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ANNUAL REPORT
OF THE
ARCHÆOLOGICAL SURVEY
OF INDIA

1923-24

EDITED BY

SIR JOHN MARSHALL, KT., CLE., M.A., LITT. D., F.S.A. HON. A.R.LBA, HON. PH. D.,

Director General of Archaeology in India-



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ANNUAL REPORT OF THE ARCHAEOLOGICAL SURVEY OF INDIA

FOR THE YEAR
1923-24

SECTION I CONSERVATION

IN reviewing the work of the Archaeological Department during the year Introductory 1923-24, I shall refrain from dwelling on the financial difficulties which it has had to encounter. These difficulties are still much the same as were facing us a year ago, and they have already been explained in detail in the Report for 1922-23. It would, therefore, serve no useful purpose to go over the same ground again. All that I need remark is that the provision made for the conservation of monuments and the excavation of buried remains is still inadequate for the needs of the country, the former amounting to no more than Rs. (6,52,200 and the latter to the insignificant sum of Rs. 14,000 for the whole of India and Burma. But, while this lack of funds has inevitably hampered the usefulness of the Department in certain directions, nevertheless the record of its activities during the past twelve months is one which may well give ground for satisfaction. Indeed, the discoveries which have recently been made in Sind and the South West of the Punjab and which are as remarkable as any ever made in this country, would alone suffice to make the year 1923-24 a memorable one in the history of Indian Archaeology. At the same time they justify the hope that the provision made for this particular branch of its work, if not for the others also, will henceforth be substantially more liberal than it has been in the past; for it is hardly to be imagined that money will be denied to an undertaking which has already appealed so powerfully to the national sentiment of India and which seems likely to revolutionise our ideas of the cultural development of man in the Middle and Nearer East.

In the Introduction to last year's Report attention was drawn to the unduly heavy lapses which were occurring in the allotments made for works executed by the local Departments of Public Works, the actual amount which lapsed in 1922-23 being something over two lakhs. According to the figures supplied* to me by the Local Administrations this sum has been reduced during this year to the almost negligible amount of Rs. 12,000 and it is hoped that henceforth the loss sustained on this account need not at any time rise much above that figure. Another matter alluded to in the same Report was that

Introductory of the heavy agency charges levied by the Provincial Departments of Public Works on account of the works executed by them on behalf of the Central government. These charges amount on the average to about 20 per cent of the cost of the estimate, and so long as our conservation works have to be carried out through the agency of the Public Works Department, they will of course be unavoidable. Indeed it is not unlikely that the changes now taking place in the Public Works Department may necessitate a further increase in the rates. However this may be it is manifestly desirable that no opportunity should be lost of saving these overhead charges, when it is possible to do so. During the past year a notable step in this direction has been taken by transferring to the Archaeological Department the actual execution of repairs and the maintenance of all protected monuments in the Agra District of the United Provinces. Although the transfer, which took place on June 1st 1923, was intended to be an experimental measure, it is gratifying to be able to state that it has so far been attended with eminently successful results. In addition to the agency charges, which in the United Provinces amount to 19 per cent, a considerable saving has also been effected by the relatively low tender rates obtained from contractors which were some 8 per cent below the rates of the estimates prepared by the Public Works Department. Thus, the total approximate saving of the Department in the Agra District has been 27 per cent, amounting to Rs. 20,678, on the conservation works carried out by the Superintendent. What is also very satisfactory is that the execution of these works has left nothing to be desired and that Maulvi Zafar Hasan, to whom the successful working of the new scheme is due, has found it possible to reappropriate all the savings referred to above and so to utilize the full allotment made for conservation in this District. Now that the experiment has turned out so well we may look forward to adopting at no very distant date the new procedure in the United Provinces generally, and later on to extending it to other Circles also.

While the duties of the Superintendent Muhammadan and British Monuments, have thus been increased in one direction they have been diminished in another by the transfer to the Frontier Circle of all the Muhammadan and British Monuments, in the Punjab. Up to April, 1923, the Northern Circle had embraced the United Provinces of Agra and Oudh, Delhi and the Punjab, but in view of the very great disparity that existed in the duties devolving on the Superintendents in the Northern and Frontier Circles, the latter has now been charged with the conservation of Muhammadan and British Monuments in the Punjab in addition to his previous functions, the Superintendent in the Northern Circle remaining responsible for the conservation of Muhammadan and British Monuments in the United Provinces and Delhi only. Simultaneously with this readjustment all records relating to the Punjab monuments together with drawings, photographs, etc., have been transferred to the Superintendent, Frontier Circle.

United

" Out of a sum of Rs. 1,47,083 spent on the conservation of Muhammadan

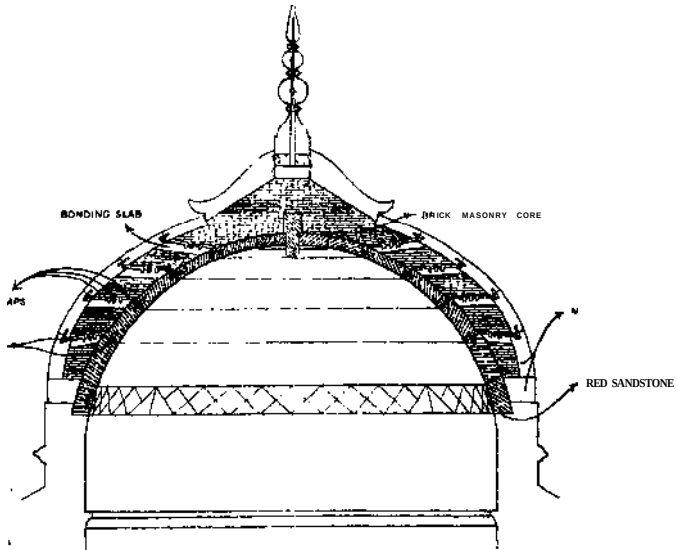
Provinces

Muhammadan and British Monuments in the United Provinces, the Public Works Department was responsible for the expenditure of Rs. 37,196 (Rs. 10,292 on special repairs and Rs. 26,904 on annual repairs) and the Superintendent, Archaeological Survey, for Rs. 66,589 (Rs. 50,533 on special repairs and Rs. 16,066 on annual repairs). The balance of Rs. 43,298 went to the maintenance of gardens. The programme of conservation undertaken by the Archaeological Superintendent was a long and varied one embracing some 16 works of a special nature besides the usual

annual repairs. At Agra, the chief work was the rebuilding of the south-west **United** corner chhatra at the Taj. On account of cracks in its dome and the breaking **Provinces** of most of the lintels, brackets, capitals and bases of pillars as a result of the Muhammadan

sinking of its plinth, the whole of the chhatra was in a precarious condition. **Monuments**

As a temporary measure, three of its openings had been tilled in with buck Agra, masonry walls to support, the most affected parts (PI. I,a), until funds could be made available to rebuild it. in the reconstruction every care has been taken to re-use as far as possible the old serviceable stones, and *with* this object all the stones were numbered and photographed before dismantling (PI. I,b). The work of dismantling and lowering the heavy stones from a height of some 80 feet was not without difficulty and danger, requiring a heavy scaffolding (PI. I,c), strong lopes and pullv blocks and the task was made all the more complex owing to the extreme care that had to be taken to avoid damage in the removal of the stones. In the course of dismantling it was found that the cupola of the chhatra WKS not constructed on the usual dome principles. Instead, it was built as a solid mass with exterior and interior facings of marble and led sandstone respectively, the interspace between these facings being filled in with a brick masonry core. The iacni'; stones were held in position with iron clamps and dowels while bonding alalia fixed with iron clamps held together then respective inner and outer courses (see Fig. J).



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" In rebuilding the dome the same method has been followed, except that copper clamps and dowels have been used instead of iron ones, and the whole chhatni has been reconstructed in a form exactly similar to the original (Pl. I, d).

" Other works carried out at the Taj were the restoration of copper sheeting on the north shine door, and the provision of two more red sandstone seats at the main entrance gate. Repairs were also executed to the Taj Mosque, where the dislodged and bulging stones of the central arch were reset, and the cracks in the south-west compartment made good. A piece of *laharya* inlay work on the south facade of the shrine was restored, while in the *gausala* a brick wall which had suddenly collapsed during the rains, was rebuilt.

" In the Tajganj Muhalla the roof of the Resham Katra gate which had been in a very precarious condition was reconstructed. The conservation of the aqueduct in the Khan-i-Alam Bagh was another work carried out during the year, the chief items being the rebuilding of an arch, underpinning several dilapidated patches with *lakhauri* bricks and renovating the iron pipe which runs over it.

" The new pavement laid in the central courtyard of the Jahangiri Mahal and in certain upper storey colonnades and compartments surrounding the Machhi Bhawan in the Agra Fort have resulted in a marked improvement to these buildings. In connection with this work the roof of the two compartments at the back of the Diwan-i-Am has also been reconstructed. The wooden beams of the roof had so badly sagged as to be in imminent danger of collapse. The wooden doors of the *Zanana* gallery of the Moti Masjid have been provided with copper sheetings studded with small copper nails according to the old design. The project is still in progress, as there still remains the repair of the pavement of the outside courts of the Jahangiri Mahal, which it is proposed to take in hand in the ensuing year.

