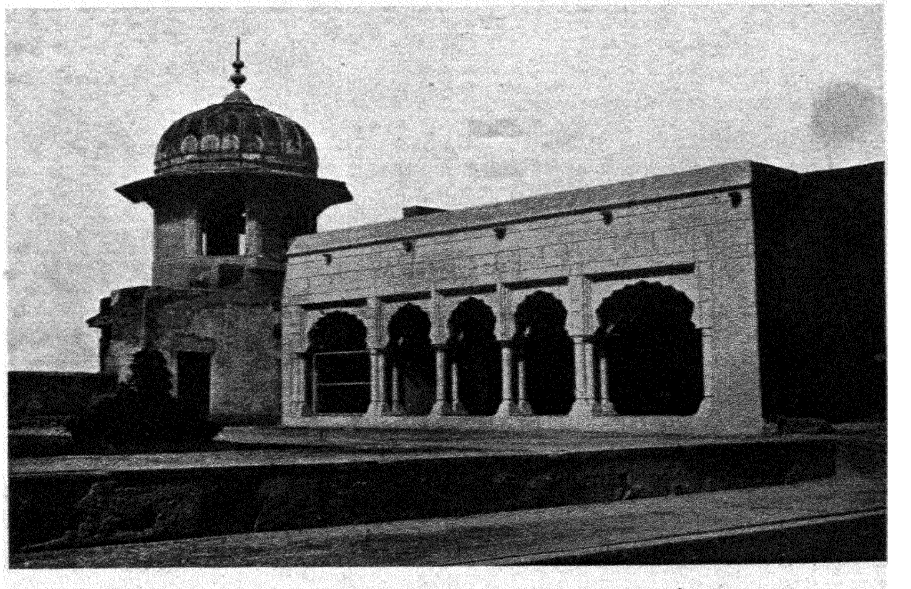
(*a*) Lahore. Roshnai Gate. Western frontage, after conservation.



(*b*) Lahore. Roshnai Gate. Western frontage, after conservation.

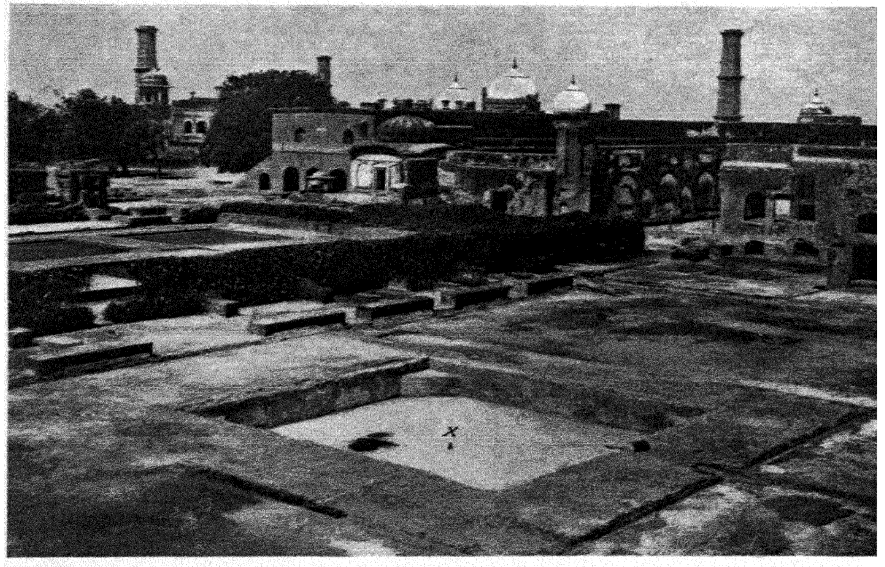


(*c*) Lahore Fort. Building No. 29, before conservation.



(*d*) Lahore Fort. Building No. 29, after conservation.

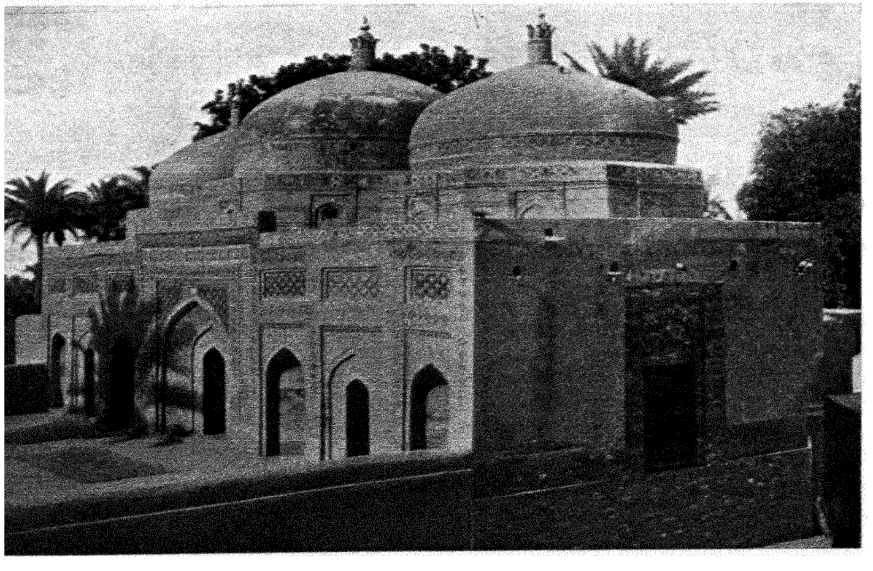
Photo.-Litho. Office, Survey of India.



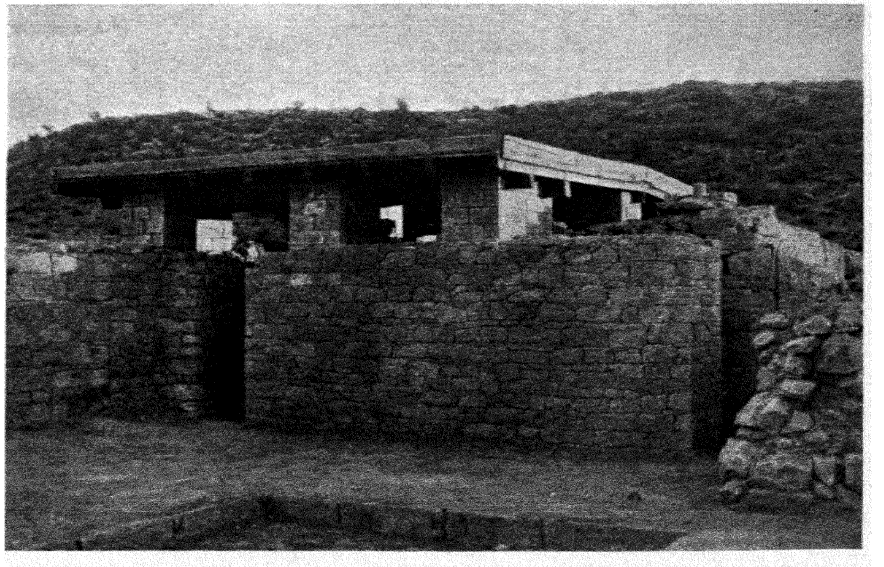
(*a*) Lahore Fort. Tank with pipe of fountain (marked with a cross) near Lal Burj.



(*b*) Lahore. Kamran's Baradari showing the star-shaped plan of flower-bed, from north-west.

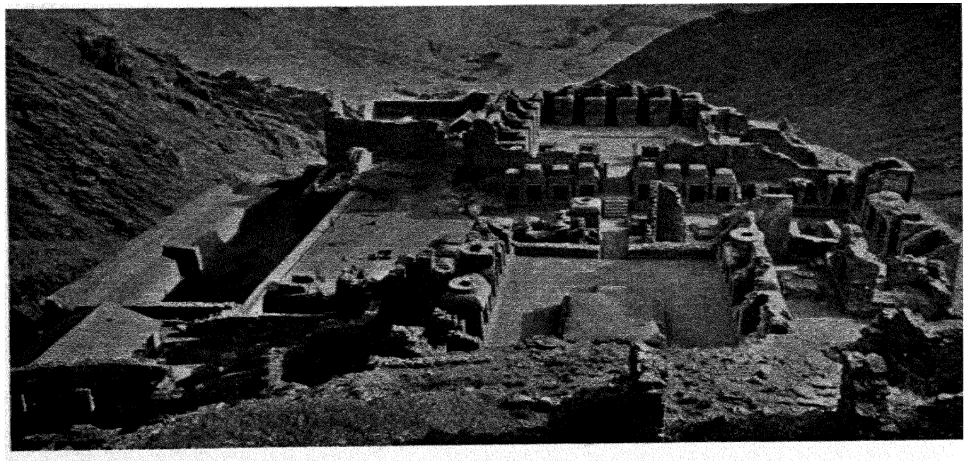


(*c*) Sitpur. District Muzaffargarh. Tahar Khan's Mosque.

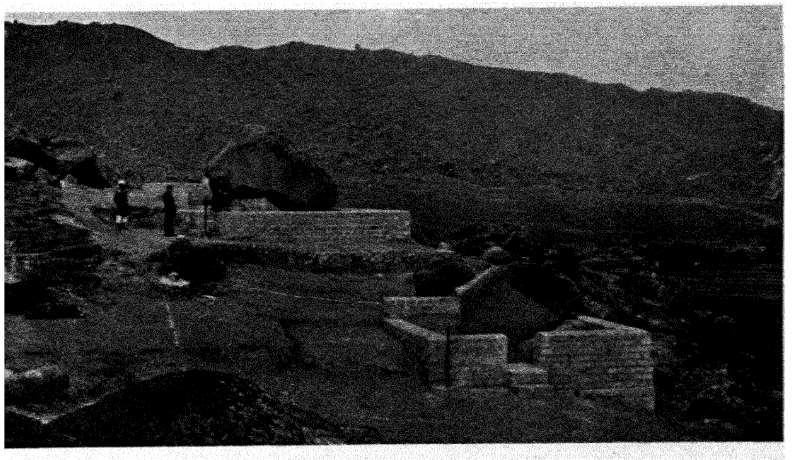


(*d*) Taxila. District Rawalpindi. Pippalan. View of the monastery cell.

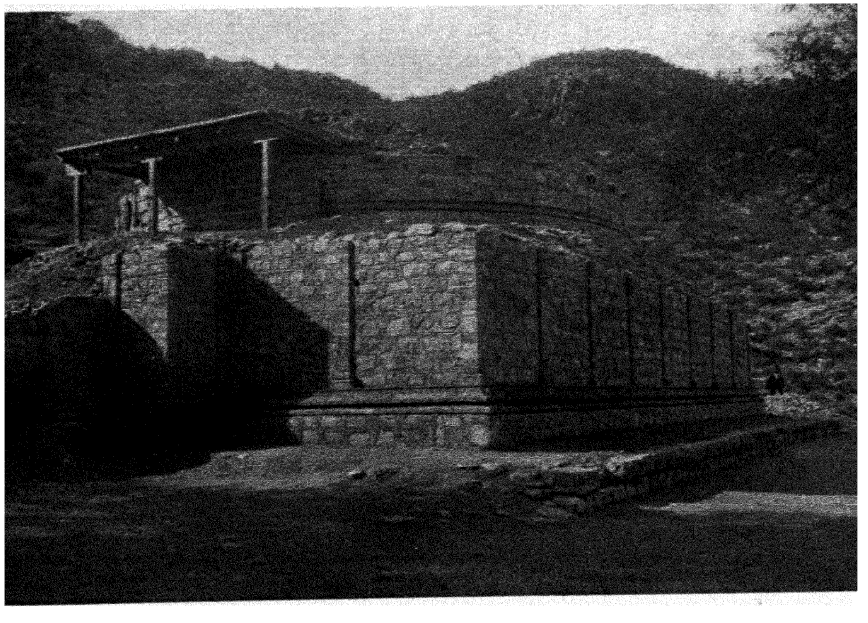
Photo.-Litho. Office, Survey of India.



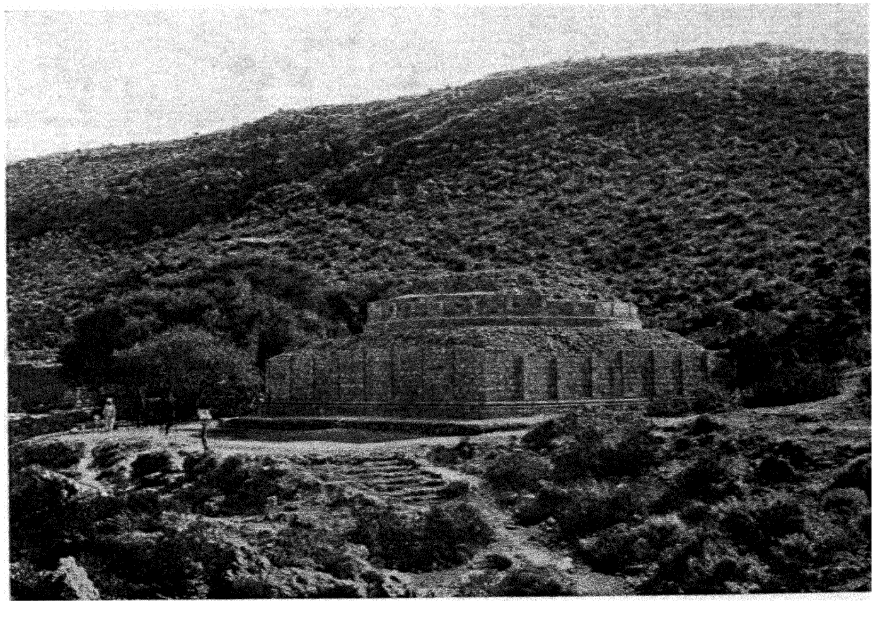
(*a*) Takht-i-Bahi. Bird's eye view of monastic area.



(*b*) Mansehra. Inscribed Rocks A and B with improved enclosure walls.



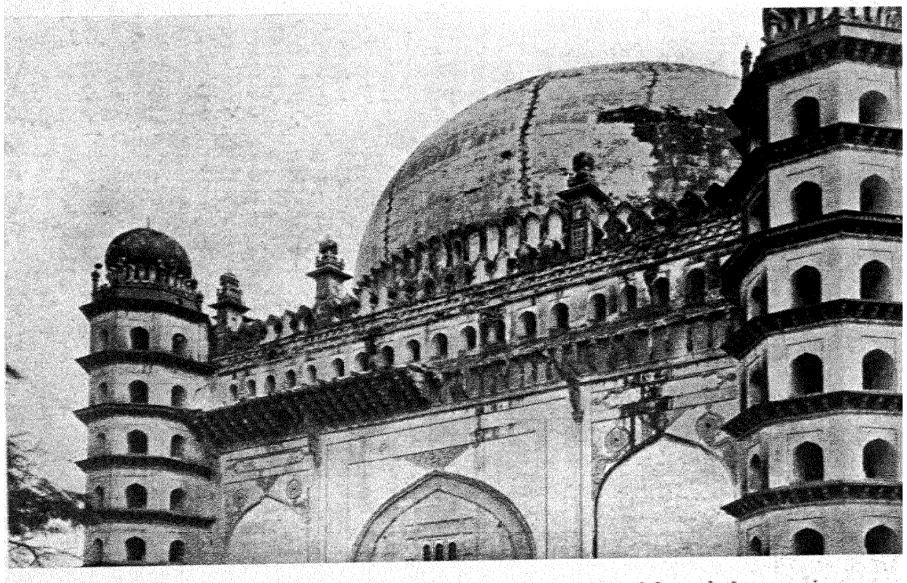
(*c*) Taxila. Mohra Moradu. View of stupa from north-east.



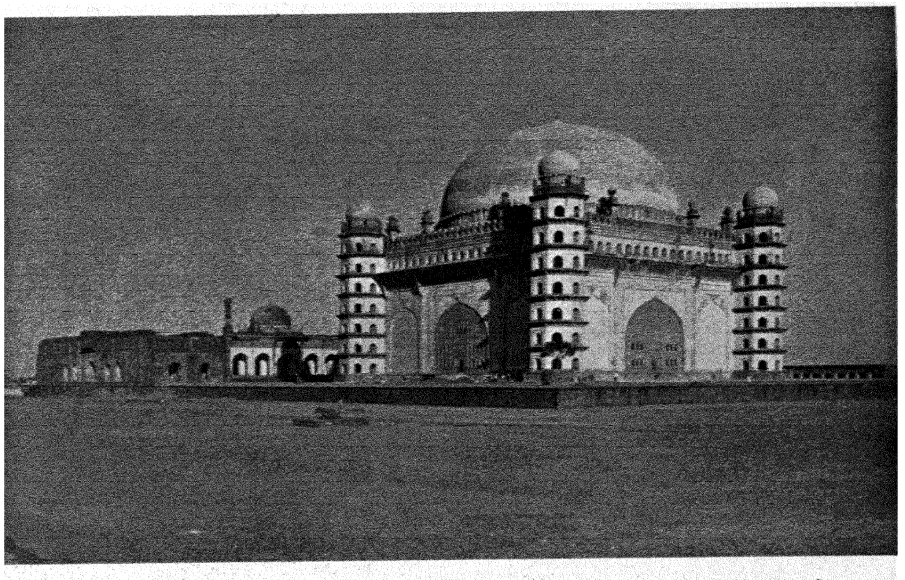
(*d*) Taxila. Mohra Moradu. Bird's eye view of stupa from north-west.

Photo.-Litho. Office, Survey of India.