" The minor works carried out in the Agra Fort, included the dismantling and rebuilding of the east *guldasta* in the south gate of the forecourt of the Diwan-i-Am, the replacement of a missing stone wall in the Anguri Bagh, the resetting of a few dislodged and broken stones at the south-east bastion, and the pointing and underpinning of the brick masonry walls at the Akbari Mahal, Anguri Bagh, Mina Bazar, etc.

" Three gates have been pierced in the enclosing walls of Akbar's Tomb, Sikandra, in order to allow carts to enter the north-east, north-west and south-west sections of the garden. Until recently there had been only one entrance in the south-east section, and the three sections named above were reached by traversing the east and west causeways, which had been intersected by *kachcha* roads and earthen ramps. These roads and ramps have now been removed and each quarter of the garden has been provided with a gate for carts to enter by. The new arrangement has made it possible to restore the causeways, of which the eastern one was rebuilt thoroughly last year, while the western one has been restored at its east end during the year under report. The restoration of the other end of the west causeway will be taken in hand next year.

"The ruined platform of the two ancient wells near the Dak Bungalow, **United Provinces** which presented a very ugly sight, have been conserved. The work mainly consisted of resetting facing stone panels and copings, and replacing decayed ones (PI. II). The provision of new teak wood doors and windows at the Dak **Monuments** Bungalow was another useful measure carried out during the year. Among the minor works executed at Sikandra may be mentioned the dismantling and rebuilding of the south *guldastu* in the West False gate, which had gone out of plumb, and the replacement of the broken and dislodged chhajjas, brackets And shafts in the chhatris on the second storey of Akbar's Tomb.

"The reconstruction of a part of the enclosure wall of Akbar's Tomb at the south-west corner turret which was continued from the last year has been completed, and so have the bridle paths to the tombs of Itbari Khan, Sadiq Khan and Salabat Khan, which were commenced some three years ago And could not be finished on account of some technical difficulties over the acquisition of land. The work of constructing a tube well at the Kanch Mahal which is being executed by the Public Health Department, United Piovnces, is still in progress It is a big project amounting to Rs. 37,194, and comprising the construction of a well together with an engine house and pumping plant. The only item hitherto taken in hand has been the sinking of the tube and even this—owing to the non-supply of certain necessary materials -has not yet been brought to completion. The Executive Kngmeei, Well Boring Operations, however, reports that the well will be completed in the ensuing year, after which a start will be made with the construction of the engine house.

"At Fathpur Sikri only two special works were undertaken during the year. *fathpur Sikan* One of them, viz, the provision of new wooden doors of Mughal design on either side of the Buland Darwaza, has been completed The other work—the construction of a paved pathway to the Rang Mahal—could not, on account of unavoidable delay in the acquisition of land, be taken in hand until the 1st March 1924, when it was found necessary to make certain alterations in the proposed pathway entailing some further acquisition of land and additional delay. It is, however, hoped to finish the work during the ensuing year.

"The chief works carried out at the palace of Fathpur Sikri under the head of 'annual repairs' are as follows.—

- (a) Repair of the fallen chhajja at the north-east comer of the Khas Mahal (PI. I 11, a & b).
- (b) Relaying the roof of the Girls' School with concrete and making it water-tight.
- (c) Resetting the dislodged chhajja slabs at the Ankh Michauli and Birbal's Kothi.
- (d) Pavmg the south-east compartment of Mariam's Kothi.
- (el Construction of steps at the Elephant Gate to enable visitors to reach that building from the Zanana passage.
- (f) Replacement of the decayed stone brackets and capitals in three of the openings of Birbal's stables. A few other openings require

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the same treatment, which it is proposed to undertake gradually in the ensuing years.

" Mention may also be made of the contribution works taken in hand at the Dargah of Fathpur Sikn. A sum of Rs. 500 is granted annually from the Dargah endowments for the repair of these buildings, but the amount not having been utilised by the Public Works Department for some time past a balance of Rs. 1,447-0-3 was available during the year under report. The works, which comprise the restoration of painting inside the tomb of Shaikh Salim Chishti and miscellaneous repairs to the Dargah mosque, the shrine of the saint and surrounding *dalans*, are in progress and will be completed early next year.

" Petty repairs have been executed to Humayun's mosque at Kachpura. The building which contains two inscriptions of Babar and Humayun respectively, is in a very dilapidated condition. It seems originally to have consisted of five domed compartments, one in the centre and two on either side. The southern compartments have now disappeared, while those on the north are also in an advanced stage of decay, the north wall having entirely collapsed and the domes being left without any support on that side. As a temporary measure and until effective means can be adopted to preserve the building, the domes have been shored up with brick masonry pillars and the crumbling walls underpinned

" Another minor work carried out during the year was the conservation of a domed chhatra at Burhia-ka-Tal, where a few broken and dislodged chhajja slabs have been reset and several cracks in the arches and roof filled in. The chhatra is an unknown tomb of the pre-Mughal period. It stands in the centre of a tank and is approached by a causeway, these being, perhaps, its most interesting features.

" The work of extending the office building for the accommodation of Draftsmen and Conservation Assistants was taken in hand in the beginning of March last. It is in progress and will be completed shortly.

Lucknow

" Away from Agra, only a few works of special repair were undertaken, of which the most important perhaps was that connected with the Rauza-i-Kazmain at Lucknow. In the year 1918 a sum of Rs. 3,400 was provided by the Government of the United Provinces for this work subject to the condition that the repairs should be executed according to the recommendations of the Archaeological Department. The estimate prepared in accordance with the Conservation Notes of this Department amounted to Rs. 7,627, and, as the grant did not cover it, the allotment, which had been made over to the Trustees of the Husainabad and Shah Najaf Trusts, was applied by them to the repair of certain shops attached to the Rauza. During the year under report, however, the Secretary of the Trusts refunded the money spent, and a start was made with the work on the Rauza. The balance of the money is to be provided by this Department next year.

Isauk
Aurangabad

" At Isauli in the Sultanpur District the special repair of the mosque which was continued from the last year has been completed; and at Aurangabad.

in the Kheri District the work of constructing a five feet diameter well has **United** again been in progress. A sum of Rs. 1,490 was allotted for the completion **Provinces** of the well, but the Public Works Department, which was responsible for the work, utilised only Rs. 44. Out of this allotment Rs. 1,000 were reappropriated **Monuments** and Rs. 452 allowed to lapse. *Awrangabad,*

"Other works of importance have been the renewal of the testing wire of the lightning conductor in Aurangzeb's mosque at Benares and providing *Benares* the Atala Masjid at Jaunpur with a brass hanging lamp made in the School of Arts, Jaipur.

"At Sardhana, District Meerut, special repairs had been carried out to the *Sardhana*, Roman Catholic Church by the Mission in accordance with the recommendations of this Department, and as the building is a protected monument it was agreed to pay the Mission a moiety of the expenditure amounting to Rs. 9,867-8. A sum of Rs 7,500 has been paid during the year and the balance will be provided in the next year's budget.

"As stated in the last year's report a separate sub-head of account *has* **Gardens** been opened for the Archaeological Gardens in the United Provinces in order to facilitate control over income and expenditure. The net cost of the maintenance of Archaeological Gardens in the Province amounted to Rs 42,297-8-11, of which Rs 13,509-12-3 represent the cost of superior supervision, overhead, leave, pension and other charges.

"At the Taj Mahal, Agra, the operation of dwarfing the cypress trees to prevent them from growing out of harmony with the buildings has been completed, the rose and canna parterres have been duly attended to, and casualties replaced. The shrubberies are also receiving attention and are being gradually replanted. At the Khan-i-Alam Bagh, which accommodates a small nursery for the supply of plants to the archaeological gardens at Agra, the overgrown portion has been cleared and plant propagation resumed. The acclimatization of special strains of annuals is also being conducted there. In the Fort Garden an endeavour has been made to revive the lawns and to replace with hardy evergreens the decayed climbers of the Akbari Mahal. The Rambagh orchard is undergoing a radical restoration and not less than 500 fruit trees have been planted during the year. At Itimadu-d-Duula, the old partly decayed mulberry trees bordering the shrubbery have been removed and a freer use made of flowering and coloured shrubs. In the outer gardens the orchard is receiving attention, and it is hoped that at no distant date other improvements, particularly in the matter of flowers, may be effected. At Sikandra, the remnants of disused water courses and old roads referred to in the last year's report have been levelled. A number of trees have been removed from the overcrowded shrubberies, and an attempt has been made to establish some hardy flowering trees with a view to giving more colour to the grounds. Tree guards have been provided for all the newly planted trees in order to protect them against the deer, the number of which **has**, however, now been reduced from some two hundred to a couple of score only. It was with some difficulty that the deer were induced to leave the garden, which had served as a home

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to them for so long. They were so attached to the enclosure that many of them lingered for several days outside it, and a few even lost their lives in vain attempts to return.

" The Residency grounds and the garden of Nadan Mahal and Ibrahim Chishti's tomb at Lucknow, which were hitherto under the charge of the Nazul and Municipal Departments, have been taken over and placed, like other archaeological gardens, under the control of the Agricultural Department. At the Residency, the central lawns have been relaid and pathways and drive* realigned. The boundary fence, however, which is maintained by the Public Works Department, requires immediate attention; otherwise it will soon cease to exist.

" The Khuro Bagh at Allahabad covering a vast area of land possesses little archaeological interest, and it is therefore proposed that in future the Archaeological Department should relinquish all except the ground in the immediate neighbourhood of the protected monuments, which it will then lay out in a more worthy form. During the year under review climbers have been planted along the bare enclosure walls, and fruit trees between the circular drive and walls, so as eventually to mask the latter. The main lawn has been trenched, levelled and relaid, and the canna and rose parterres have all received attention

Miscellaneous

" The scheme for separating the Archaeological and Military areas inside the Agra Fort referred to in the last year's report has been carried out at a cost of Rs. 9,996. All the ancient palaces including the Moti Masjid and Sahmgarh have been enclosed with iron fencing, furnished with gates at various places to meet the Military requirements. The upper storey of the inner Amar Singh Gate has been converted into residential quarters for a European Care-taker, who has been specially appointed to supervise the sale of tickets, etc. The scheme, which is paying well, has involved an extra expenditure of about Rs. 2,000 annually, and unless a separate allotment is made for the same, it will prove a heavy drain on the [Annual](#) Repairs grant for the Agra buildings, which is already insufficient for their maintenance. The work of fencing the archaeological area was completed in the month of February last, and with the consent of the Military authorities, to whom special thanks are due for all the facilities offered by them in the execution of the scheme, the Amar Singh Gate was opened to visitors on the 25th of that month. That the new arrangements are proving a great convenience to the public when visiting the Agra Fort buildings, may be inferred from the sale proceeds of the entrance tickets, which at the rate of two annas per head, amounted to Rs. 1,205 between the 25th February, the date of opening the Amar Singh Gate, and the 31st March 1924.

Delhi

Muhammadan
and British
Monuments

" The total expenditure incurred on the conservation and maintenance of Muhammadan and British monuments in the Delhi Province amounted to Rs. 1,11,289 (Rs. 32,144 on special repairs, Rs. 13,561 on annual repairs and Rs. 65,584 on the maintenance of gardens). The most important works carried out during the year have been in connection with the irrigation water supply to certain archaeological gardens in the Province, on which Rs. 20,002 has

been spent. At Delhi the supply of water to our archaeological gardens has **Delhi** been a very serious problem. Almost all the wells there are brackish, and **Mubammadan** apart from the fact that their water is detrimental to the growth of plants **Monuments** and grass, they fail to yield sufficient quantity during the hot weather, notwithstanding the great expenditure involved in raising it with engine pumps and bullock *charsas*. Accordingly it was decided to take advantage, where possible, of the irrigation water scheme of the new capital. Thanks to the Public Works Department and particularly to Mr. J. L. Sale, the Superintending Engineer, I Circle, who takes a very keen interest in all archaeological works, the new arrangements are now in working order. The Safdar Jang Garden was connected with the permanent irrigation water supply last year, and the tomb of Humayun, the Delhi Fort Gardens, the Purana Qila and the Kotla Firoz Shah had their turn this year, the two last named with only a nominal expense to the department.

"The chief conservation work carried out was the repair of the gateway of the Khan-ul-Manazil mosque in which some very ominous cracks had appeared. A relieving arch has now been erected to support the inner arch of the gate, and its dilapidated walls and piers have been strengthened. The replacement of the broken stone finials in the Mummy Memorial Tower was another work carried out during the year under report. The repairs to the north-west bastion of Tughlaq's tomb which were commenced last year have been completed. At the same time the clearance of the lower *dalals* at the Khirki Mosque, the construction of an approach road to Hauz Khas, and the special repairs to the ceiling of the Rang Mahal in the Delhi Fort, which were in progress, have been brought to completion.

"The minor works executed under the head of annual repairs are as follows :—

- (a) Rebuilding the fallen portions of the enclosing walls of Bu. Halima's Garden and Arab Sana ;
- (b) replacement of stone *jahs* at the tomb of Humayun ,
- (c) reconstruction of the roofs of two more compartments at the first storey of the Zafar Mahal at Mehrauli,
- (d) relaying with *murum* the floor of the verandah in the tomb of Adham Khan ,
- (e) repairs to the buttresses and floor of the verandah of the tomb of Muhammad Shah, the Sayyid King;
- (f) resetting of a chhajja stone with brackets and relaying with *murum* the floor of the verandah of Sikandar Lodi's Tomb at Khairpur;
- (g) resetting the dislodged marble lacing slabs at the dome of Safdar Jang's Tomb ;
- (h) repairs to the roof of the compartments at the back of the Diwan-i-Am in the Delhi Fort, together with the replacement of three *jah* screens, one in the staircase leading to this roof and two in the *takhana* under the Rang Mahal.

"The New Capital water supply has proved invaluable to most of the ~~Gardens~~ archaeological gardens at Delhi, and their condition is generally satisfactory.

Northern Circle The Safdar Jang garden fared admirably during the year under report, the number of plants which needed replacing being very small. Owing to lack of funds no advance could be made in the new scheme for its layout. At Humayuri's Tomb the water supply was not ready early enough to be of avail during the hot weather when many of the shrubs and large part of the grass died out. These casualties were replaced during the monsoon, and the garden is now responding to the more liberal water supply.

Maulvi Zafar Hasan

"In the Kotlah Firoz Shah great difficulties had to be overcome in our efforts to obtain adequate water throughout the dry season. The only existing supply was from a *baoh*, which, although deepened to a considerable extent, failed to meet requirements, with the result that vast areas of grass succumbed. These were replanted during the rains and the splendid monsoon and winter rains were helpful in improving affairs. But at the close of the year the garden again suffered from drought, as the electric pump in the *bmh* was abandoned on the advent of the New Capital water supply, but no water was received from the new lines. It is, however, hoped that this defect will be remedied in the near future. At the Purana Qila, the disused tank has been dismantled and filled in. Owing to the porous nature of the soil and the deep filling when the ground inside this Fortress was levelled the surface has become so uneven that it is impossible to mow large plots of lawn. The redressing of the whole area will therefore be necessary, but it cannot be undertaken until further funds become available.

"The garden of the Hauz Khas although small, was as popular as ever with the visiting public. The verdure of the lawns and its secluded position offer great attractions and the new metalled approach road has made it far more accessible. At the Qutb, much difficulty was again experienced over maintaining shrubs and grass parterres during the hot weather, and many of them perished. The small deep well which yields only a very scanty supply of water, has been almost abandoned and it is now proposed to get a new pump fitted into another well near the Bagh-i-Nazir. The garden was visited during the winter by several hailstorms which, however, did not do any great damage.

"The Delhi Fort gardens were maintained to the same high standard as in previous years. No new works were undertaken, except that a tall screen of *mga dulcis* has been made on the west boundary of the Mumtaz Mahal section. The grevillea trees planted in place of those which died during the hot season of 1921 are doing well.

Miscellaneous

"At the request of the Exhibition Commissioner for India a wooden replica of the iron pillar at the Qutb was supplied for the Indian Pavilion of the British Empire Exhibition at London. It was prepared by the local carpenters at Delhi, but on account of the difficult nature of the work the Head Draftsman and one of the Conservation Assistants, Babu Muran Lal Arora were¹ deputed to supervise it. For the sake of convenience in transit the replica was divided into four pieces provided with strong iron dowels and collars. Care was taken that the replica should be an exact copy of the original, and to this

end the Gupta inscription and other details were faithfully reproduced (Plate **Delhi III**, c and d). A full size drawing of the iron pillar showing all details was **Muhammadan** also supplied with the replica to facilitate its erection at the Exhibition. The **Monuments** £* total cost of the work excluding packing, freight, etc., amounted to Ks. 049 which was paid by the Exhibition Commissioner".

For the conservation and maintenance of the Hindu and Buddhist Monu- **Punjab** ments in the Punjab an allotment of Ks. 32,000, including departmental charges, **Hindu and** was made by the Government of India. Out of this sum, repairs were executed **Monuments** by the Director-General to the excavated monuments at Taxila; a masonry well, yielding an adequate supply of water, was constructed at that spot; and in addition to the ordinary annual repairs of the Province, works of a special nature were undertaken at the large masonry tank known as the Suraj Kund (lis 1,574), at the temples at Amb, District Shahpur (Ks. 383), and at Baijnath, District Kangra (Ks. 180).