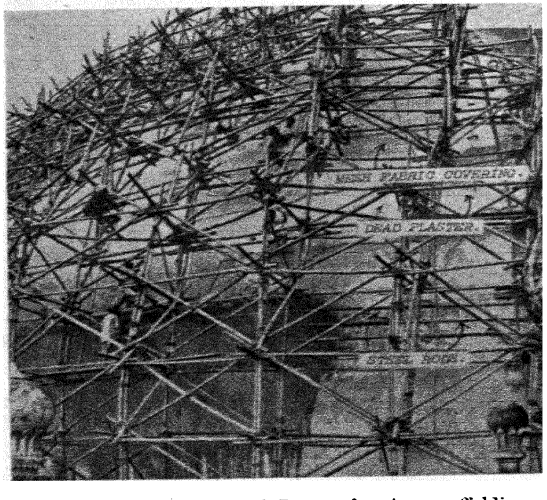
CONSERVATION. BIJAPUR.



(*a*) Bijapur. Gol Gumbad showing decayed condition of dome before repairs.



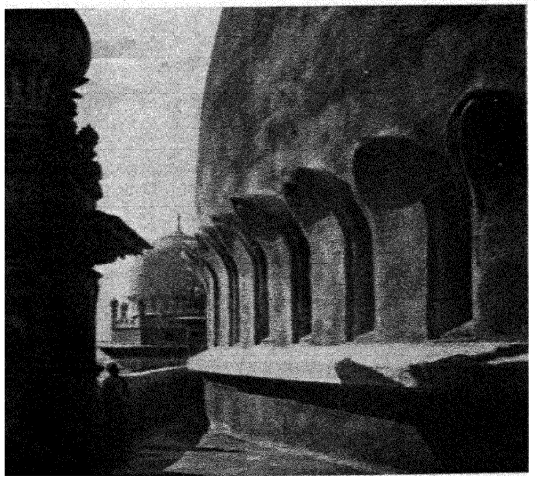
(*b*) Bijapur. Gol Gumbad, showing dome after guniting treatment. From south-east.



(*c*) Bijapur. Gol Gumbad Dome showing scaffolding and details of repairs in progress.



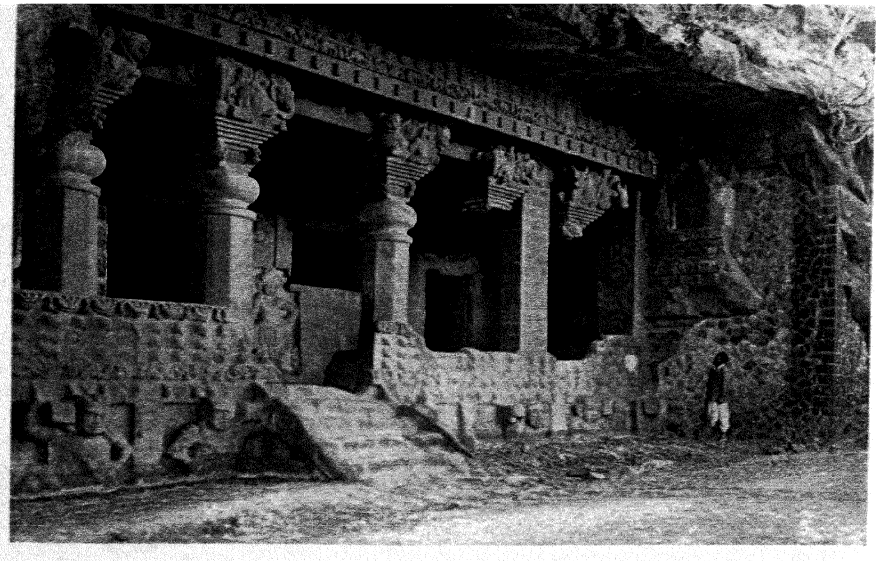
(*d*) Bijapur. Gol Gumbad showing workmen guniting dome surface near top.



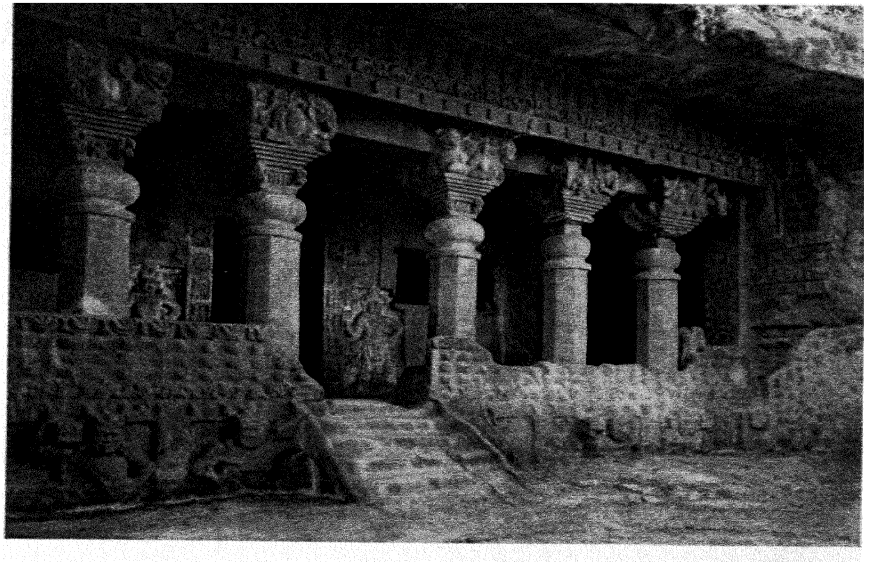
(*e*) Bijapur. Gol Gumbad showing base wall of dome after guniting treatment.

Photo.-Litho. Office, Survey of India.

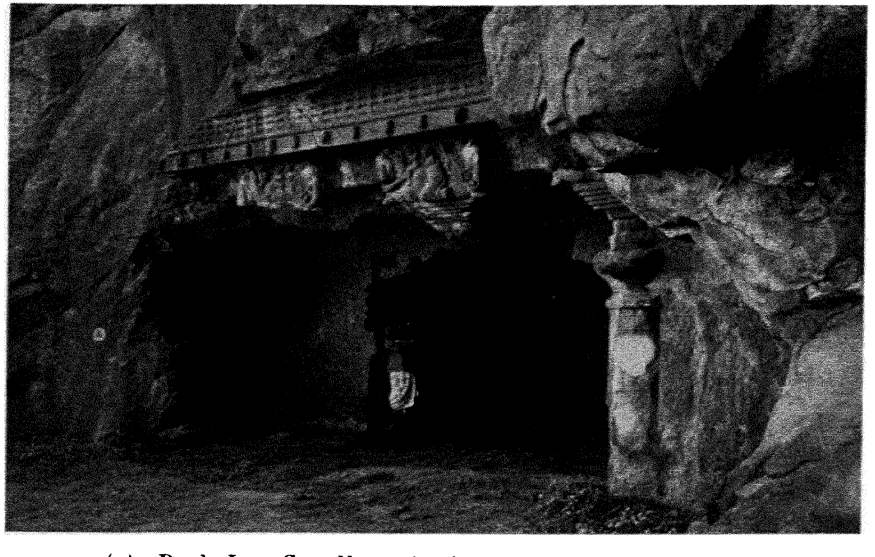
PLATE VI



(*a*) Pandu Lena Cave No. 3, showing two hanging capitals of missing pillars in verandah.

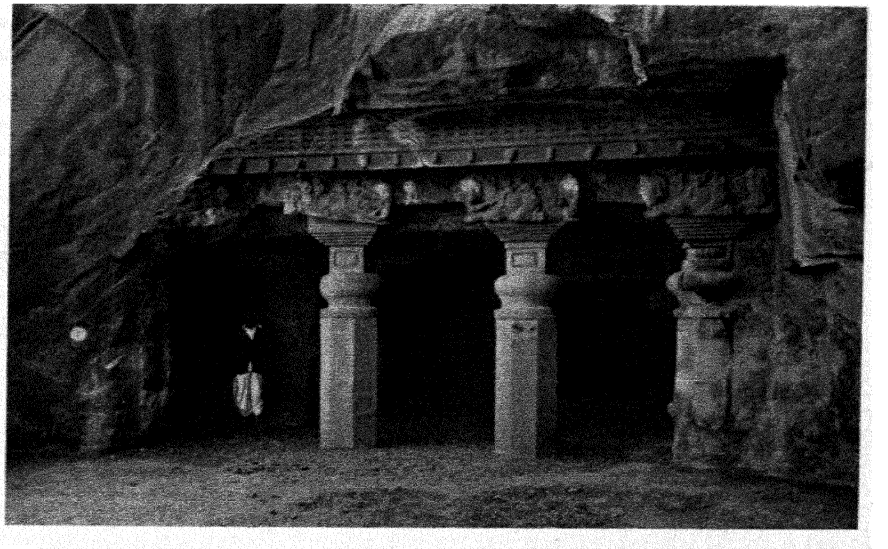


(*b*) Pandu Lena Cave No. 3, showing restored pillars. Note removal of the square masonry pillar seen in (*a*).

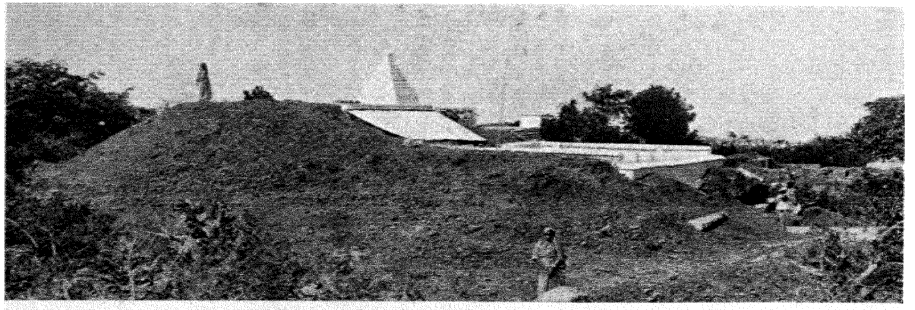


(*c*) Pandu Lena Cave No. 4, showing hanging capitals in verandh roof.

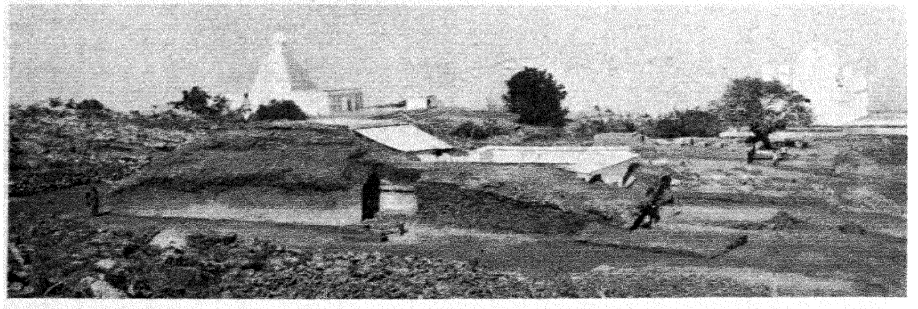
Photo.-Litho. Office, Survey of India.



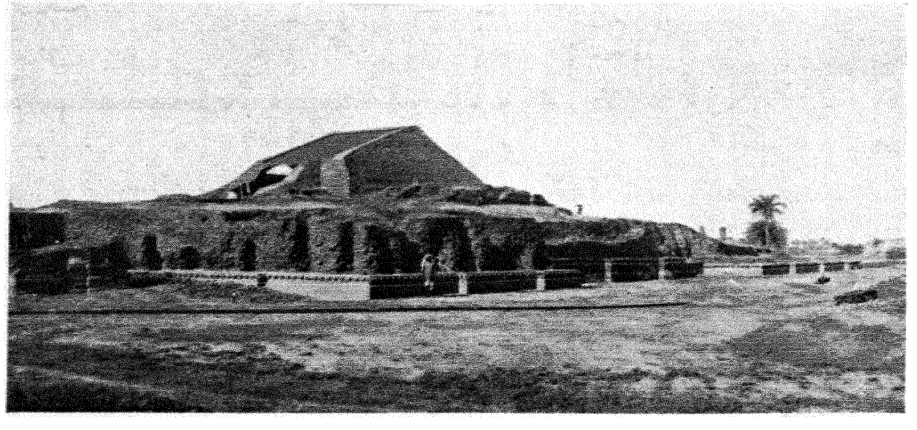
(*d*) Pandu Lena Cave No. 4, showing verandah complete with missing pillars.



(*a*) Rajgir. Mahadeva temple on Vaibhara hill from south east before excavation.

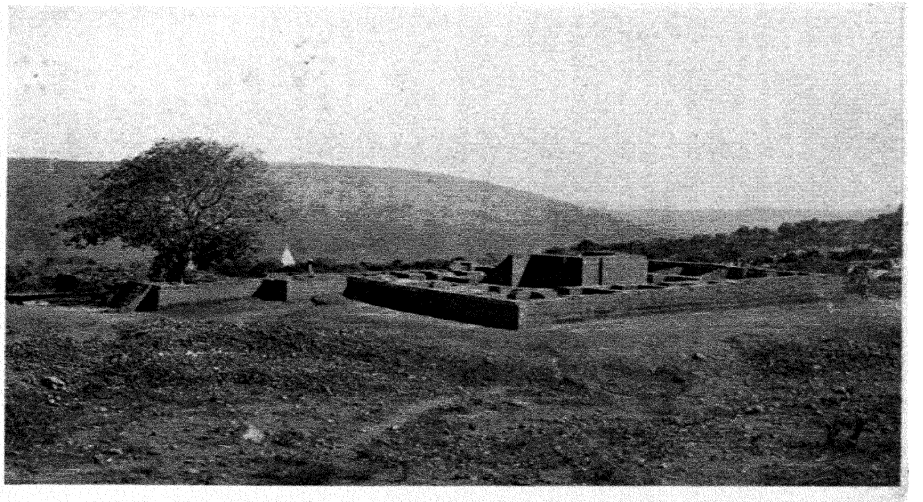


(*b*) Rajgir. Mahadeva temple on Vaibhara hill from south east after clearance.

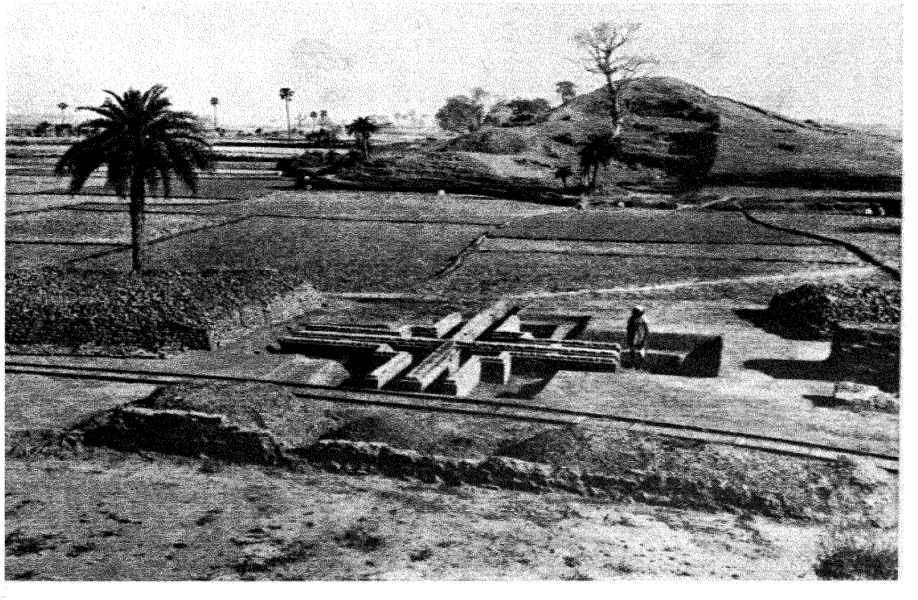


(*c*) Rajgir. Mahadeva temple on Vaibhara hill from north west after conservation.

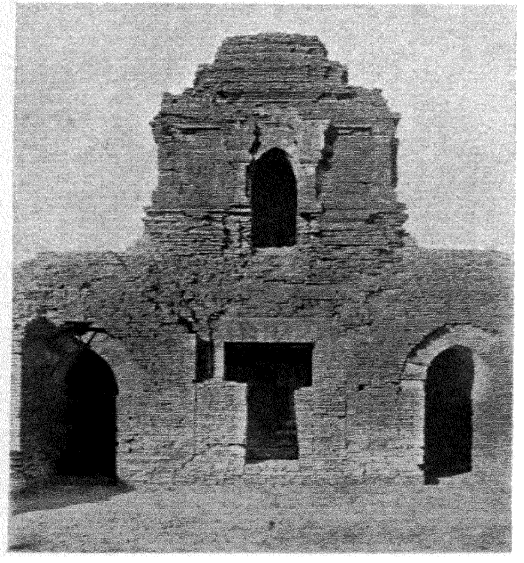
Photo.-Litho. Office, Survey of India.



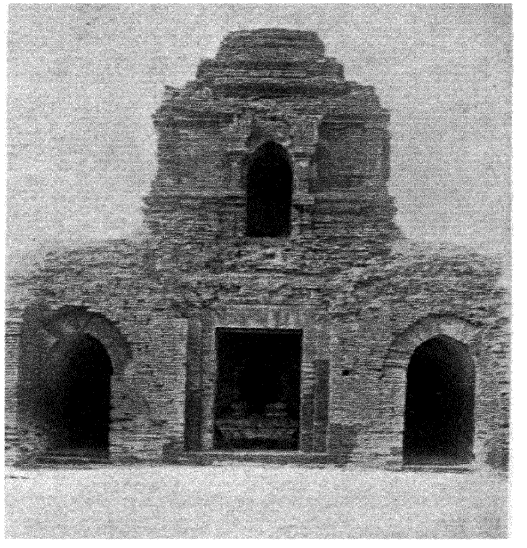
(*d*) Nalanda. Chaitya Site No. XIII, showing conservation work on north.