"The Suraj Kund", writes Rai Bahadur Daya Kam Sahm. "is an extensive *Suraj Kund* tank lined with continuous flights of steps *m* stone, situated about a mile and a quarter from Lai Kua on the Badarpur-Mehrauh Road. The rocky country around the Suraj Kund embraces the site of an ancient town which, except for the tank and a stone well near the village of Lakkaipui, has now completely disappeared. Nothing is known about the ancient history of the Suraj Kund as it does not appear to be referred to by any of the known historians. That it is pre-Muhammadan is certain, and that it was built by Anangpal II, who constructed the colossal dam distant about two miles from the Suraj Kund, seems probable, in plan the Suraj Kund is *a* segment, the chord being on the west side. It was ted by a natural *nala* at the north-west corner and is provided with a broad flagged ramp on the north-east. About the centre of the east and west sides is a broad staircase enclosed by flanking walls of plain stonework. Mr. Rodgers mentions the existence of a runed temple on the west side of the tank. In reahty the remains in question represent a square citadel or *garhi*, as the villagers call it, of which only the surrounding wall has survived in a dilapidated condition. An estimate amounting to Its. 10,579 was drawn up by the Public Works Department on the basis of a conservation note supplied by the Archaeological Superintendent. The estimate provided for the clearance of the jungle which completely enveloped the sides of the tank, and repairs to the flights of steps and terraced landings, the lowest one of which had been undermined by water. During the year under review a sum of Rs. 1,490 was allotted and completely utilized. The accompanying photograph (Plate IV, *a*) will show the improvements effected; the most important of which was the conservation of about 200 feet of the *ghats* on the east side. A large portion of the lowest landing which had cracked and fallen in, was also dismantled and rebuilt with the original materials. In view of the scarcity of funds the Director-General has now decided that the remaining items of the estimate must for the present be held in abeyance and in accordance with his instructions no further operations will be undertaken except such as ere indispensable for making the place tidy and finishing off the repairs already carried out.

**Northern
Circle**

Ram Sahni

Amb

Baijnath

"At Amb work was continued, on the two temples in the ancient Hindu Fort and completed with a saving of Rs. 444 on the estimated amount. The smaller temple requires some further repairs to the platform which is broken and partly missing.

"The work carried out at Baijnath, District Kangra, consisted in the scraping off of lime mortar from the interior of the *mandapa* of the main temple, the cutting down of a large Salmah tree which was in danger of falling and damaging the monument, and the clearing and levelling of the ground round about the temple.

"In the United Provinces a sum of Rs. 15,000 only was granted in the beginning of the year for the conservation of the Hindu and Buddhist Monuments against Rs. 26,066 allotted in the previous year. An additional sum of Rs. 9,884, however, was provided towards the end of the year, thus bringing the total allotment to Rs. 24,884. Out of this sum Rs. 18,582 was allotted to the Public Works Department of the Local Government, the residue being placed at the disposal of the Archaeological Superintendent for works to be carried out under his direct control. The latter amount was fully utilized but the reports received from the several Superintending Engineers show a lapse of Rs. 2,988 including a sum of Rs. 1,000 provided for Garhwa and Rs. 714 for annual repairs. The former could not be utilized on account of the unsatisfactory character of the work which has since been re-done at the expense of the contractor.

"The works carried out by the Public Works Department comprised the completion of work in connection with the re-erection of the ancient pillar at Kosam, (see Plate IV, b), further measures for the conservation of the monuments at Dwarahat, special repairs to the approach road to the ancient fort at Kalanjar, special repairs to the monuments at Mahoba and the construction of a surface drain on the north side of the Archaeological Museum at Sarnath. The amount expended by the Archaeological Superintendent was devoted to the acquisition of land for further archaeological explorations at Sarnath, conservation of the Buddhist ruins at the same site and certain improvements to the collections in the Archaeological Museum at Sarnath.

Dwarahat

"At Dwarahat several improvements have been effected to the shrines in the Kacheri group (Plate IV, c). In shrine No. 3, the *amalaka* with the finial and the necking, which was lying on the floor, has been neatly restored to its original position. The porch of shrine No. 5 was out of joint and has been set right, the lintels having been eased back to their original positions and the ceiling slabs readjusted. The ceilings of the porticos of shrines Nos. 7 to 10 consisted of single square slabs of slate stone adorned on the under-sides with broad lotus patterns. Two of these ceilings were badly broken and have been replaced by plain slabs of the same material but without the carvings referred to. Shrines Nos. 11 and 12 had lost two of the pillars which supported their common porch. These have been replaced by pillars closely akin to the original ones, which were found after a careful search in the village. The same search also brought to light a quadrant-shaped monolithic reservoir similar to

the one for libation water in the Mrityunjaya temple. It will be placed in **United**
 one of the shrines in the Kacheri group **Provinces**

"In the Ratandeo temple there were large gaps in the front Of north face been made good with old stones obtained from the site. Similarly , the front side of one of the subsidiary shrines at the west end of the courtyard which had fallen down some years ago, has been leconstructed with the original material in stuct accord with the old work Other measures on this site which still require attention are the restoration of the retaining wall of the platform supporting the portico of the mam *Trumuih* shrines, the readjustment of the *amalaka* of the middle shrine in the west low, the piovision of a dram to carry off rain water horn the central court and the underpinning of the inner walls in the middle shrine on the south side.

" The conservation of the Gujardeo temple which had received some attention during the year 1922-23 has now been brought to a finish (Plate IV, d) In the cella, the floor has been repaved with stone slabs and the walls supposing the inner lintel rebuilt with the old matenal The retaining "wall of the large plinth on which the temple stands had been partly exposed on all four sides by the removal of the debus which hid it in past years This work has now been completed and the wall thoiously repaired to the height of 3-4" from the original floor level. The staircase on the west side has also been repaved together with its balustrades The top of the plinth was in a dilapidated condition, and most of the stones have had to be taken up and relaid. The monument now presents as satisfactory an appealance as could be expected in its present impaired condition

" At Sarnath some very valuable results were achieved during the year *Sarnath* under review The eastern enelosuie wall of the forecourt of the Mam Shrine was repaired with old bricks obtained from the site, the northern portion, which had completely penshed before its excavation, being rebuilt with modern bricks specially made for the purpose Another improvement was the repair of a portion of the brick drain belonging to the Main Shrine and its forecourt, which had been brought to light in the year 1921-22. About 40 feet out of the total length of 259 feet of this dram has been reconstructed with the original material and re-covered with the old stone slabs The portion running underneath the second gateway of the Dharmachakiajmvahara has also been suitably repaired, care being taken to use such strong stones for its roof as could effectively support the weight of the structure above it No part of the drain has been traced beyond the gateway mentioned above, and there are good reasons for believing that the drain terminated at this point, the water being allowed to flow off to the *Jhil* on the north side When Queen Kumara-devi undertook the construction of the temple, the ground had to be raised and the area to the east of the second gateway was filled up with clean earthy without any underground drain being provided. This process deprived the Main Shrine of the only means of its drainage, with the result that the ram water soaked into the foundations of the monuments. This obstruction has now been

**Northern
Circle**
**R: B. Daya
Ram Sahai**
Samath

overcome by the excavation of a broad channel more than two hundred feet in length, forty feet in width at the top and over seventeen feet in depth. Beyond this point the ground slopes away towards the north and the cost of connecting the channel with the will be negligible.

"The Dharmchakrajyavihara with its adjuncts had so far received little attention, but a good beginning was made with its conservation during the past year. A large portion of the 2nd forecourt has been exposed down to the original floor level, and the inner northern wall of the main block reconstructed just high enough to show its original alignment. The little shrine with its long sub-terranean passage in the western part of the building which was undoubtedly elected by Queen Kumaradevi in order to provide a place of solitude for spiritual practices, was in a ruinous condition. Long stretches of the side walls of the passage had fallen down at several places while in other places they had bulged out under the weight of the superimposed debris. The whole of the structure has now been thoroughly repaired with the original material, care being taken to avoid any interference with the better preserved parts of the structure. The flat, stone slabs with which the passage was covered from beginning to end have also been restored, though large openings have been left to admit sufficient light and fresh air into the interior. Visitors may now descend into the passage by the original staircase and traverse the whole length without inconvenience. For the less curious, a *kaccha* walk has been provided along the northern edge. The shrine at the western end has also been repaired and the work completed with the exception of a part of the square chamber about the middle of the passage, the exact design of which is not ascertainable.

Kalanjar

"The approach road to the Kalanjar Fort was in a neglected condition. During the year under review a sum of Rs. 589 was devoted to the clearance of jungle, removing of stone boulders and other masonry work.

**Frontier
Circle**
**Mr. H.
Hargreaves**

"For the conservation of the Muhammadan and British Monuments in the Punjab only a small sum was available and this was expended principally on annual repairs and maintenance. New works, however, were undertaken at Buddha's Tomb, the Gulabi Bagh gateway and Ali Mardan Khan's Tomb at Lahore.

"Buddha's Tomb is a simple tomb of the Mughal period and marks the resting place of the famous brickmaker of Lahore, who was the chief purveyor of bricks to the royal establishments of Shah Jahan. His business is said to have fallen under the curse of a holy *faqir*, who was refused the indulgence of warming himself on a cold and wet night at the fire of the kiln. Conservation here was limited to the preservation of the existing remains, the restoration of the missing portions of the square plinth and the enclosing of a small area around the monument with a fencing of reinforced concrete posts and wire. The enclosure has also been turfed. The monument is now in a sound and satisfactory condition, but further improvements to the surroundings are desirable and will be carried out later.

"The Gulabi Bagh gateway, constructed in 1655 by Mirza Sultan Beg, is a pleasing Mughal structure decorated with some fine tile mosaics. It now

Serves as an entrance from the Lahore Amntsar Road to two other protected **Punjab** monuments, namely, Dai Anga's Mosque and the Saruwala Maqbarn. Work here Muhammadan consisted in enclosing the protected area with a fence of reinforced concrete Monuments posts and wire, and turfing the enclosure. The new fencing is satisfactory. but there are still some modern accretions in the enclosure which require further attention. The Superintendent, Archaeological Gardens, Lahore, has been asked to make proposals for the maintenance of the surroundings of both this monument and Buddhu's Tomb. Mirza Sultan Beg was a Persian nobleman who married Sultan Begam, a daughter of Shah Jahan. He was killed by the accidental bursting of an English gun which had been presented to him by his royal father-in-law.

" The most important work undertaken in Lahore was the conservation of the Tomb of Ah Mardan Khan, the famous Mughal Engineer (PI VI, a). It is situated inside the enclosure of the General Stores of the North Western Railway and access to the monument is at present gained by a private road belonging to the railway, but as this road is not always open, a proposal is now on foot to construct another approach from the Lahore Amntsar Road. The monument consists of a gateway adorned with *Kashi* enamelling and of the tomb proper, the lofty dome of which is a striking and conspicuous object on the right hand side of the road as one goes from Lahore to the Shalamar gardens. The immediate surroundings of the monument were partially enclosed by a high brick wall built some years ago by the North Western Railway authorities. To protect the monument and prevent the use of the precincts as a dumping ground for rubbish, this wall has now been completed and the protected area adequately enclosed. The first work undertaken was the clearance and levelling of the compound. This has revealed fragments of the original brick pavement adjacent to the tomb and also a portion of the original steps giving access to the high octagonal plinth. Three sides of the plinth had been restored many years ago and the live remaining sides have now been given attention. During the operations it was observed that in the centre of the plinth, opposite alternate entrances to the tomb, the brick pavement was entirely absent. This suggested the former existence of small tanks resembling those recently discovered at Asaf Khan's Tomb at Shahdara, and on excavation being made these tanks were brought to light and have now been completely cleared. Originally each tank had a fountain in the centre and several of the original *qalabas* (earthen water pipes) which fed the tank have also been discovered. The whole of the facing of the tomb has disappeared and was in all probability removed in Sikh times, but the monument is otherwise structurally sound and is impressive even in its despoiled condition. Missing portions of the parapet of the roof have been restored, gaps in the dome filled, loose masonry secured, the interior of the dome cleared of rubbish, and *parnas* provided for the drainage of the roof. Where necessary, plaster has been edged off with filletting both in the ceiling of the tomb and on the exterior of the monument. As the remains of the steps giving access to the plinth were sufficient to indicate their original form, the missing portions have been restored.

Frontier Circle "Ah Mardan Khan was the Persian Governor who surrendered the fort of Mr. H.

Kandahar to Shah Jahan in 1631. He was made much of and appointed Governor of Lahore and Kashmir, and subsequently designed the Shalamar and many other important buildings, including canals and bridges. He died in 1675.

"A small and unpretentious, but particularly pleasing monument at Lahore is the Chatiburji, the gateway of the garden of Zebu-n-nisa, the poetess and eldest daughter of Aurangzeb. Its conservation was undertaken in 1922-23, and the monument is now structurally sound, but its surroundings—a confined area enclosed by a fence of wooden standards and wire—are wholly out of keeping with the dignity of the monument. The alignment of the enclosure is inappropriate and the area too restricted, the fencing unsightly and one of the trees hides the beautiful *Kasht* work of the south-east tower. Unfortunately, the adjacent ground is the property of private owners and of the Lahore Municipality, and all endeavours to secure the ground required to improve the surroundings of this monument, have so far failed.

Kashmir Smas "As mentioned in last year's report, the Garrison Engineer, Mardan, inspected the Kashmir Smas and worked out a detailed estimate for improving the most dangerous parts of the approach to the site. Funds on the basis of this estimate were allotted to the A C R E. concerned, who was reminded that it would be necessary for a fully qualified engineer to be present at the work if it was to be satisfactorily executed. After a long delay in which no action was taken by the Public Works Department in two working seasons this estimate was cancelled by the Assistant Commanding Royal Engineer in September 1923, and the preparation of a new estimate ordered. For this object the Personal Assistant to the Superintendent, Archaeological Survey, was again sent with the P W D. Overseer of Mardan to re-examine the approach road in October 1923, and the latter officer subsequently submitted a revised scheme and estimate to the Assistant Commanding Royal Engineer. Completion of the work was reported by that officer in February 1924, but it has not yet been possible for an Archaeological Officer to inspect the work.

Jamalgarh "At Jamalgarhi, conservation work was resumed on the lines of last year's operations, the trained masons from Taxila, who were engaged last year, being again employed. The work was restricted to the preservation of existing remains, as little as possible being done in the way of restoration. Top-heavy and overhanging walls had to be dismantled and rebuilt and many gaps in the ancient walls filled up. Broken and unsafe lintels were replaced with similar stones recovered from the debris, of which there were enough spare. Ruined steps were also rebuilt, wherever possible. Mortar was used in the new work when stability demanded it, but, no pointing was allowed. Due provision was made for rain water to escape from all roofless buildings, and the tops of walls were treated in accordance with the instructions given in the Conservation Manual. The repairs at the Main Stupa referred to in last year's report were continued and all the remaining converging chapels which were in a damaged condition were treated in the same way as those conserved during tie-previous year. (PL V).

" Two of the ruined vaulted chambers in building No 5 have been re-roofed with corbelled arches on the design of those extant at the site, and will prove of great advantage for the storing of such antiquities as need not be transported to Peshawar, where the question of providing accommodation has now become acute. The ruined platform in front of these chambers has also been reconstructed and has added greatly to the appearance of the monument. Besides the above measures minor repairs were wanted at some 19 structures on this site and debris and jungle were cleared from some 18 more.

• The structures referred to are for the most part three-roomed monastic quarters usually facing south, and designed mainly for comfort in the cold weather, this being a feature of the majority of houses in this part of the world even now. A feature of interest which came to light in the course of the clearance work was the presence of sunk water vessels set in finely bordered pavements contiguous to the buildings numbered 19, 21 and 20. But a more important discovery made in the newly cleared monastic building No 24 was an underground cell or *tahkuvnu* measuring 5'-8" X 5'-3" and 4'-2" in height and furnished with a lamp niche and a bigger one for books, etc. Two other underground and vaulted chambers, have been found under buildings Nos 17 and 18. The former is entered in a descent of 7 steps and measures 11' X 8'. The vaulted roof of corbelled masonry is broken, but there is evidence of its having been re-roofed with wood, as there are empty sockets above the cornice on each side which must have been intended for rafters.

" Consequent on the recommendations of the Incheape Committee the grant for conservation in the Western Circle was further reduced to Rs 81,000 as compared with Rs 1,04,000 in the previous year, and the programme of special works had to be curtailed accordingly. Fortunately the grant was supplemented by a sum of Rs. 7,800 sanctioned by the Bombay Government from the reserve for further excavations in the Shanwar Wada (the Peshwas' palace) in Poona, from which the modern Court buildings had already been removed. From this allotment Rs 61,051 was assigned to the Public Works Department for annual repairs and maintenance, and for such special works as were entrusted to them, and the balance to the Archaeological Superintendent for the works to be executed directly by him, which besides the special repairs in progress at Elephanta and the fort at Bassem included the following three works, held in abeyance during the previous year, viz., (1) Conservation of the Farm Bagh water-palace at Ahmednagar, (2) Excavation of the ancient remains of the Nizamshahi Kings in the Ahmednagar fort, and (3) Excavation and special repair of the Peshwas' palace at Poona. The Archaeological Superintendent also carried out various special repairs to the Caves at Karla in the Poona District, and to the temple of Gaitesvara Mahadeva at Sarnal in the Kaira District.

" In order to arrest the further crumbling away of the rock, steps were taken to divert the flow of rain water from the facade and two-side wings of the Main Cave at Elephanta. Training walls of stone-in-hme similar to

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Western Circle those above the caves at Bedsa and Nasik were constructed and a stone drain **Chandra** was across the pathway leading to the caves beyond. Another useful improvement carried out at Elephanta was the renovation of 60 out of the 131 massive blocks of cement concrete provided as stepping stones at the jetty. These stepping stones had originally been constructed in 1854, and in the course of the 70 years that had since elapsed many of them had become broken at the edges or worn and slippery, with the result that they were a constant source of danger to passengers landing from boats.

tiasetn " At Bassem, the rest of the Fort wall was cleared of pipal and banian trees and a partial clearance of earth and debris was made from the Church of NOSH Sanhora da Vida, the San Franciscan Church and monastery, and St. Paul's Church and monastery. It will take some years to finish the conservation of the ten different buildings inside the fort. Even with the comparatively small amount of work, however, that has hitherto been done, the appearance of the remains already shows a marked improvement.

Ahmednayar " The special repairs to the water-palace of the Nizamshahi Kings of Ahmednagar, commonly known as the Faria Bagh palace, were resumed during the year. The arched roof of the two-stoned octagonal structure standing free in the centre of an extensive square tank had collapsed at five different places some years ago. Stones and debris lying over the domes were removed in 1921-22, as a preliminary to reconstruction, and new arches, on the lines of the old, have now been built and finished off in lime concrete. Two gaps in the roof have been closed up to the present and three more still remain to be attended to.