(*e*) Nalanda. Four smelting furnaces with four inlets and flues north of Chaitya site No. XIII from south-east.



(*a*) Myinpagan. Chapel of ruined monastery south of Somingyi Pagoda, showing later additions.



(*b*) Myinpagan. Chapel of the ruined monastery south of Somingyi Pagoda after removal of later additions.



(*c*) Tiruvalisvaram. Inscribed enclosure wall of Valisvara temple before conservation.



(*d*) Tiruvalisvaram. Inscribed enclosure wall of Valisvara temple after conservation.

Photo.-Litho. Office, Survey of India.



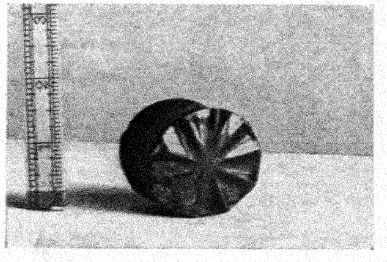
(*a*) Taxila. Bhir Mound. Excavations in progress in the north-east area. From North-East.



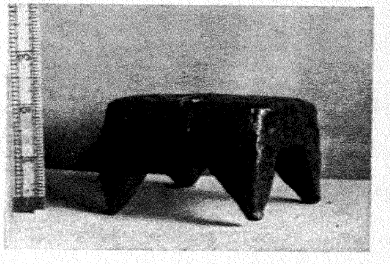
(*b*) Taxila. Bhir Mound. General view of excavation in the north-east area. From North.



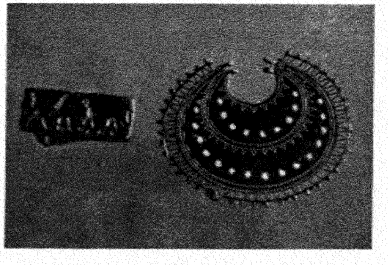
(*c*) Taxila. Bhir Mound. Excavations to the west of street No. I. From South-West.



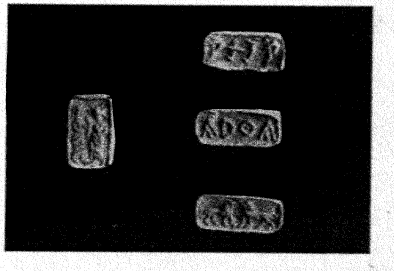
(*d*) Cylindrical black glass plug.



(*e*) Foot-stool of iron.



(*f*) Bronze die and gold ear pendent.



(*g*) Plaster casts of bronze cylindrical die.

Photo.-Litho. Office, Survey of India.



(*a*) Harappa. Mound D. Site J. Trench I. View of remains in the eastern extension.

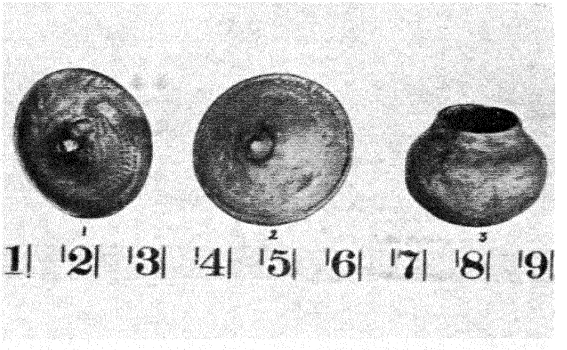


(*b*) Harappa. Mound D. Site J. Remains in the eastern extension after excavation.

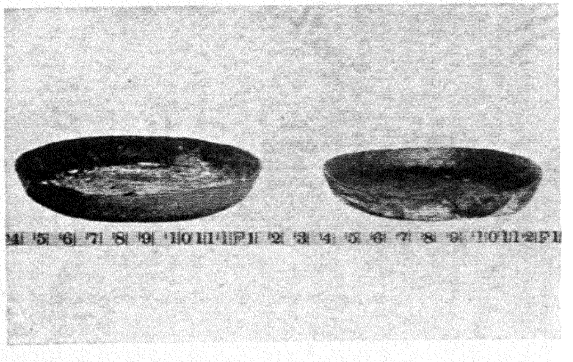
Photo.-Litho. Office. Survey of India.



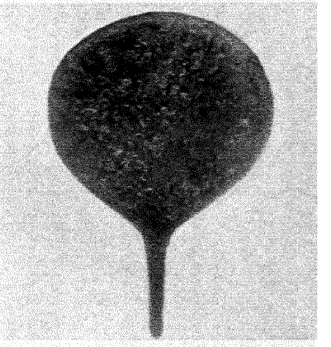
(*c*) Two copper jars.



(*d*) Two copper ornaments and a vase.



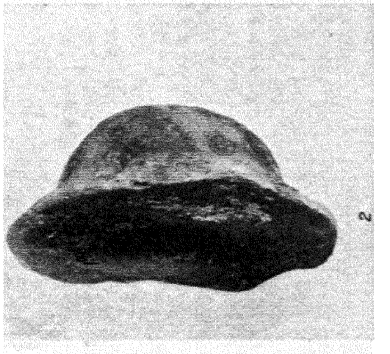
(*e*) Two copper dishes.



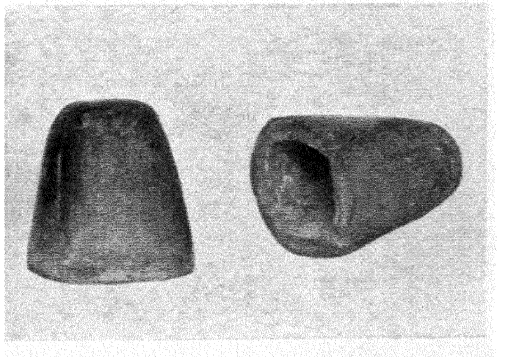
(*f*) Copper mirror.



(*g*) Terracotta figurine.



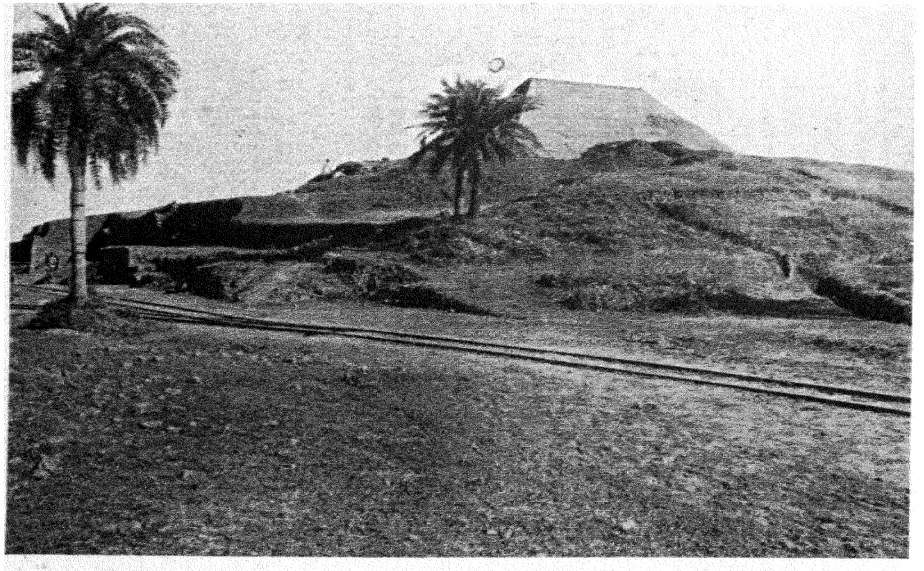
(*h*) Terracotta toy helmet.



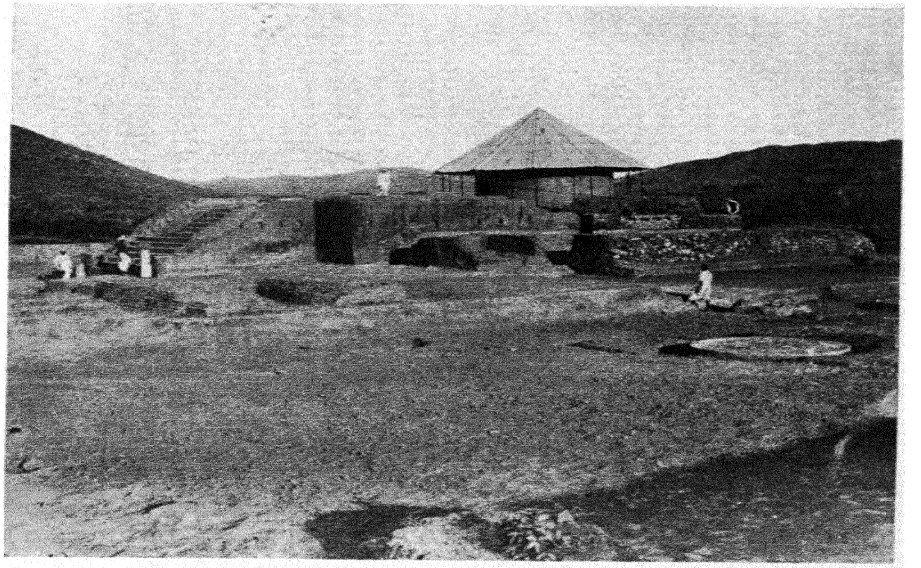
(*i*) Terracotta cones.

(*i*) **Terracotta cones.**

PLATE XI



(*a*) Nalanda. Chaitya Site No. XIII. North side from north west.



(*b*) Rajgir. Maniyar Math. General view from north west.



(*c*) Rajgir. Old Jaina temple on Vaibhara hill showing Digambar Jaina images fixed on the walls.

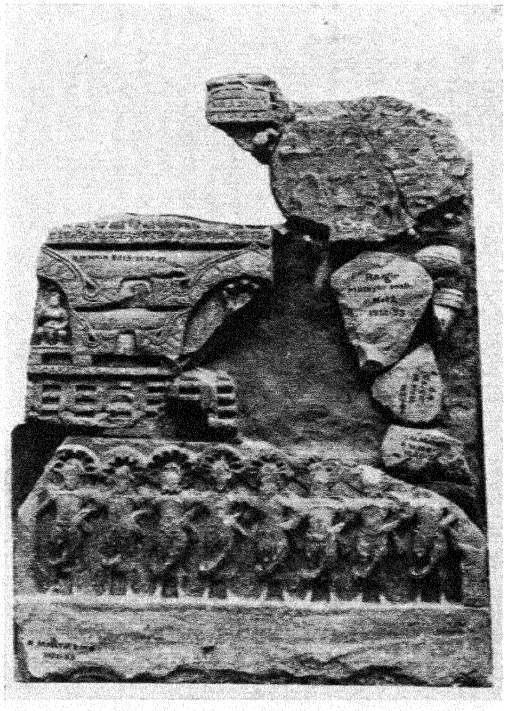


(*d*) Nalanda. Stupa Site No. 3. Brick inscribed in Gupta characters.

Photo.-Litho. Office, Survey of India.



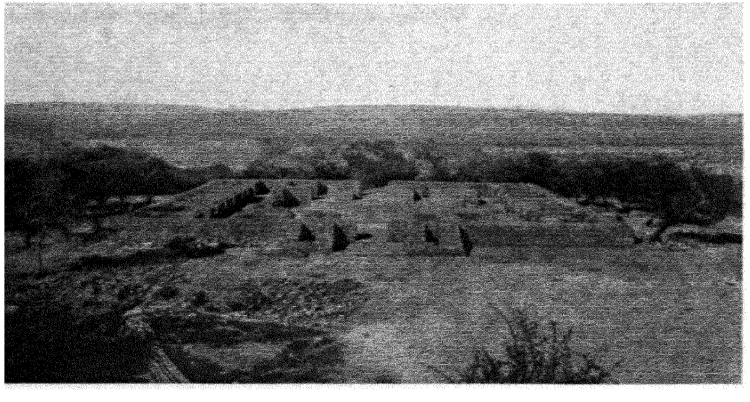
(*a*) Rajgir. Maniyar Math. Naga relief constructed from fragments. Obverse.



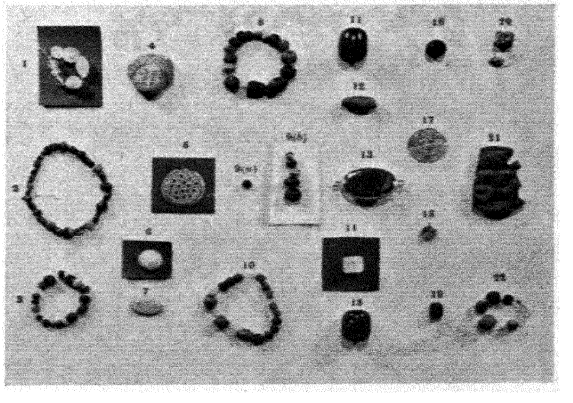
(*b*) Rajgir. Maniyar Math. Naga relief constructed from fragments. Reverse.



(*c*) Rajgir. Seated stone image of Buddha recovered from Gridhrakuta hill.



(*d*) Sanchi. **Devi's Vihara.**

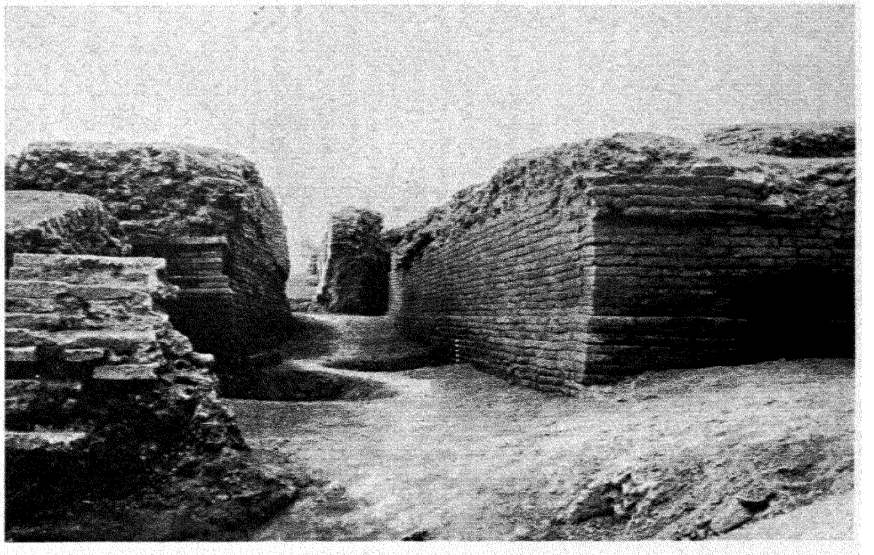


(*e*) Sanchi. Antiquities recovered from Devi's Vihara.

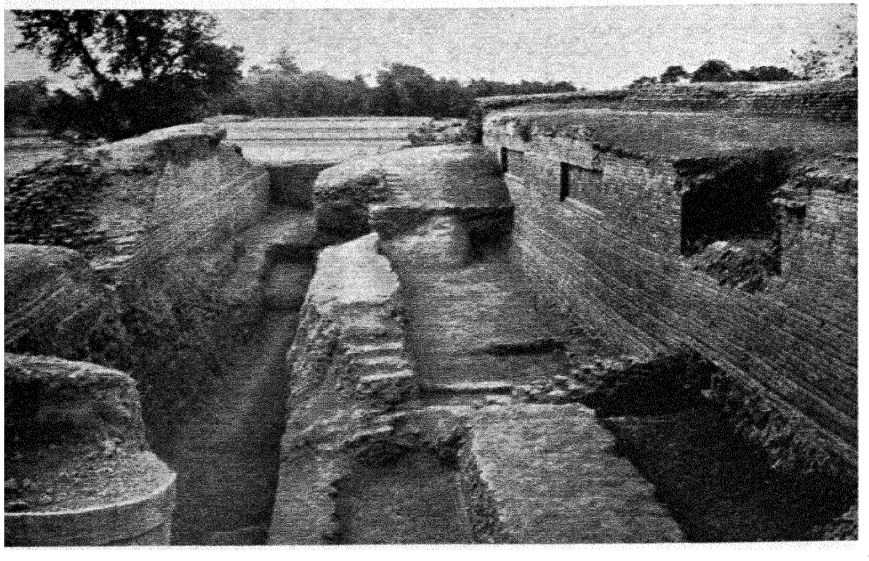
Photo.-Litho. Office, Survey of India.



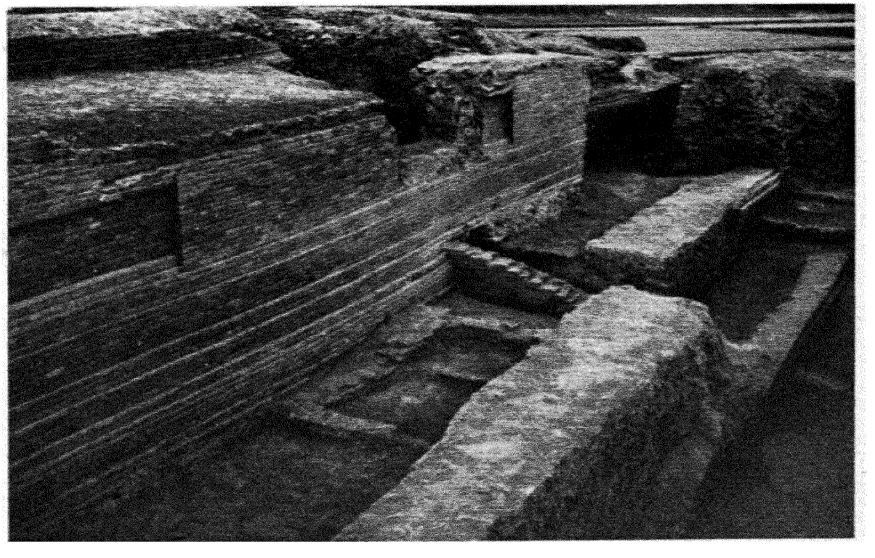
(*a*) Mahasthan, Bogra. View of Govinda Bhita, from south-east, showing late structures.