" Inside the Ahmednagar Fort various remains of buildings of the Nizam-Bhuhi Kings he buried. Some portions of them outside the main entrance to the palace, just at the west side of the compound Wall of Brigade Headquarters were dug up by the Military Department in 1914, but the work was then stopped till 1919, when it was taken up by the Archaeological Department. The ruins exposed to view are described in the Progress Report of the Western Circle for the year 1919-20. The excavation was continued further in 1920-21 but nothing of special interest, except two fountains, was discovered. Proposals for the final treatment of the two excavated areas were submitted to the Military authorities and approved by them. In accordance with this plan, work was started during the year. Over the plinth of the south wall of the Royal Bath a retaining wall of stone and lime masonry was built to an average depth of 2'-9", with a dry rubble wall at its back averaging 1'-0" in depth. The rooms to the east, and west of the Bath, where patches of stucco are visible, have been cleared of all rubbish and now present a much neater appearance. For the convenience of the public small steps at five different places in the excavated area at the rear of the palace (now used as Brigade Headquarters) have been provided, and gaps in the masonry below the arches at the south-east corner of the gateway have been repaired. The remaining items, chiefly the provision of wire fencing around the excavated areas and a small connecting drain will be taken up during the ensuing year.

" At Poona special repairs were executed to the south rampart wall immediately to the left as one enters the Ganesa gate of the Shanwar Wada. Four small arched cells primarily intended for sentinels and built into the thick-over the rampart. After clearing earth and debris from these guard rooms four new arches in brick and lime were constructed over them to bring the collapsed portion to its original level. Nearly half of the length of the south wall was badly disintegrated and bulging out. This portion was thoroughly repaired with small bricks of the same dimensions as the original and the joints finished with recessed lime pointing. Besides the special repairs mentioned above excavations were started inside the area occupied by the modern Small Cause Court buildings. These resulted in the discovery of a big cistern with traces of a fountain in the centre of the inner courtyard of the palace. Other small fountains were also unearthed to the east of the plinth of the main building. So many, indeed, are the fountains brought to light in the Shanwar Wada, that it might well be called the Palace of Fountains.

" The appearance of the well-known Chaitya Hall at Karla with its single double and three-storied monasteries adjoining has been much improved by the removal of the unsightly modern stone and mud platforms on either side of the narrow approach, which appear to have been built during the annual local fairs. The whole area in front of the caves has now been levelled up and tidied. Owing to the blocking up of the old rock-cut water channels over the caves and the consequent overflow of rain water, almost the whole of the facade of the viharas had become disintegrated. These old channels have now been cleared out and supplemented by the construction of retaining walls similar to those at Elephanta.

" At the temple of Gaitesvara Mahadeva at Sarnal, where owing to certain technical difficulties the work of conservation had been transferred from the Public Works to the Archaeological Department, displaced or fallen blocks of the sthupa were reset in their proper beds, and here too, the carved plinth stones of the mandapa on the south, which had bulged out or collapsed at certain places, were dismantled after numbering and reset in fine lime mortar on a new concrete foundation.

" At Dholka, in the Ahmedabad District, special repairs were continued to the Khan Masjid, the great brick masjid of Ahmed Khan Bhukai which stands on the south-east corner of the extensive Khan tank in front of the Railway station. The small open channel on the top of the solid pylon at the south-east end of the facade primarily intended for Azan (prayer-call) which was threatening to collapse, was saved from further danger (PL VI, b), and the long fissures in the domes and walls referred to in previous reports were thoroughly grouted and packed with cement mortar. All other gaps in the domes and walls were repaired with small size bricks in lime mortar, and smaller open joints of masonry were finished with lime pointing. On account of paucity of funds the work here had to be slowed down and it will be two or three years more before the monument is fully conserved.

Western Circle

Mr. G. C.
Chandra
Shah Bagh

' On the banc of the Sabarmati near the B. B. & C. I. Railway bridge stands the monument known as Shahi Bagh. It was built by Shah Jahan dining his vicerovalty of Gujaiaat from 1516 to 1623 A. D. and is now used by the Commissioner, Northern Division, as his residence. Some of the modern additions and alterations on the terrace of this fine building were removed and two turrets out of the four, on the roof, were exposed to view (Plate VII, a). Other accretions on the roof will shortly be removed so as to restore the monument as nearly as present conditions will permit to its pristine condition.

Shah Alam

" The group of buildings inside the compound of Shah Alam in the Ahmedabad District constructed between 1475 and 1570 A. D., is commonly known as Shah Alam Rauza. The protected monuments comprised in it are maintained from the revenue derived from the *Inami* village—Vasna Buzurg—in the Kaira District. Among these buildings the principal masjid standing on an extensive platform with a water cistern below it, was sorely in need of repair and during the year under review a start has been made with the task of water-proofing the badly disintegrated surfaces of the domes in accordance with the conservation notes drawn up in 1921 (Plate VII, 6). Out of a sum of Rs. 10,000 received from the Collector of Kaira, the Executive Engineer, Ahmedabad District, reports that about Rs. 9,710 have been expended up to the present.

Virangam

" Few lakes in India are more impressive than the Manasarovar Talao at Virangam and few monuments more eloquent of religious fervour than the endless array of shrines extending along its banks. Of the 305 shrines built in the 11th Century only 201 have survived, but traces of the remainder can still be seen on the broad terraces above the ghat. Pedestals or *yons* for Siva-lingas are to be seen in nearly half the temples on the southern terrace and in the remaining ones there exist rectangular grooves probably intended for the reception of other images. Pierced through the *sikharas* of all the temples are small circular holes, 2" in diameter, through which a continuous string could be passed connecting together the 365 bells, the object of the string being, so it is said, to allow each devotee to ring all the bells at one and the same time after bathing in the tank (Plate VII, c). Beyond a small amount devoted to annual repairs nothing has hitherto been expended on the upkeep of this interesting monument, but an estimate has now been framed for conserving the broken retaining wall on the north side of the tank just behind the temples, and the work is to be put in hand as soon as certain preliminaries relative to the contribution to be made by the Virangam Municipality have been settled.

Mahmudabad

" The Bhamana Well at Mahmudabad in the Kaira District is situated about half a mile to the south-west of Kaira Road or Mahmudabad station on the B. B. & C. I. Railway. This beautiful structure is said to have been built by Mahmud Bigarah in the 15th century. Around the octagonal shaft are four square and four rectangular rooms, from the latter of which four spiral staircases lead up to balconies at the four corners. The brick walls of

these rooms, originally covered with Sindh tiles of various patterns, were very **Bombay** badly broken and disintegrated, and it was high time for them to be repaired. **Presidency and** **This** work has been taken in hand during the year and the ground around the square platform has also been cleared of earth and rubbish to a distance of 15 feet and the ancient plinth exposed to view. At the same time parapet walls of brick-m-hme were constructed on the top of the well to prevent accidents.

"The special repairs already" begun at the important seven-stoned palace *Pomgadh* (Sat Manzil) on Pavagadh Hill, were continued and the deformed ashlai masonry of the front wall was carefully reset in plumb. Behind the face, a backing of rubble-m-hme masonry was provided with bonding similar to that found in the old construction. Besides the above work repairs to the Kliajim Masjid situated on the northern bank of the Bada Talao near the Kabutar Khana pavilion at Champaner, were also started during the year, the collapsed wall to the west being rebuilt "with old stones living at the site.

" On the north side of the road running from the Ark Qila to the Jami *Bijapur* Masjid stands the great aichwaj which forms the main entrance to the enclave of Nawab Mustafa Khan's palace, tanks, gardens, masjid, etc. It is generally known as Badi Kantian, and is a rectangular four-arched structure earned on piers of equal size. The arch to the west collapsed long ago and some repairs to the north-west pier were executed by the Public Works Department. A crack subsequently appeared in the arch to the east and was observed to be gradually widening, and some of the voussoirs were even threatening to come down. Steps were accordingly taken to support it by means of a relieving arch. The partial removal of earth, stone and debris from the sides of this structure have revealed the existence of old plinths showing the alignment of an arcade which once existed on each side of the Bach Kaman.

" On an examination of the dome over the famous mausoleum of Sultan Muhammad Add Shah, commonly known as the God Gumbaz at Bijapur, two cracks, about 2" wide, were noticed in the north-east quadrant which had resulted in some of the plaster facing inside and outside the thickness of the brick dome becoming loose. At first a simple estimate was framed for repairing the outside with a new haver of plaster 3" to 4" in thickness, but when the work was started it was obvious that more radical measures were called for and accordingly the cracks have been thoroughly grouted and five alternate layers of coarse lime plaster and broken country tiles have been laid over the dome and finished off with a coating of lime, the object of this method of treatment being to prevent further cracks forming owing to unequal heating and cooling.

" In the city of Nautiaspur, which he founded near the village of Torvi, Ibrahim Add Shah I/ built several *mahals* between the years 1599 and 1624 A.D. Special repairs to the one named Sangit Mahal bounded by an octagonal compound wall were completed, and the work of underpinning with stone and lime masonry was started on the high enclosure walls of the Nari Mahal situated to the south-west of the above. The repairs to the terraced roof of the **Asar Mafeal** at Bijapur mentioned in last year's report were again resumed and **one**

WeBtefri Circle wooden beam was replaced and another strengthened by iron fish-plates, the-Mr. G. G. ornamental wooden ceiling being refixed in its original place.

chandra " Special repairs to the Gagan Mahal, built by Ah Add Shah I in 1561 A. D., were also continued during the year. The works carried out comprised the construction of two parapet walls between the broken masonry on the landing of the stairs, at the first floor level, the waterproofing of the tops of walls with concrete, and various minor repairs to the dry stone compound wall.