(*b*) Mahasthan, Bogra. Govinda Bhita. Basement wall of Eastern temple.



(*c*) Mahasthan, Bogra. Govinda Bhita. Southern side of second terrace wall of Western temple.



(*d*) Mahasthan. Govind Bhita. Earlier verandah of eastern temple seen under the second terrace wall of Western temple.

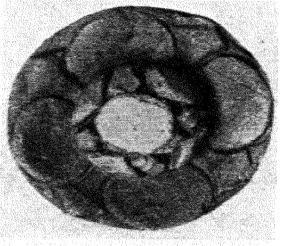
Photo.-Litho. Office, Survey of India.



(*a*) Govinda Bhita. Terracotta plaque showing dream of Marudevi?



(*b*) Govinda Bhita. Terracotta head.



(*c*) Govinda Bhita. Terracotta lotus knob.



(*d*) Govind Bhita. Terracotta medallion showing mithuna.

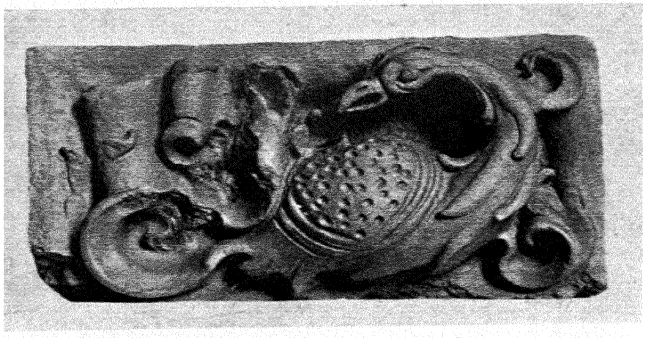


(*e*) Govind Bhita. Frieze of Terracotta plaques on wall to the south east of eastern temple.

Photo.-Litho. Office, Survey of India.



(*a*)



(*b*)



(*c*)



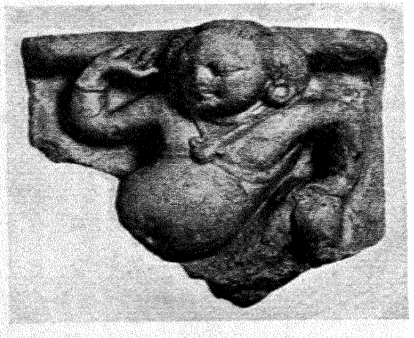
(*d*)



(*e*)



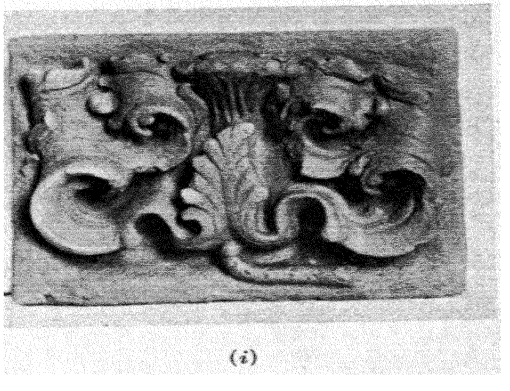
(*f*)



(*g*)



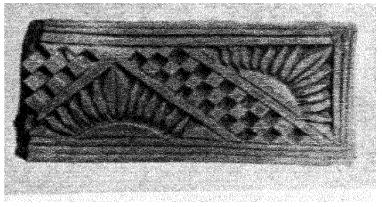
(*h*)

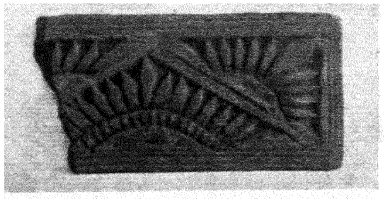


(*i*)

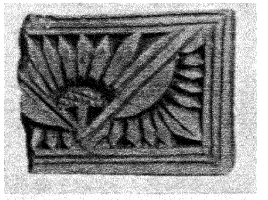
(*a*—*i*) Govinda Bhita. Terracotta plaques with a variety of designs.

Photo.-Litho. Office, Survey of India.

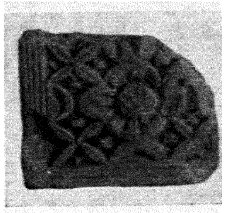




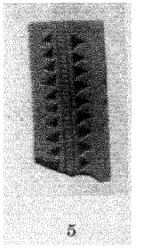
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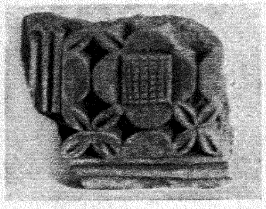
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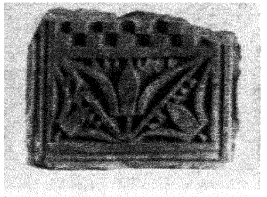
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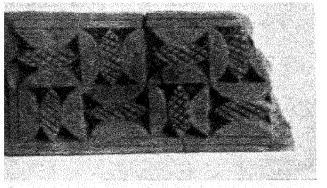
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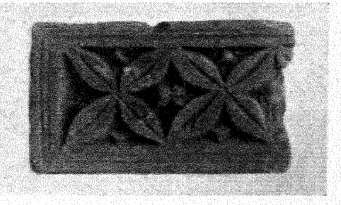
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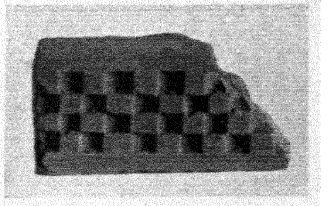
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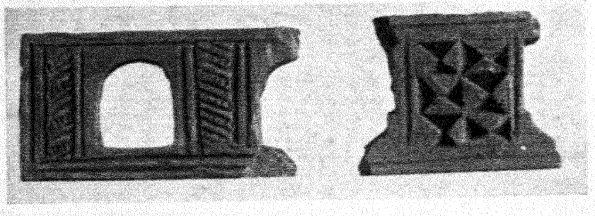
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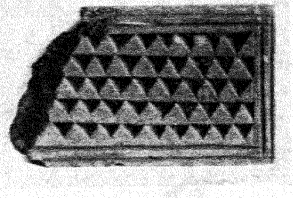
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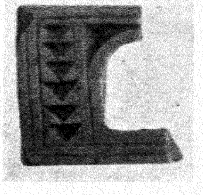
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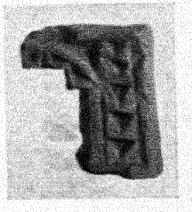
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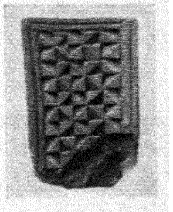
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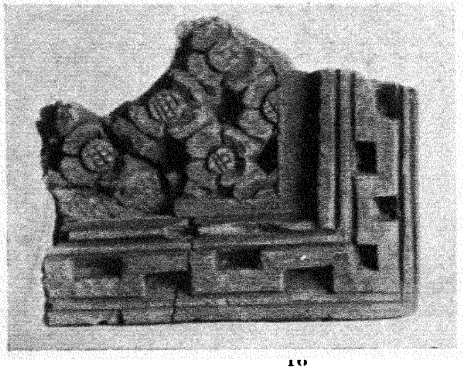
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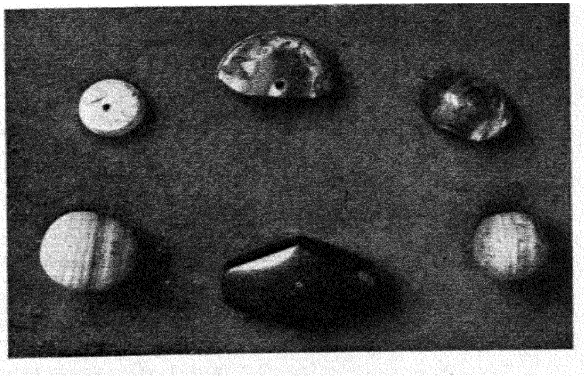
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17



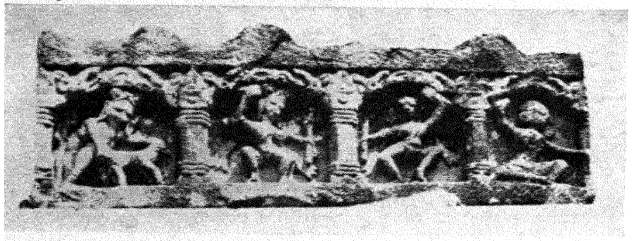
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(1-17). Carved bricks. 18. Beads.

Photo.-Litho. Office, Survey of India.



(*a*)



(*b*)



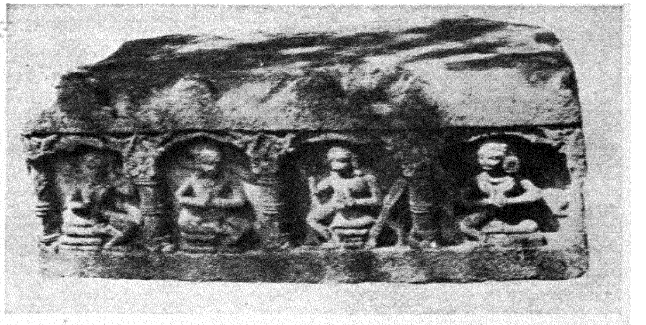
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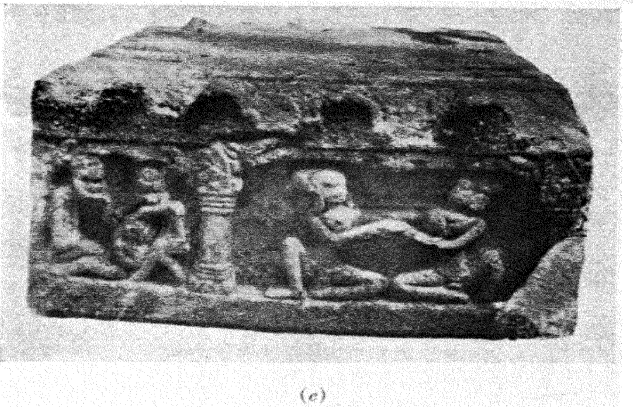
(*i*) Numaligarh, Sibsagar. Deoparbat. Lotus carving.



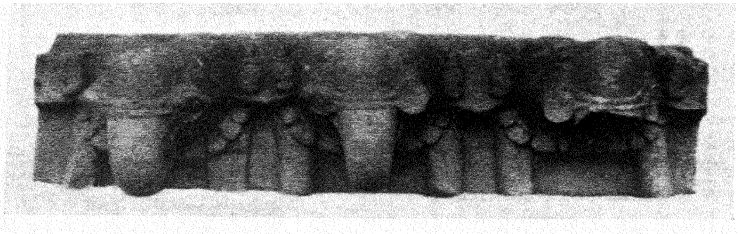
(*h*) Numaligarh, Sibsagar, Sivathan. Vishnu.



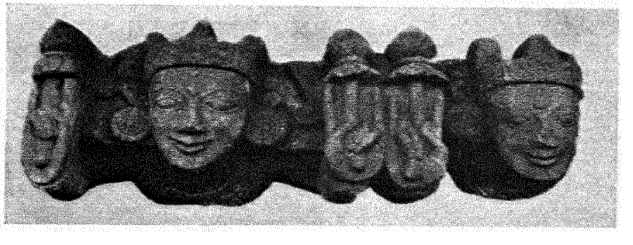
(*d*)



(*e*)



(*f*)



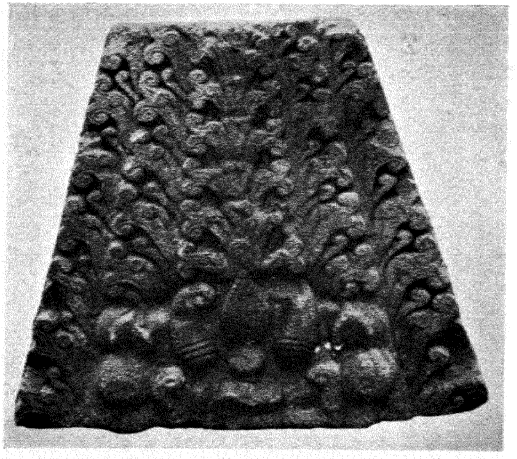
(*g*)

(*a*—*e*) Numaligarh. Sibsagar. Deoparbat. Friezes from mandapa with panelled scenes.
(*f*—*g*) Numaligarh. Sibsagar. Deoparbat. Carved pieces from plinth.

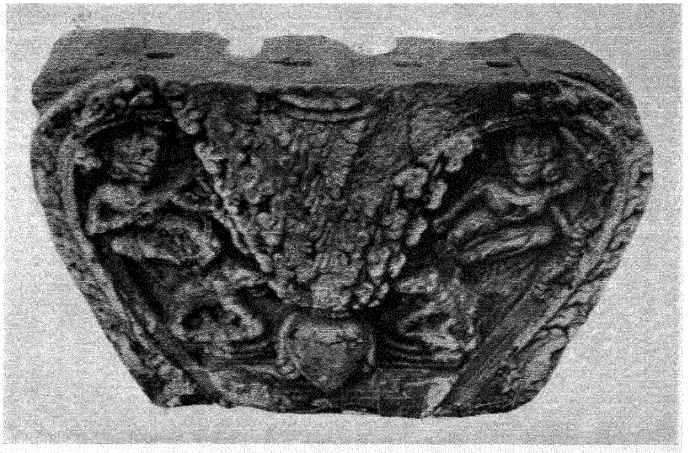
Photo.-Litho. Office, Survey of India.



(*a*) Numaligarh, Sibsagar. Sivathan. Garuda and ascetic.



(*b*) Numaligarh, Sibsagar. Deoparbat. Coping piece from *torana*.

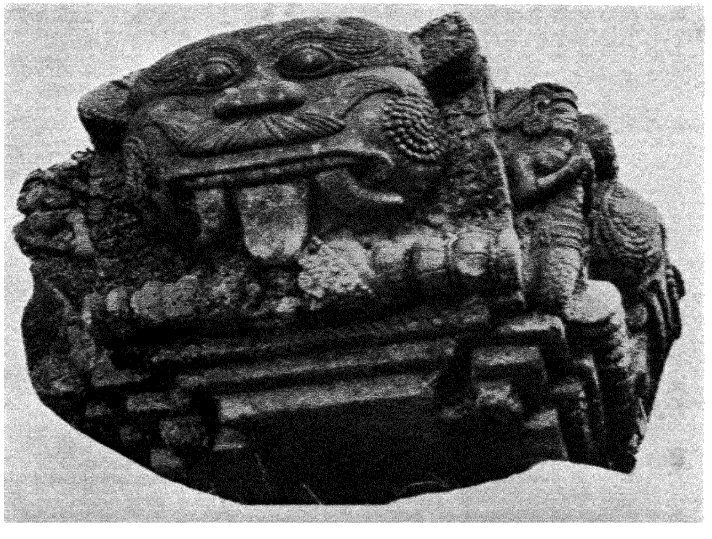


(*c*) Numaligarh, Sibsagar. Deoparbat. Coping piece from *torana*.



(*d*) Numaligarh, Sibsagar. Deoparbat. Carving showing Siva as *Tripurarimurti*.

Photo.-Litho. Office, Survey of India.

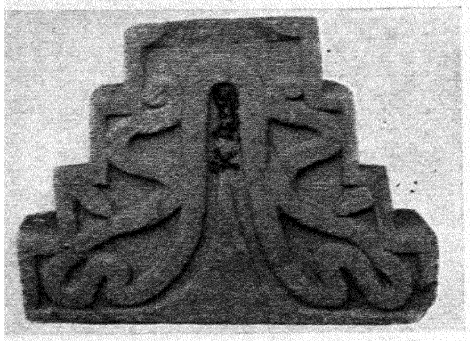


(*e*) Numaligarh, Sibsagar. Deoparbat. Pillar capital.

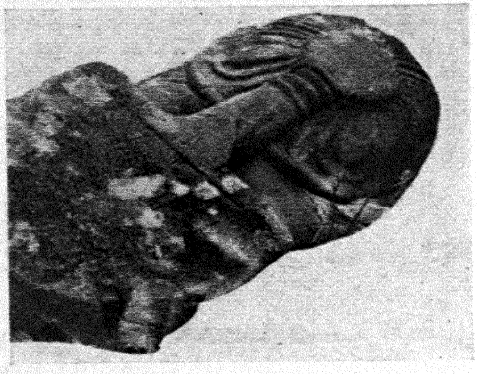


(*f*) Doboka, Nowgong. Gosain-Juri. Image of Vishnu.

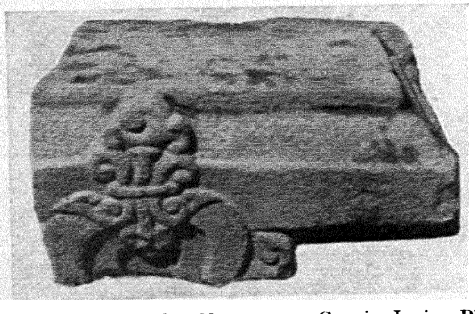
PLATE XIX



(*a*) Numaligarh, Sibsagar. Deoparbat. Coping piece from *torana*.



(*b*) Numaligarh, Sibsagar. Deoparbat. Pillar base from a *Mandapa*.



(*c*) Doboka, Nowgong. Gosain-Juri. Pillar capital with *Gavaksha* design.



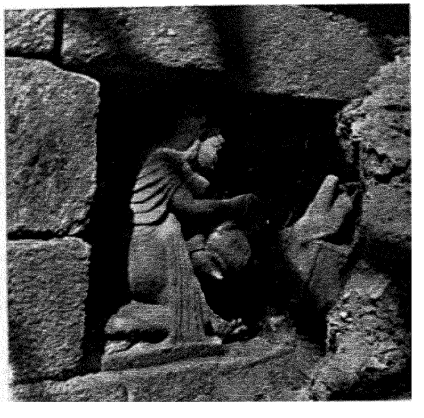
(*d*) Kamakhya temple, Kamrup. Carving of Venugopala.



(*e*) Numaligarh, Sibsagar. Sivathan. Carving of lion. Sejant.



(*f*) Kamakhya temple, Kamrup. Carving of conch blower.



(*g*) Kamakhya temple. Kamrup. Panel showing lady feeding animal (?) with water.



(*h*) Kamakhya temple. Kamrup. Panels showing domestic scenes.

PLATE XX



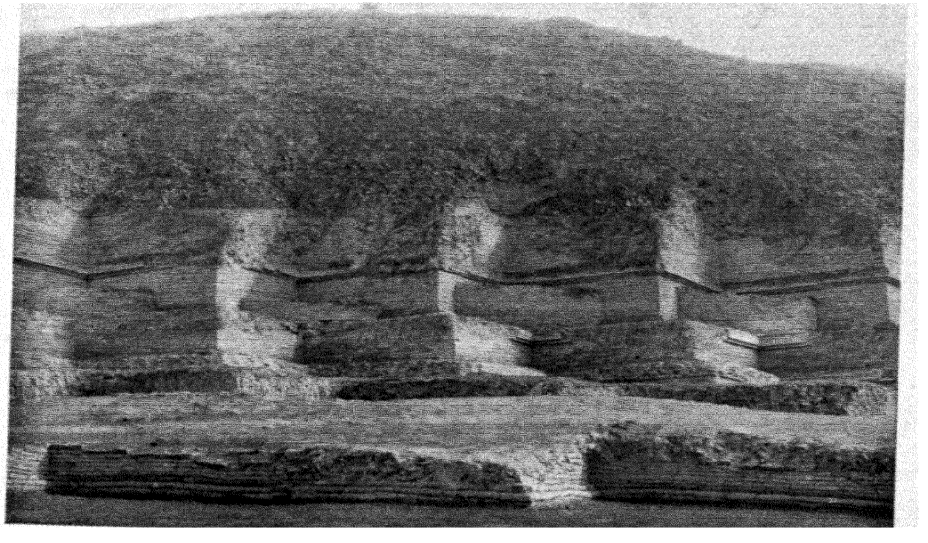
(*a*) Nandangarh. View of the mound before removal of circular wall (marked by a cross), from south-west.



(*b*) Nandangarh. View of the mound after removal of circular wall from south-west.



(*c*) Nandangarh. View of the excavated building from south.



(*d*) Nandangarh. View of the excavated building from south-west.

Photo.-Litho. Office, Survey of India.

EXCAVATIONS. NANDANGARH.



Terracottas.

Photo.-Litho. Office, Survey of India.

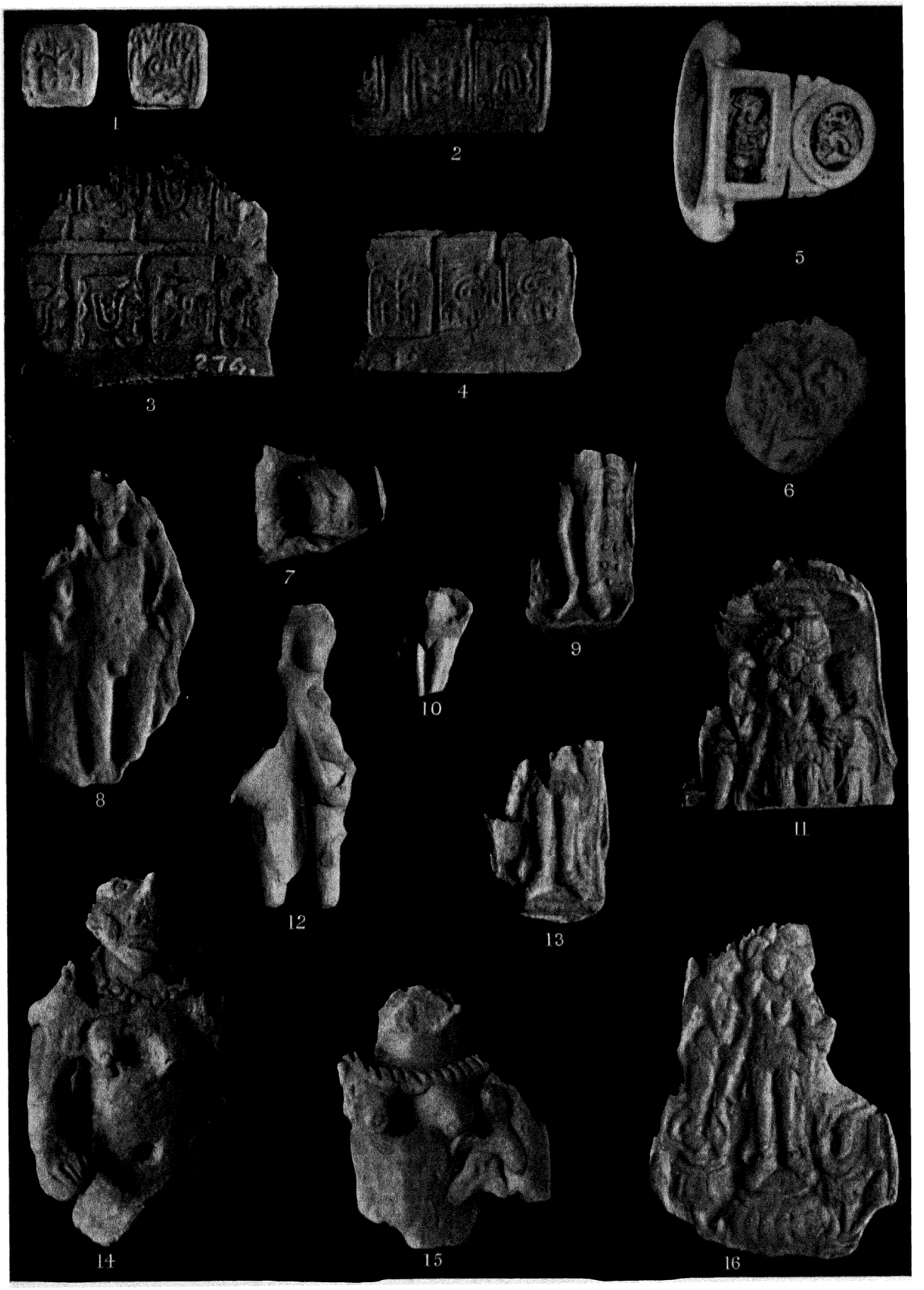
EXCAVATIONS. NANDANGARH.



Terracottas.

Photo.-Litho. Office, Survey of India.

EXCAVATIONS. NANDANGARH.

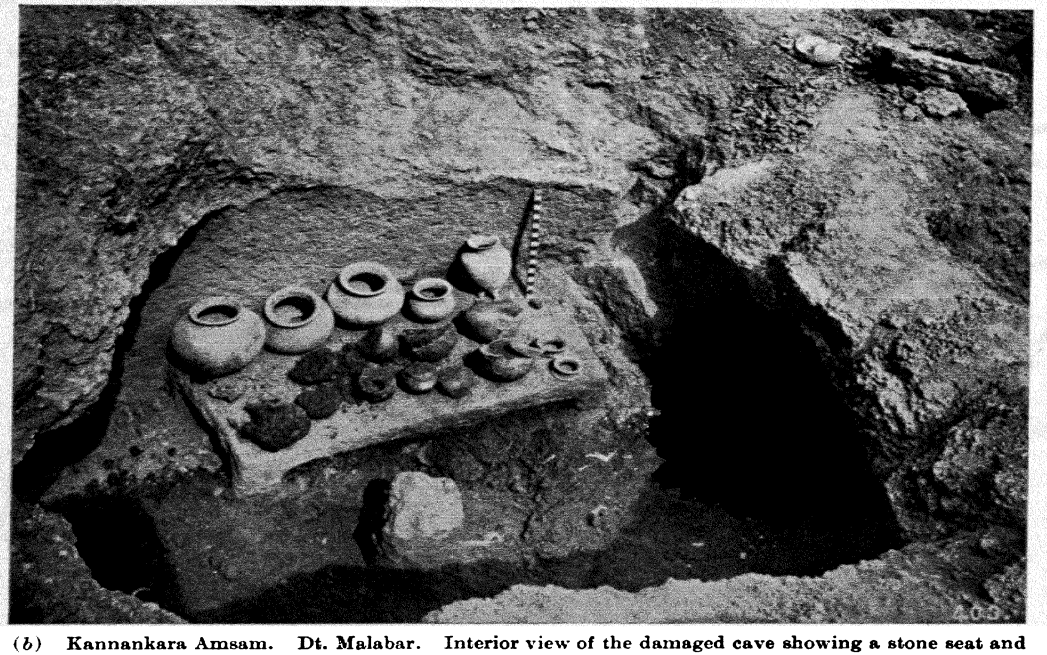


(1) Lead coin or token. (2—4) Terracotta moulds. 5) Silver ring with gold inlay. (6) Terracotta sealing. (7—11) Terracotta figurines.

Photo.-Litho. Office, Survey of India.



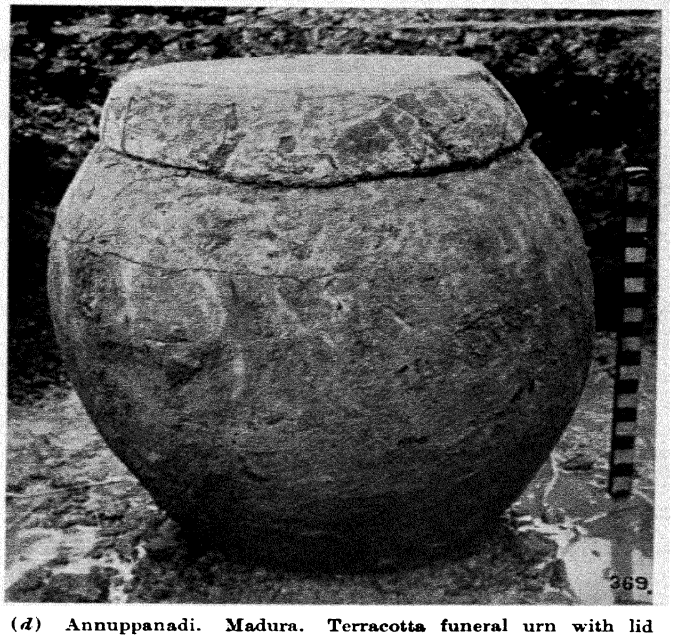
(*a*) Kannankara Amsam. Dt. Malabar. Entrance to damaged rock-cut cave after partial clearance.



(*b*) Kannankara Amsam. Dt. Malabar. Interior view of the damaged cave showing a stone seat and some terracotta vessels.



(*c*) Annuppanadi. Madura. Terracotta funeral urn with other small pots and vessels exposed at ancient site.



(*d*) Annuppanadi. Madura. Terracotta funeral urn with lid unearthed from ancient site.

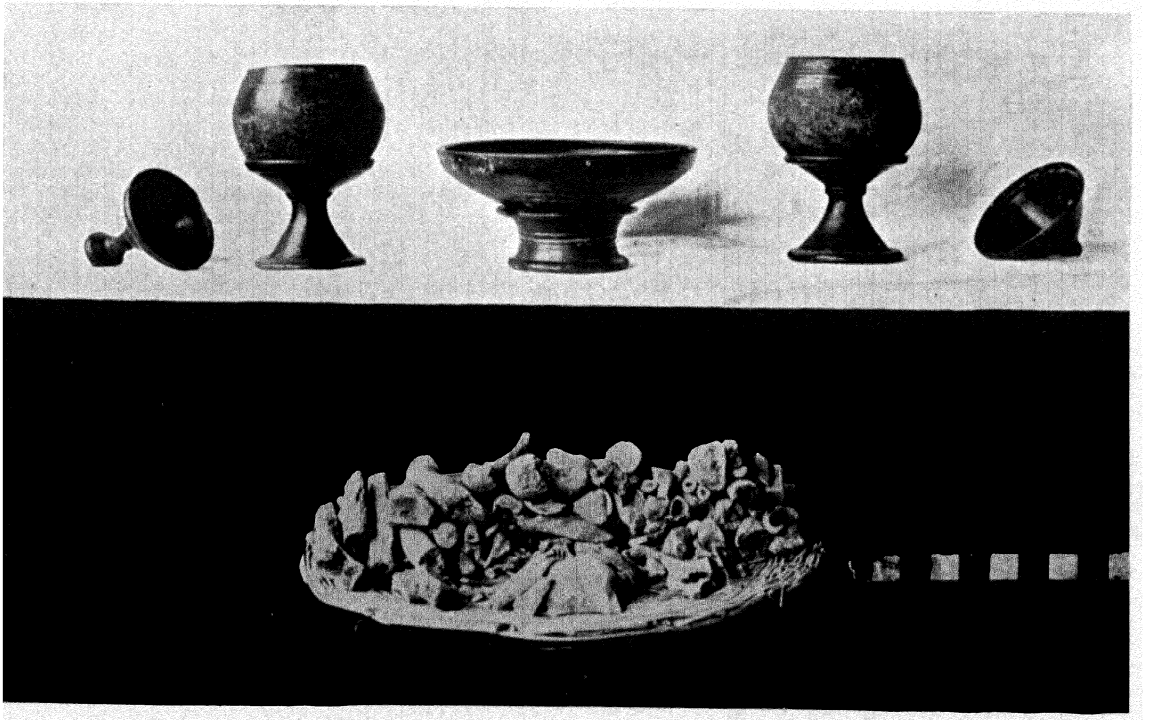
Photo.-Litho. Office, Survey of India.



(*a*) Vadagarai. Prehistoric pottery.



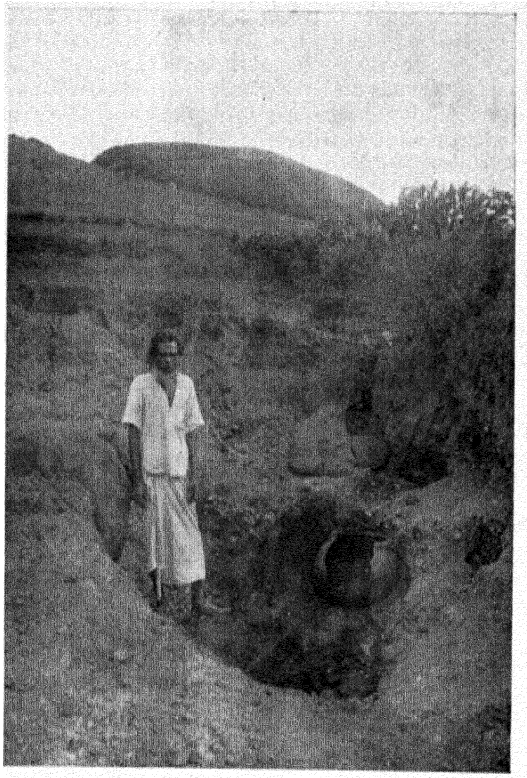
(*b*) Annuppanadi. Group of pottery and vessels.



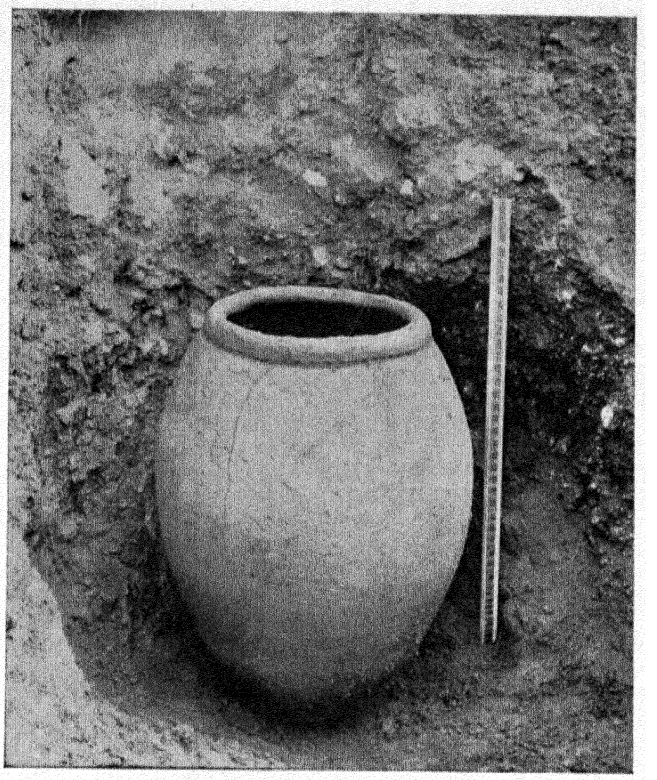
(*c*) Vadagarai. Pottery and human bones.