" The Ibrahimpur well situated in the village of the same name founded by Ibrahim Adul Shah I in 1520 A D., hes about a mile and a half outside the Fath Gate of the city of Bijapur. The whole plinth had become buried beneath an accumulation of earth and stones, and in order to avoid the imminent danger of men and cattle falling in, it had to be dug out and cleared. The wide open joints of its masonry were pointed with lime mortar and proper steps were constructed descending to the landing from the surrounding ground level. To accentuate the corners of the well and at the same time provide shade, eight *mm* trees have been planted

" All modern additions and mailings to the front arches of the Taj Baodi were removed, with the result that the whole facade of the monument with its beautiful octagonal towers on both side of the central arch now presents a far more dignified appearance than when it was used as offices and cattle-shed by the City Municipality of Bijapur. It will be some years, however, before all the measures of conservation required at this monument can be completed

Badam

" Vatapruri the ancient capital of the Chalukyan Kings, founded by Pulakesi in the 6th century AT), is now known as Badami, and is celebrated for its group of cave temples hewn in the scarp of a hill overlooking a large tank. Among the measures undertaken here during the past twelve months have been the filling in and levelling of the undulating ground in front of Cave No. 3 (now No 4), the construction of a pathway up to the almost inaccessible Suvah temple, which stands out on a projecting crag of the hill to the north of the tank (Plate VII), and the clearance of the plmth of the same building A feature of special interest at this temple is the carved panel illustrated in Plate XVI,a Standing in the centre of a herd of cattle Sri Krishna is lifting the mountain Govardhana, on the sides of which tigers are seen issuing from their lairs. Nandaram or Yasoda is churning milk to the left, while four other attendants are looking at them.

" At Pattadkal in the Bijapur District eight temples had been recommended for conservation and notes on them were drawn up by Mr. Page in 1914. Since then partial repairs had been carried out to the Brahmanical temples of Papanatha, Kadsiddhesvara, Sangamesvara and the Jain temple in the missionary compound. Until the question of the acquisition of the ugly modern huts abutting on to the important temples of Kasivisvanatha, Mallkarjuna, (Plates V111, a&b) Virupaksha and Galganatha are settled, the repair of these monuments must be postponed.

"Of the seventy monuments at Aihole the present condition is far more **Bombay** satisfactory than of those of Pattadakal, and the monuments outside the village **Presidency and** have been neatly fenced in with dry rubble masonry, but here again the question of the acquisition of modern houses and land must be taken up before effect can be given to the conservation notes drawn up by this Department in 1914. The earliest and most interesting of the temples is the "Kynt-gudi," a Saiva shrine; but the modern ugly huts built right up to the chhajja and over it at places are still an eyesore (Plate Y1JI, c). Fortunately, the two monuments known as Charanthi Math situated in the middle of the village have already been cleared of all modern accretions.

"During 1922-23 the work of clamping the broken chhajja over the main *Haralhallt* porch in front of the triple shrined *Somesvara* temple at *Haralhalli* in the *Dharwar* District was satisfactorily earned out (Plate V111,Z). Ends of two long copper clamps were fixed into the roof by temporarily removing the parapet over the chhajja and the other ends were fixed by boring holes into the latter. Four other smaller clamps were similarly fixed into the chhajja.

"At *Sholapur* the work of excavating the old *Chalukyan* temple in *theSholapur* fort was completed during the year. The north wall of the rampart close to the *garbhagruha* of the temple was thoroughly underpinned with stone and lime masonry and a buttress was also constructed against the east wall of the inner gateway."

In the Central Circle a sum of Rs 30,903 in all (exclusive of Agency **Bihar and** charges) was expended on the conservation of ancient monuments. Of this "Rs 10,463 on special repairs (non-recurring expenditure), Rs 3,190 on annual repairs and maintenance (recurring expenditure), and the residue of Rs 17,245 in the Central Provinces and Berar, where Rs 9,659 went to special repairs and Rs 7,586 to annual repairs.

"With the exception of the operations at *Nalanda*, which were carried out by the Archaeological Superintendent, all conservation work was done through the agency of the Public Works Department, an additional charge of 24 per cent, in the *Bihar and Orissa* Province and 23 per cent, in the Central Provinces and *Behar* on the estimated cost of the work being paid for this service. Among the works earned out during the year one of the most important was the conservation of the excavated remains of the old *Buddhist* University at *Nalanda*, which range in date from approximately the 6th *Nalanda* century A.D. to the 12th. As noticed in previous reports, the remains are composed to a large extent of a sequence of structures erected one upon the other on the same site after intervals of ruin and desertion, a circumstance that greatly complicates the measures required for their preservation; since it is our aim in conserving these excavated remains to leave intact a certain definite portion of each succeeding layer from the first to the last.

"The ruins, which are now almost wholly composed of brick—though in their original construction much timber was used for columns and roofs, etc.—are being built up again sufficiently to preserve the traces of the walls and

Central Circle other features where these have collapsed and definite indications of their previous existence are still appaient. The walls, which ordinarily are being built up breast-high above floor level merely to preserve their plan, will all be left open to the sky, for it is neither feasible nor desirable to reconstruct the whole fabric or to provide new roofs to replace the old fallen ones. The tops of such walls are theirfore being made secijrc agamst water percolation, and by growing grass over them the natural pieturesqueness of the remains will be preserved

" Conservation on these lines was continued in the past year on Monastery No J, and the lange of monks cells on the uppermost level of the monasters along the north side were built up to an irregular line for some three to lour feet above pavement level. Features of interest preserved in the course of this- work include the recessed eoneiete couches of the *bhikshus* and the small corner niches built into the angles of the cells to accommodate their personal belongings

" The steps of the reconstructed brick stair affording access from the upper levels of the monastery down into the internal court were provided with concrete treads and risers in accordance with the indications of these features preserved in the original work, and on the east outer front of the building a length of the later buck lacing, contemporaneous with the upper levels of the structure was supported on a series of reinforced concrete lintels carried on cantilevers, -where this facing projected beyond the frontage of the earliesbuilding exposed beneath it

' Monastery No I-A - -The outer wall, together with its range of cells, along the south side of this monastery) was built up some 8 feet to the level of the upper pavement in the yenuidah during the yeai (Plates IX, c & X, c and d). It will ieiiuire to be carried up some 3 or 4 feet higher, however, in order to enable the outline of the cells here to be reconstructed in plan. The contiguous east wall was also raised some 2 feet to the same approximate level and the repair of certain of the cells along it was commenced. A great deal more, however, remains to be done to preserve the wall along this side, and certain badly bulging portions here have yet to be dismantled and rebuilt.

"Monasiery I-B.-The principal work done during the past year was at Monastery I-B, the walls of which proved so dilapidated and fragmentary that then repair had necessarily to take precedence of other work. The ruined external walls along the south and west sides were built up some eight and five feet respectively, together with the cells adjoining them, the corbelled plinth of the old w'all face being repeated in the new work (Plate X, a & 6).

" The low parapet of the colonnade (now fallen) in the centre courtyard of this little monastery was also made good, where broken away, with concrete treated to harmonize with the ancient appearance of the original work.

'Monastery No. 4, (Plate IX, a & d).~-A very dilapidated wall of one of the lower, cells of an earlier level uncovered in the north-western corner of this structure was built up to preserve the original remains of a corbel-headed doorway that it contained. Other repairs required for the preservation of the

monastery will be taken up on the completion of the more urgent works in **Bihar and Orissa**
progress on Monastery 1-B.

"Brick-making.—Bricks of large Gupta type needed for the proper conservation of these remains at Nalanda were specially made and burnt on the site by the Archaeological Superintendent. Despite difficulties created by unseasonable weather, prolonged rains, and restrictions imposed on the transport of coal from the collieries, some seventy thousand bricks, partly 15" X 10" X and partly 12" X 8" X 2³/₄" in size, were produced for this work. In the manufacture of bricks of these uneconomical dimensions by the primitive method? available on the spot many technical difficulties were encountered. Incident on the need of ensuring a uniform intensity of heat throughout the mass during the burning; and in erecting the *bhatta* ' of clamp, in which the bricks are burnt, great care had to be taken to ensure a proportionate and uniform distribution of fuel, if results were to hit the happy mean between extreme vitrification and *kachcha* underburning. In the circumstances it is gratifying to be able to record that the experiment has been wholly successful and has resulted in a saving of 47 percent* on the cost of the bricks as estimated by outside contractors.

"With this supply of new bricks immediately available, considerable economy and despatch in the execution of the conservation work here are now possible; for previously the old ruined walls could be reconstituted only with the larger fragments of the old bricks recovered from the debris, and the dressing of these fragments to a square face was necessarily a slow and expensive process.