Photo.-Litho. Office, Survey of India.

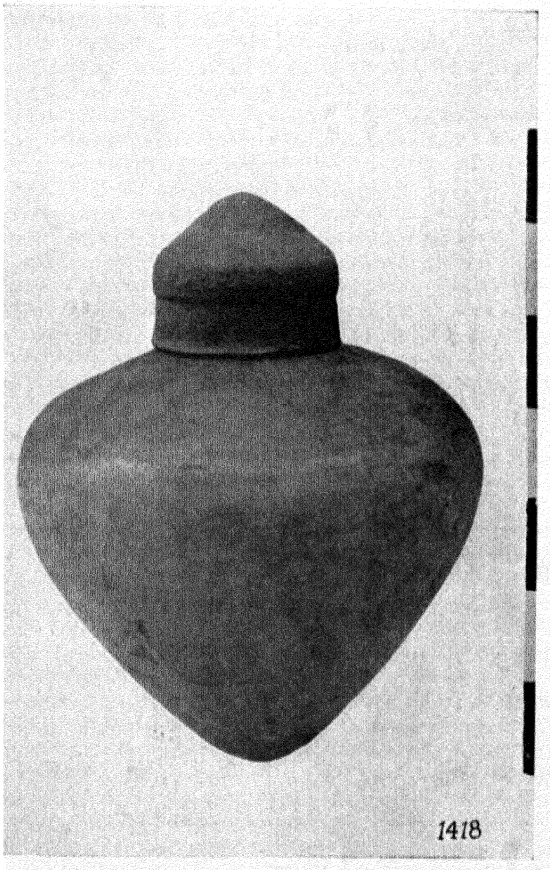
EXPLORATION. MADRAS.



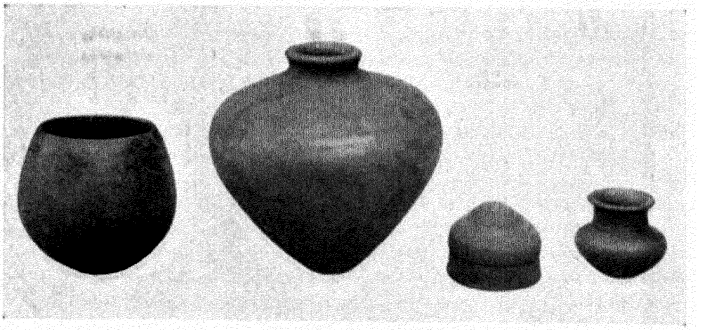
(*a*) Tenkasi. District Tinnevelly. Valiyampottai hill. Burial urns found on the mound.



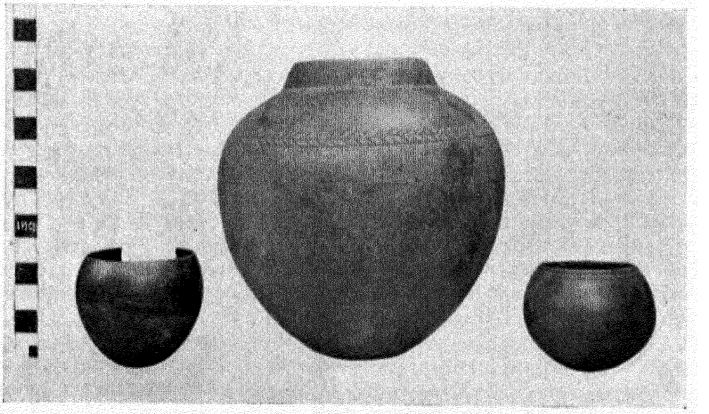
(*b*) Tenkasi. District Tinnevelly. Valiyampottai hill. A big burial urn excavated from the mound.



(*c*) Tenkasi. District Tinnevelly. Valiyampottai hill. Earthen pot with lid, found on the mound.



(*d*) Prehistoric earthen vases.

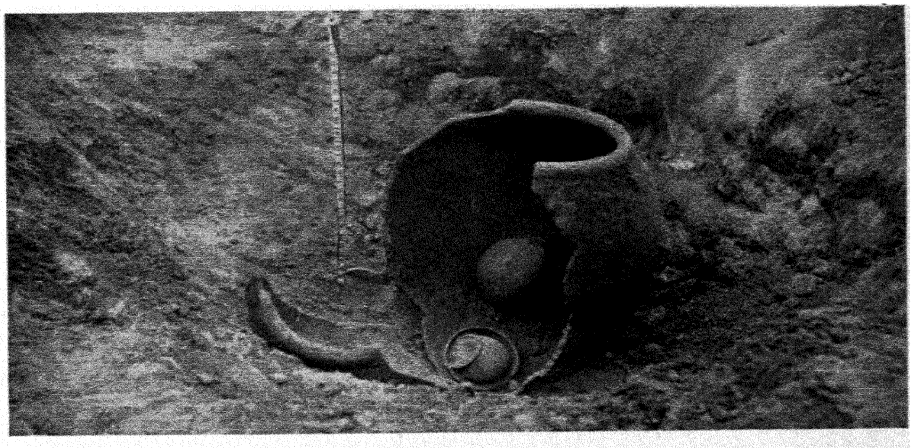


(*e*) Tenkasi. District Tinnevelly. Valiyampottai hill. Earthen vessels excavated from the mound.

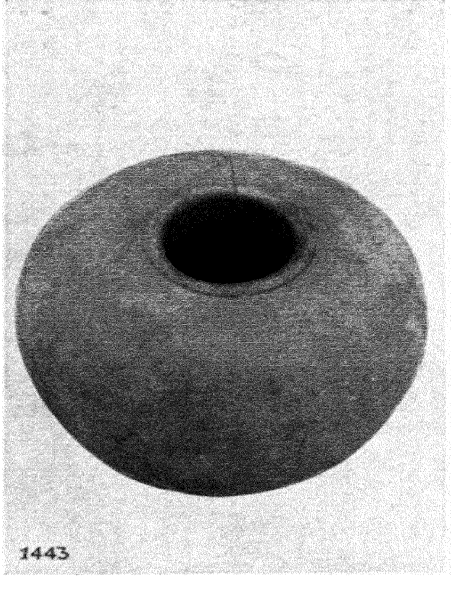
Photo.-Litho. Office, Survey of India.



(*a*) Kilanatham. District Tinnevelly. Burial deposit.



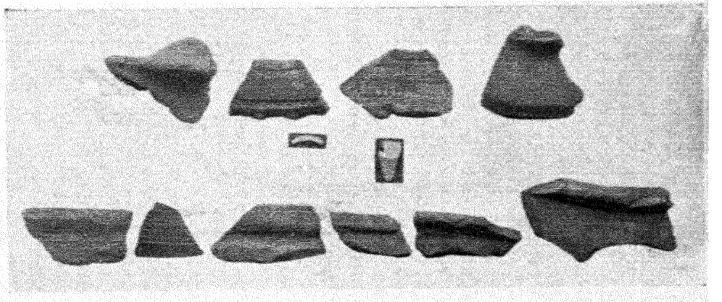
(*b*) Kuttalam. District Tinnevelly. Section of big burial jar, showing smaller vessels inside.



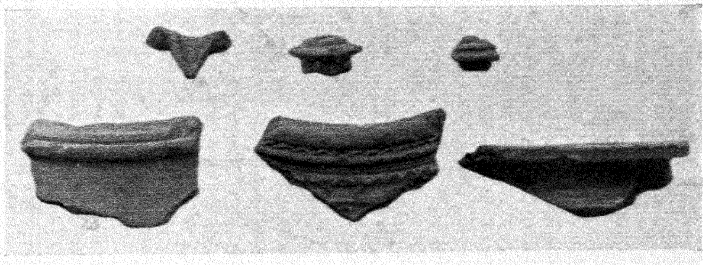
(*c*) Ukkirankottai. District Tinnevelly. Earthen pot found in a field.



(*d*) Ukkirankottai. District Tinnevelly. Earthen pot found in a field.



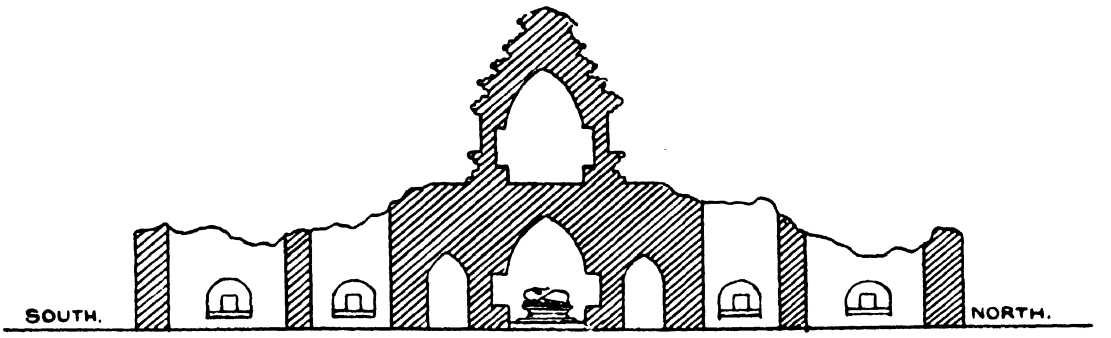
(*e*) Satur. Ramnad District. Fragments of burial pottery.



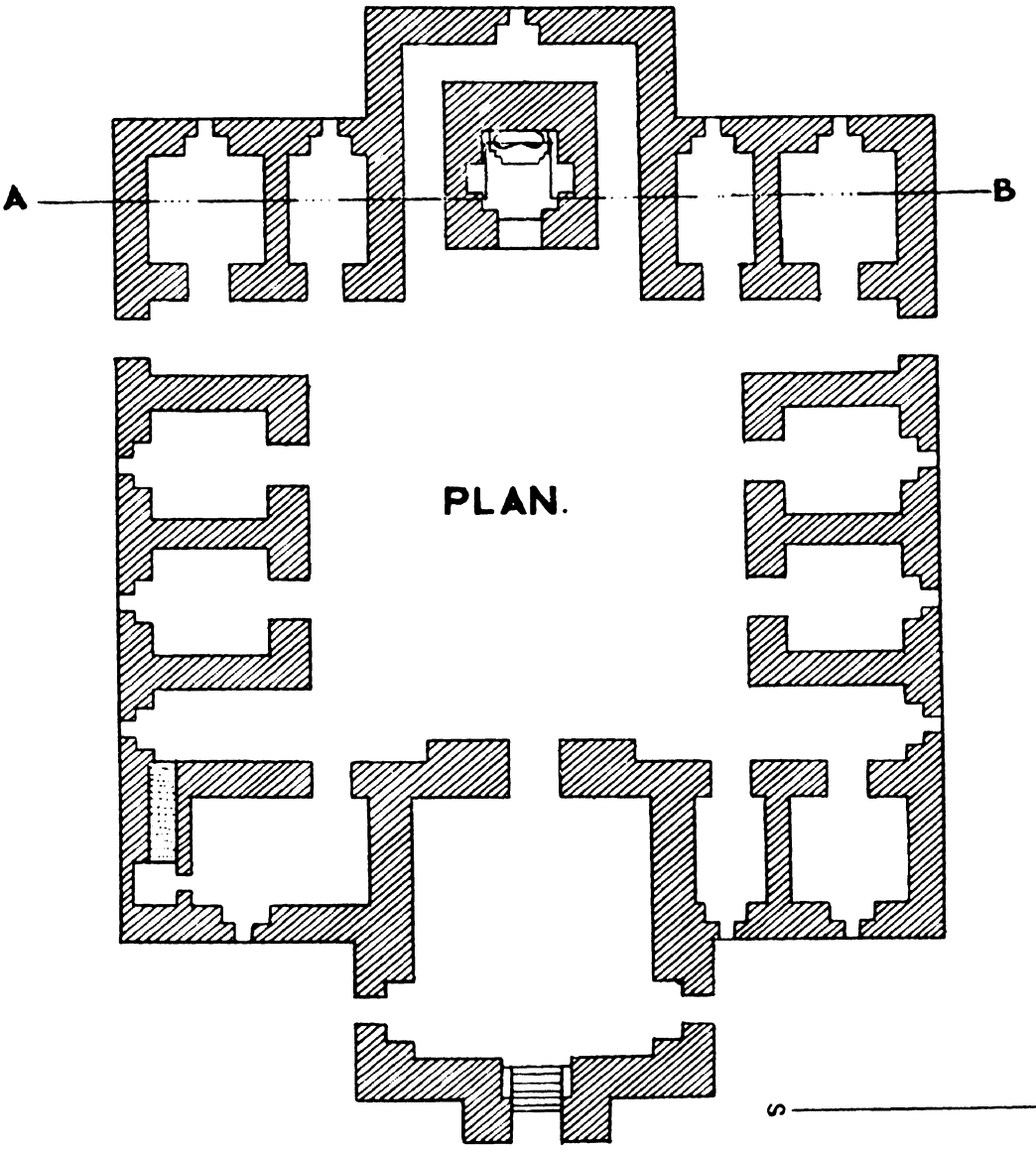
(*f*) Ukkirankottai. District Tinnevelly. Fragments of burial pottery.

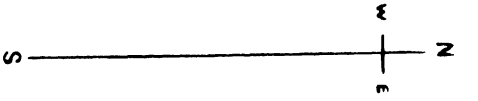
Photo.-Litho. Office, Survey of India.

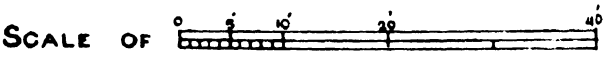
EXCAVATIONS, BURMA.



SECTION ON A.B







Myinpagan. Plan and Section of the ruined monastery south of Somingyi pagoda.

Photo.-Litho. Office, Survey of India.

EXCAVATIONS. BURMA.



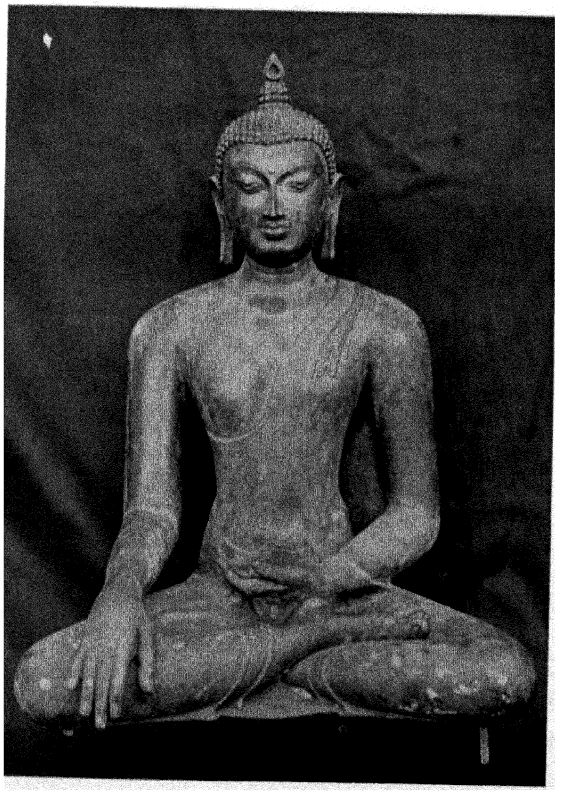
(*a*) Myinpagan. A bronze image of Dipankara Buddha.



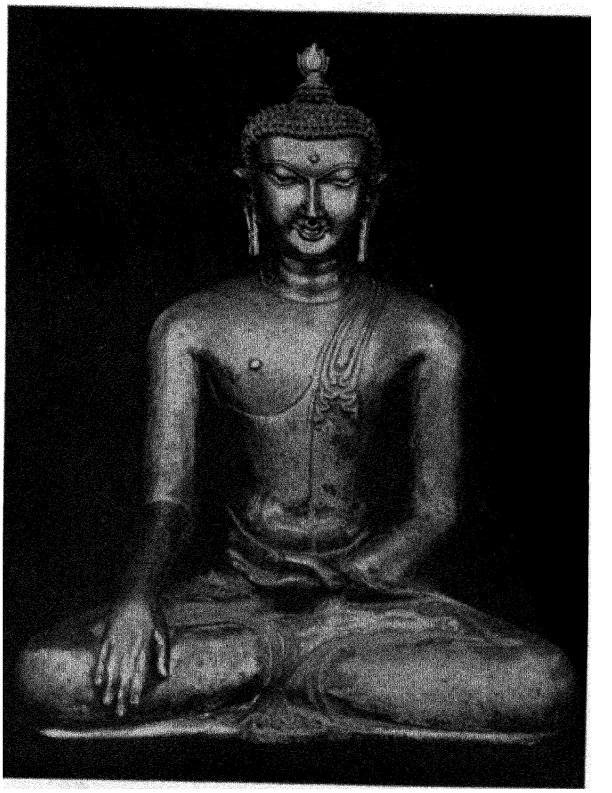
(*b*) Myinpagan. A stone sculpture depicting Gautama Buddha flanked by a Bodhisattva.



(*c*) Pagan. A bronze image of the Dipankara Buddha found in a relic chamber of a ruined temple west of Shwesandaw Pagoda.



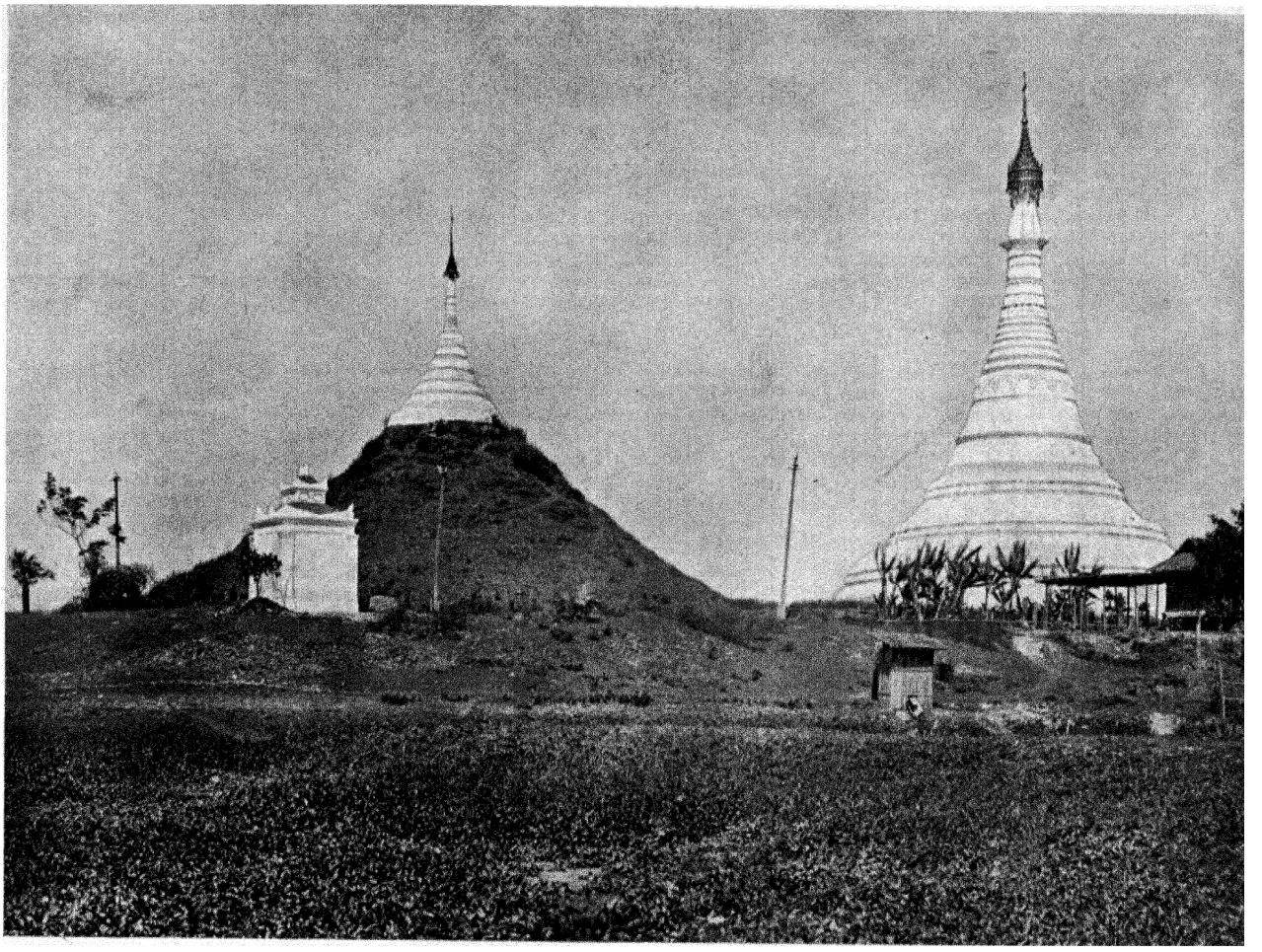
(*d*) Pagan. A seated bronze image of the Buddha found in a relic chamber of a ruined temple west of Shwesandaw Pagoda.



(*e*) Pagan. A seated bronze image of the Buddha found in a relic chamber of a ruined temple west of Shwesandaw Pagoda.

Photo.-Litho. Office, Survey of India.

EXCAVATIONS. BURMA.



(*a*) Kyontu-*Paya* (Pagoda) consisting of two conical stupas near Waw.



(*b*) Terracotta plaque found in Kyontu monastery near Waw, now at Mandalay.



(*c*) Terracotta plaque preserved in Kyontu monastery near Waw. Pegu.

Photo.-Litho. Office, Survey of India.



(*a*) Terra-cotta plaque preserved in Kyontu monastery near Waw.



(*b*) Terra-cotta plaque preserved in Kyontu monastery near Waw.



(*c*) Terra-cotta plaque preserved in Kyontu monastery near Waw.



(*d*) Terra-cotta plaque found in excavation at Kyontu Paya (Pagoda) near Waw.

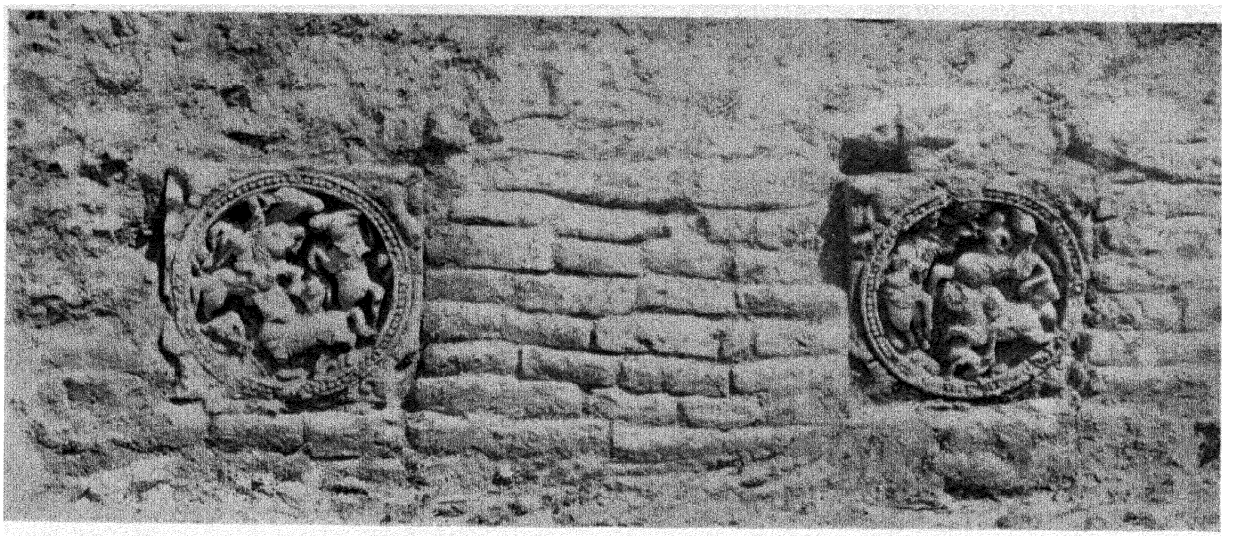


(*e*) Terra-cotta plaque found in excavation.

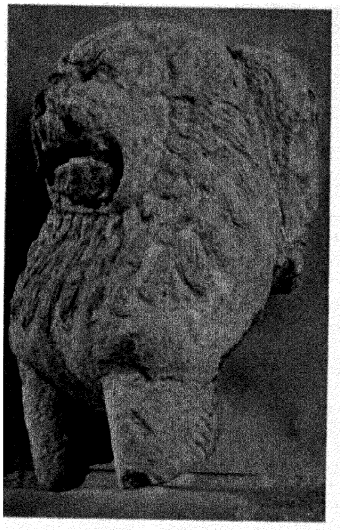


(*f*) A fragment of a terra-cotta plaque.

Photo.-Litho. Office, Survey of India.



(*a*) Terracotta plaques on south retaining wall of platform of Kyontu-Paya Pagoda.



b) A fragment of a terracotta figure of a lion.



c) Stone Buddha image in regal dress ound in ruined Sima near Shwe Onhmin monastery, Pakhangyi.



(*d*) Stone dragon head erected against a boundary pillar of a ruined Sima near Shwe Onhmin monastery.

Photo.-Litho. Office. Survey of India.



(*e*) Fragment of a terracotta plaque found at Let-Khok-Pin Payagon, east of Kyontu monastery.

INDIAN MUSEUM.

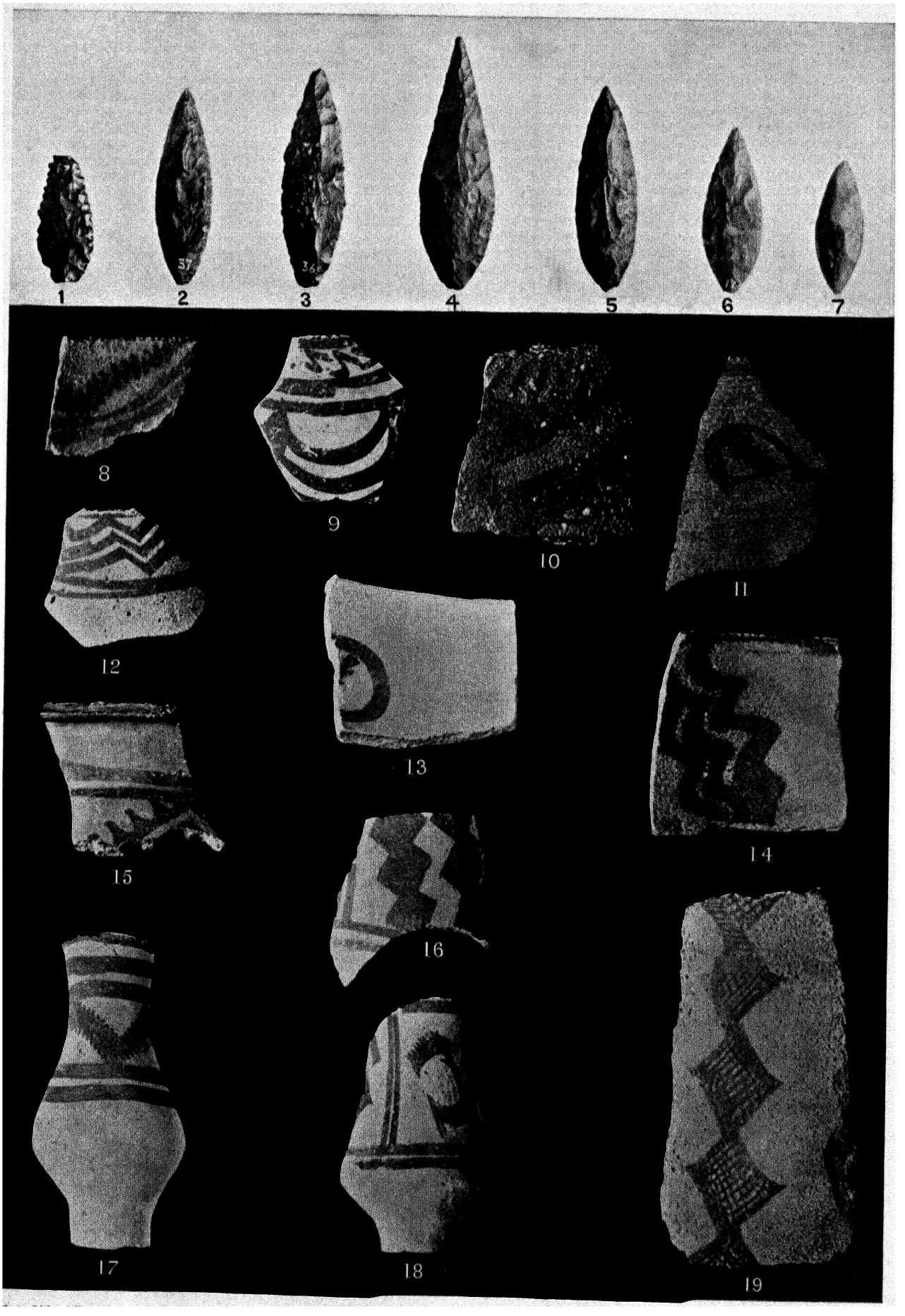


Photo.-Litho. Office, Survey of India.

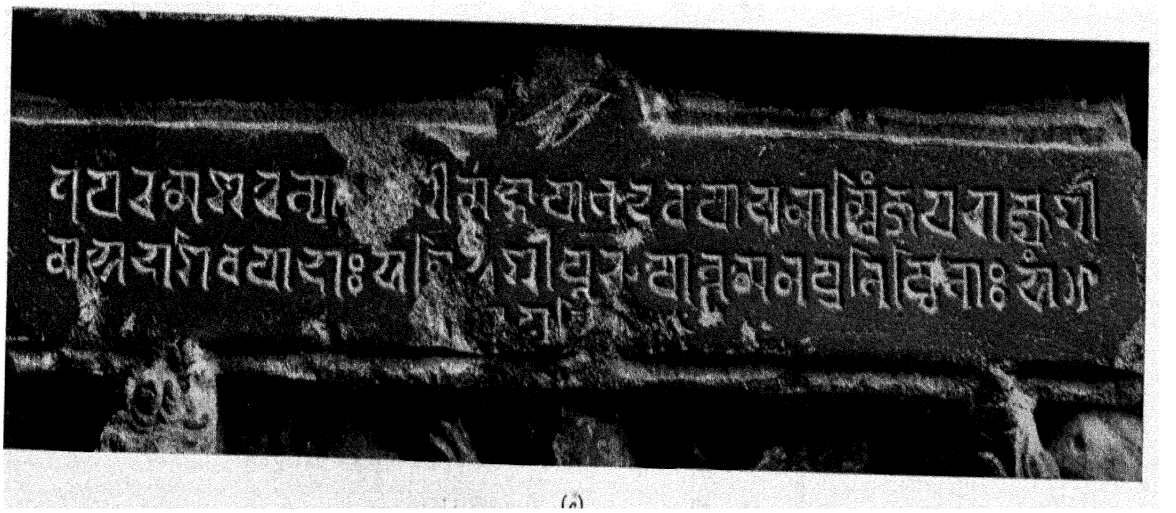
Stone implements and pottery from Seistan.



(a)



(b)

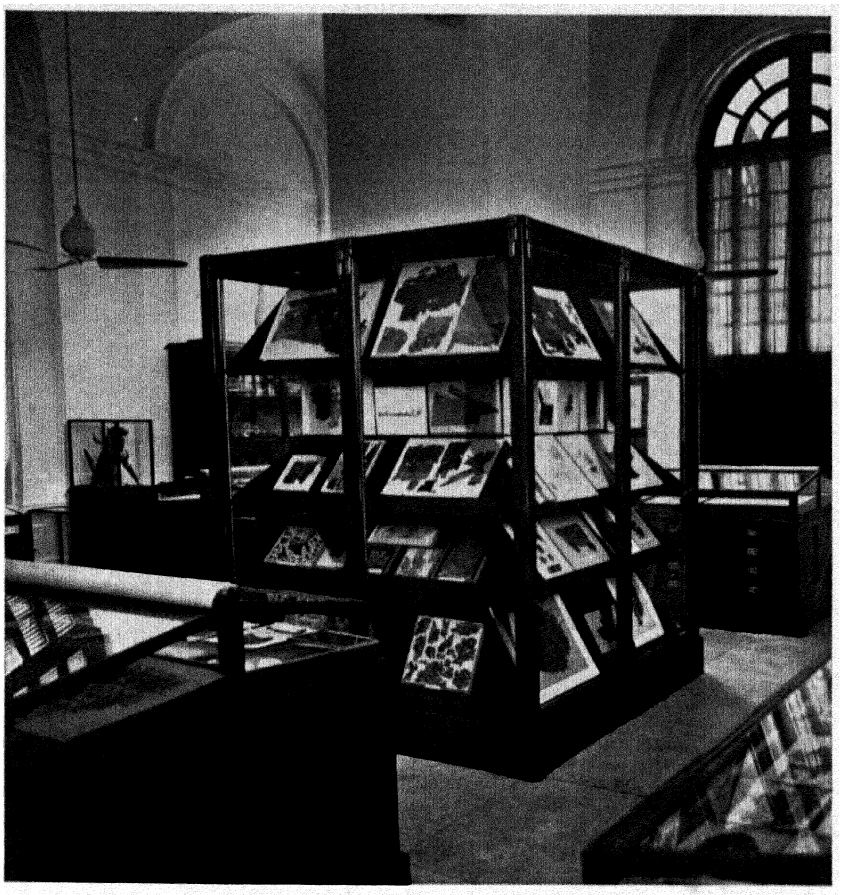


(c)

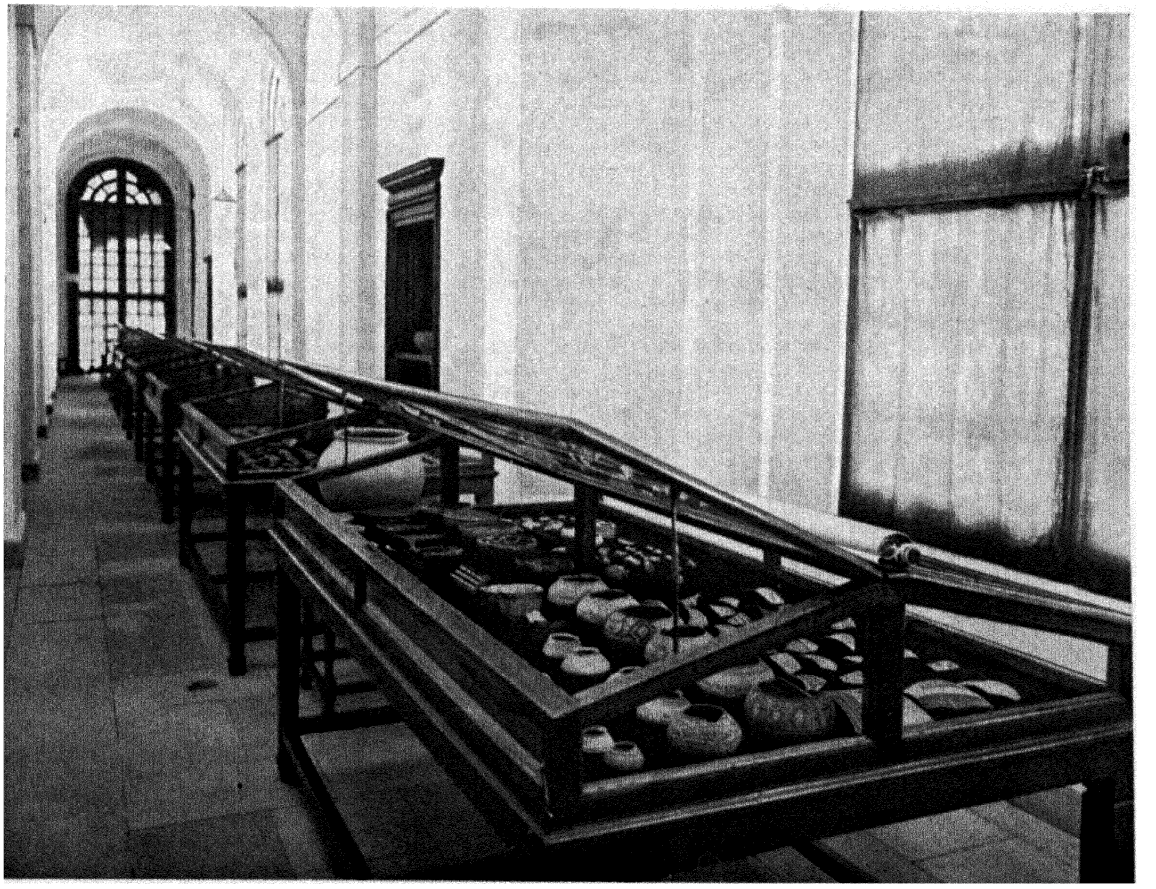
Inscribed Sadāsiva image from Bangarh, Dinajpur District.

Photo.-Litho. Office, Survey of India.

CENTRAL ASIAN ANTIQUITIES MUSEUM. NEW DELHI.



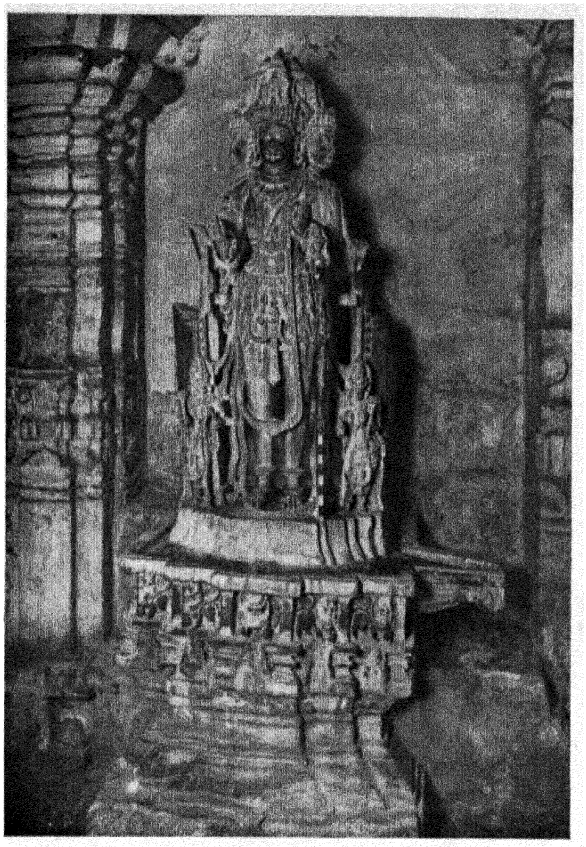
(*a*) Room No. 1. New free standing case containing miscellaneous antiquities from Central Asia.



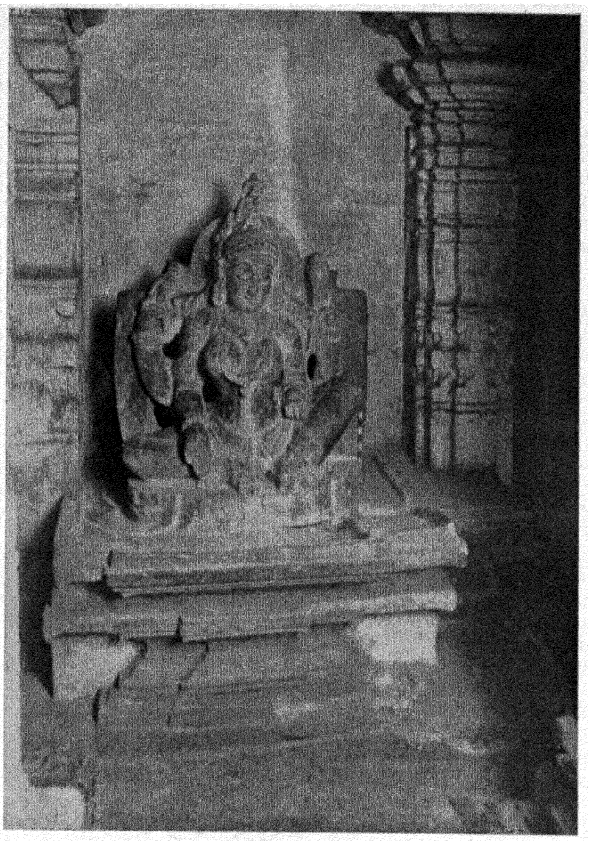
(*b*) Long gallery containing exhibits from Nal and Sind in the foreground.

Photo.-Litho. Office, Survey of India.

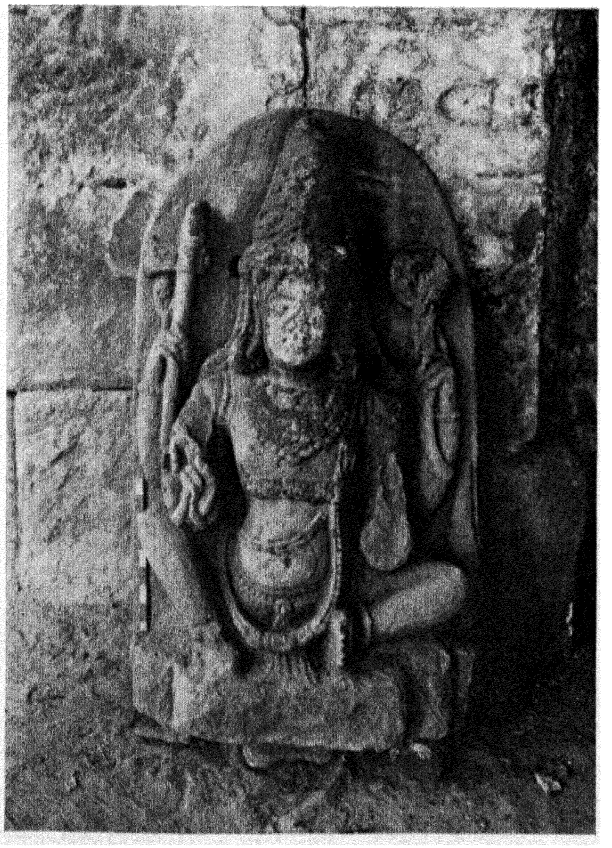
MISCELLANEOUS, WESTERN CIRCLE.



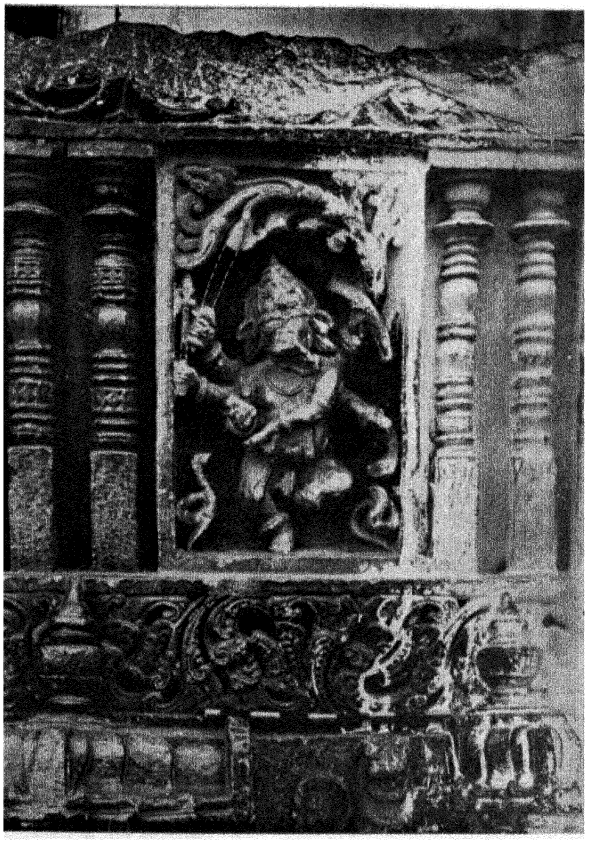
(*a*) Lakkundi, District Dharwar:—An image of Brahma in sabhamandapa of Jain Basti.



(*b*) Lakkundi, District Dharwar:—An image of Padmavati in sabhamandapa of Jain Basti.



(*c*) Aihole, District Bijapur:—Rama linga temple No. 68, loose image of Parasurama in a minor shrine.



(*d*) Gadag, District Dharwar:—Trikutesvara temple, niche in north wall of mandapa, showing dancing Ganesa with six hands.

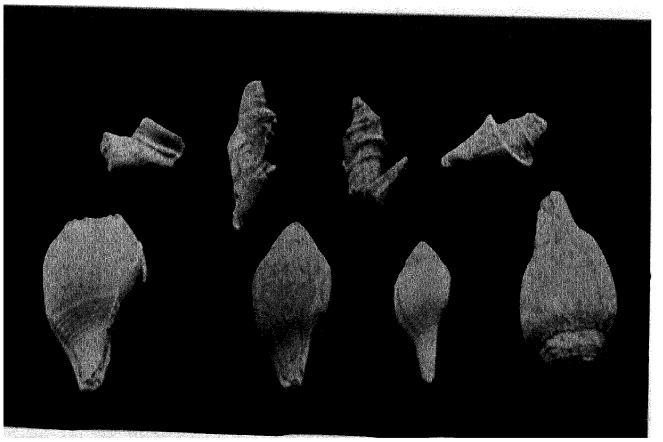
Photo.-Litho. Office, Survey of India.



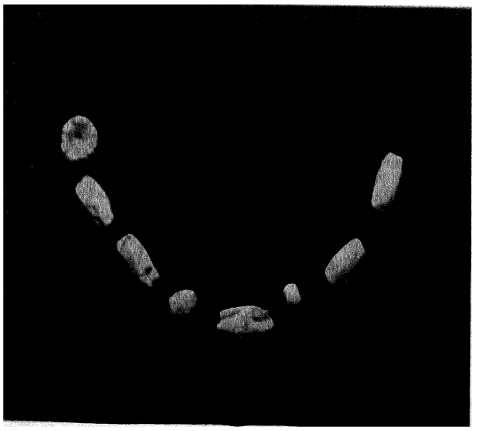
(a) Korkai. Tinnevelly District. Slab with sculpture in relief of Hanuman carrying a *Kavadi* on road side.



(b) Akkasalai. Tinnevelly District. Siva temple. Back view.



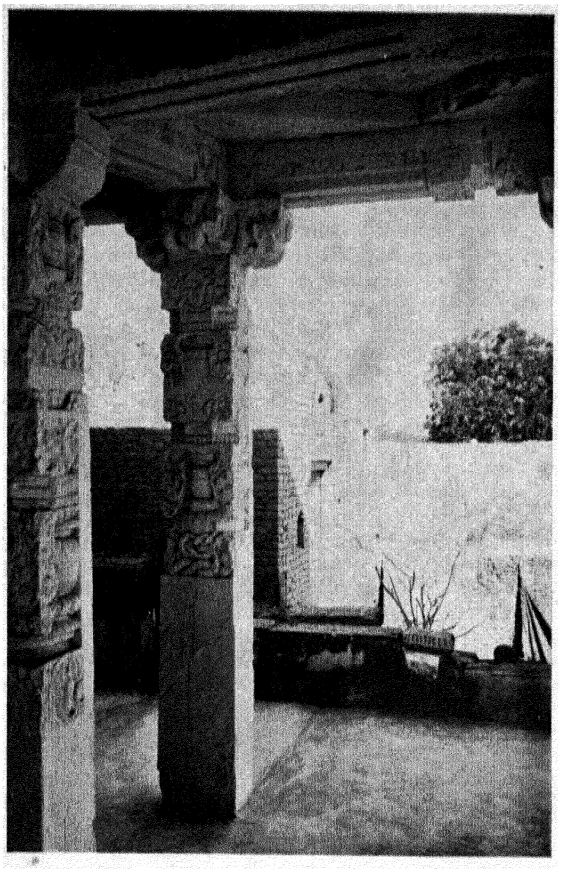
(c) Korkai. Conches found in the village.



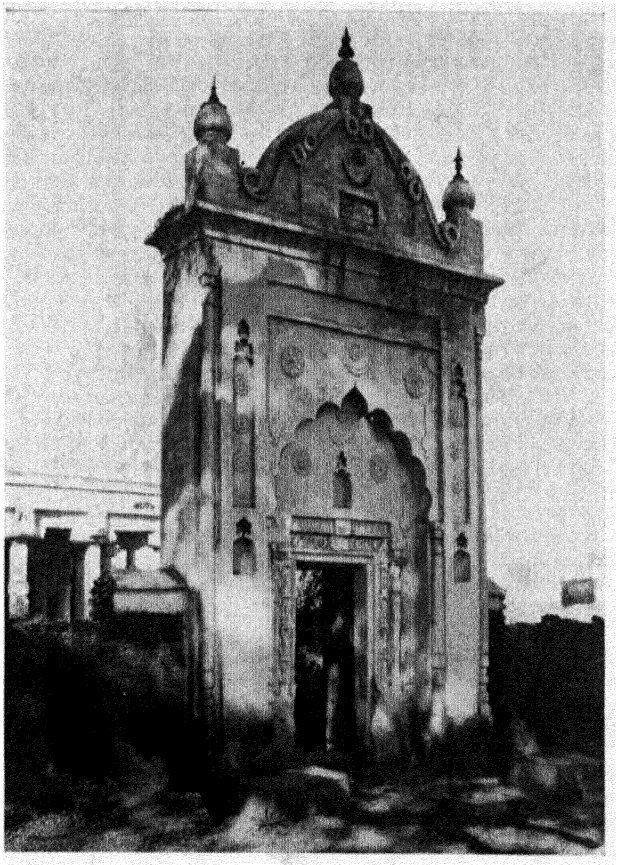
(d) Korkai. Conch beads found in the village.

Photo.-Litho. Office, Survey of India.

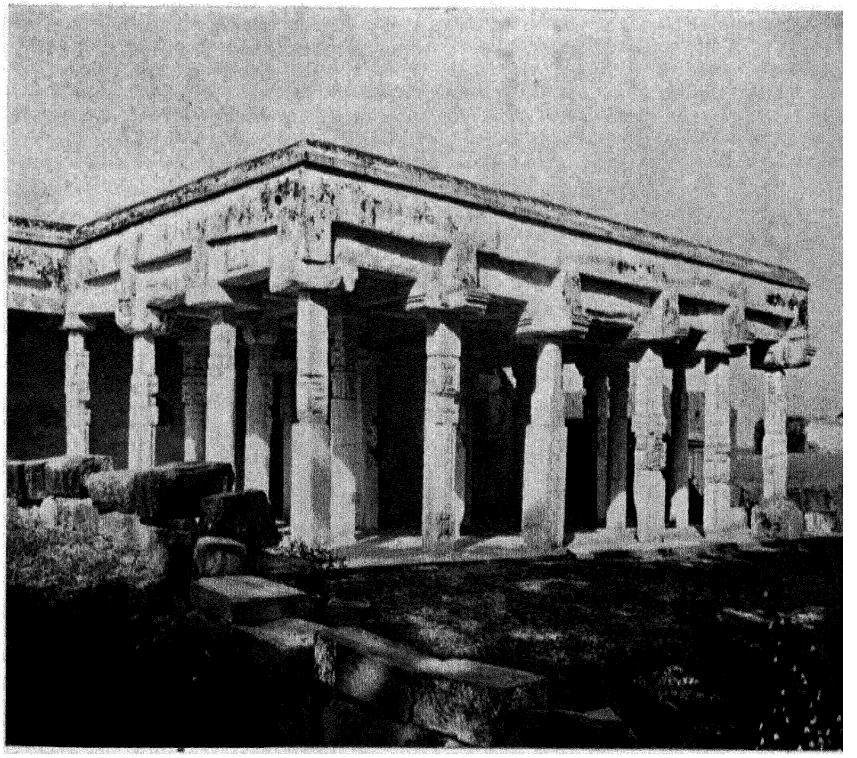
MISCELLANEOUS. NOTE.



(*a*) Hathgaon. Fatehpur. Jaichandi masjid. Carved pillar.



(*b*) Hathgaon. Fatehpur. Jaichandi masjid. The entrance gate.



(*c*) Hathgaon. Fatehpur. Jaichandi masjid. View from south-east.



(*d*) Sarnath Museum. Colossal image of Siva.

Photo.-Litho. Office, Survey of India.