"A sum of Rs. 1,415 was spent during the year in completing the work *Palawan* provided for in a sanctioned estimate of Rs. 3,557 for the conservation of the two 17th century Cheio forts at Palamau. The work was commenced in the previous year, and a sum of Rs. 4,210 in all has been spent on it. The principal item involved was the clearance of the dense jungle which almost obliterated the old forts from view; but while a good deal has been accomplished in this direction, much more still remains to be done. Supplementary estimates to this end have been called for from the "Public Works Department, and the work will be continued as soon as they can be funded. A detailed description of the conservation work in hand here was given in the previous year's report, where a brief note on the architectural features and the history of the monuments from their foundation in the early 17th century to their annexation by the East India Company in 1772, is also available, and need not be repeated here.

"On the repair of the Mundesvari Temple at Ramgarh in the Shahabad *Ramgarh* District a sum of Rs. 179 was spent against an estimate of Rs. 220. The work, which was completed during the year, was necessitated by the monument's having been struck by lightning, which caused serious cracks and displacement of masonry in the old fabric. The temple, which dates from **Harsba's** period in the 7th century A.D., stands on the summit of an isolated hill close

* In round figures this represents a saving of RS 1,840

Central Circle to the village of Ramgarh. Both externally and internally the shrine takes the shape of an octagon, with doors and windows in four of the sides and small niches for statues in the remaining walls. The principal entrance is on the west, where a few pillars of a ruined portico remain. The windows, of which the northern one still retains its perforated stone lattice, are decorated with graceful Gupta carvings, and inside the temple is a four-headed stone linga (Chaumukha Mahadeva) and an image of Durga. From an inscription found *in situ* we learn that the temple dates from 635 A.D., and the epigraph further mentions a ruling chief named Udayasena, who made various donations to the shrine. Comprehensive structural repairs had been carried out on this monument in 1915-16 at a cost of Rs 3,000 ; and a lightning conductor is to be installed in the near future to eliminate as far as possible the risk of a recurrence of the recent damage.

" Of the monuments under annual maintenance many have already been noticed in previous Reports. Here I shall confine myself to some brief remarks on the following :—

What " A monument of the early Muhammadan period under preservation is the Tomb of Malik Ibrahim Bayu—a warrior who is traditionally reputed to have overcome a Hindu chief of Rohtasgarh and to have subdued the warlike tribes of the province. The tomb, which, according to the inscription it bears, dates from the year 1353 A.I), is picturesquely located on the crest of the isolated rock known as Pir Pahari at Bihar. It is built of finely cut red brick, and is surmounted by a dome of curiously elongated shape, carried internally on a pendentive construction of triple concentric arches.

-Champur " Bakhtai Khan's tomb at Chainpur dates from the Suri period, and is endowed with all the vigorous architectural qualities of that time. It is contained within a large enclosure entered through a high gateway. Built on an imposing scale, the tomb is characteristically designed in the form of an octagon enclosed by an arcaded verandah, which is roofed by a continuous series of little domes. Behind the verandah rises the main wall of the tomb, its plain surface being pierced by a small pointed window in each facade. Above it, at each angle of the octagon, occur small open chhatris, four-columned and crowned by little domes, which afford effective relief to the massive solidity of the design, and behind these, again, rises the great main dome, set on a low octagonal drum and surmounted by a further little chhatri of four columns—a feature that here takes the place of the more usual usual.

" Local tradition asserts that Bakhtiyar's son married a daughter of Sher Shah, but there is no record of what part, Bakhtiyar Khan may have played in the history of the Sun kings.

Shatsherriagar " Shamsheer Khan's tomb at Shamsheernagar in the Shahabad District is a stucco-covered structure of brick, dating from about 1700 A.D., and is typical of the Mughal architecture of that time. Raised on a low podium or terrace, the tomb is enclosed within a square verandah, relieved by grouped arches of serai-circular type, chhajja-shaded, and crested *-with kanguras* in relief; each corner of the verandah being emphasised by a small square chhatri. Behind

the verandah facades the mam wall of the tomb appears in the form of a **Bihar and** low square, from the four corners of which rise slender minarets crowned by Orissa little octagonal chhatns; and a high octagonal drum pierced by simple *jali*-infilled windows carries the great main dome, which terminates in a finial. The dome construction is of interest as comprising a separate inner and outer shell with a hollow space between them. Centrally, beneath the dome, is the grave of Nawab Shamsher Khan? who is said to have held the position of Faujdar of Sarkar Shahabad for some 30 years under the Mughals. He was killed, so it is said, in the war of succession that ensued on the death of Aurangzeb. The monument has suffered considerable damage through lightning, which has destroyed the verandah roof and certain of the little chhatns; but the dilapidation has been arrested and the tomb is now maintained in a state of weather-tight repair.

"Arrah Bouse at Arrah in the same district of Shahabad was the scene Arrah of the very gallant defence against great odds by a small party of sepoys and civilians in the Mutiny of 1857. The incident is briefly commemorated in a marble inscription set up in a room in the upper storeys of the bungalow, which reads as follows :—' This building was the scene of the memorable defence of Arrah by a party consisting of nine Europeans, six Eurasians, three Indians, and fifty Sikh Police, from July 27th to August 2nd 1857, against three regiments of the native army who had mutinied at Dinapore. The names of the principal defenders were Messrs Littledale, Coombe, Wake, Colvm, Halls, Field, Anderson, Boyle, Dacosta, Godfrey, Cock, Taite, Delpieroux, Ilaille, D'Souza, Sayyid Azim-uddm Husam, Jamadar Hukum Singh. In order that the memory of this heroic action may not be lost, this tablet is placed here by Lord Curzon, Viceroy and Governor General of India, in 1903 '.

"A sum of Rs. 585 was spent during the year on the provision of a *Enamelled iron* standard form of notice on enamelled iron sheeting to be set up at each of the protected monuments in the Bihar and Onssa Province that are main-*monuments* tamed by the Archaeological Department. The enamelled notices, which convey a warning against damage or defacement under the penal provisions of the act, are written in English and in the principal vernacular current in the locality of the monuments; and notices in both languages will be affixed to a common post of angle-iron. Seventy such notices at a cost of Rs. 8 each net were prepared during the year, and it is hoped to purchase the remainder required for the whole of the province next year. These enamelled iron notices are expected to be much more lasting than the more usual kind of painted wood or iron, and the purchase of them in quantity will effect a considerable further economy. The notices are being kept in the Archaeological Superintendent's office, and will be supplied to the Public Works Department for fixing in position as required for initial erection or replacement.

"The conservation of the early mediaeval Temple of Mahadeo at Ghogra **Central** Khapa in the Nagpur District—to which reference was made in the previous **Provinces** report, where a descriptive account of the monument is also given—was carried *Ghogra Khapa*

Central Circle to completion during the year, the total cost of the work being Rs. 924
 Mr. J. A. against an estimate of Rs 911.

" The construction of the sculpture shed at Sirpur in the Raipur District, which was in progress from the previous year, was also completed at a total cost of Rs. 4,150, a sum of Rs 751 being spent on this work in the year under review. As stated in the previous year's report, the shed will accommodate the numerous sculptures- Buddhist, Saivite and Vaishnavite- that were recovered from the surrounding jungles during the conservation of the Lakshman shrine, a 9th century structure of finely cut brick.

Kmdkhed

" Work on the stone masonry band of the large tank to the east of the village of Sindkhed in the Buldana District was also brought to completion during the year at a total cost of Rs. 1,841. A description of this tank and a brief note on its history were given in my previous report, where the measures involved in its conservation are also detailed, and need not be repeated here.

Balapur

" At Balapur, in the Akola District, the conservation of the old brick fort, erected by the first Nawab of Ellichpui, was continued, and a further sum of Rs 2,017 spent against a sanctioned estimate of Rs 8,700

Chanda

" An important task in progress during the year in the Fort at Chanda was the reconstruction of the Achalesvaia Gate (Plate XI, a. & b), the inner front of which had collapsed in the heavy rains of 1922. The estimate for this work amounts to Rs 3,990 and a sum of Rs 2,414 has been spent on it up to the end of March. The difficulties attending the reconstruction of this old gate were considerable : for the only record available from which the features of the structure could be copied was an enlargement of a photograph which the Archaeological Superintendent was able to supply to the Public Works Department for this purpose. In the circumstances, it is a matter for congratulation that the work so far has been accomplished with entire success, and with great credit to the Public Works Department officers concerned. It is hoped that the reconstruction of the gate will be completed in the course of the ensuing year.

* On the maintenance of the Fort walls generally including the gates and smaller *khirkis* (or wickets), an additional sum of Rs. 007 was spent during the year.

Asnrgarh

" In the hill Fort at Asirgarh in the Nrnar District the old Jami Masjid, erected in the reign of Shah Jahan (1028-59) during the Mughal occupation of Khandesh, was also under repair; the work having been continued from previous years. A description of the architectural features of this monument, with its two imposing minars, cloistered court, and arcaded facades, has been given in my previous report. The principal work done in 1923-24 was the repair of the shattered north minar, a task involving the erection of an elaborate scaffolding. Owing to the desolate nature, of the locality in which it is situated the conservation of this mosque is beset with many difficulties.

' The inhabitants of the little village below the hill number scarcely half a dozen souls, and all labour, skilled and unskilled, has to be imported, together with supplies for the workmen. These circumstances necessarily increase the cost

of the work, and at the same time aggravate the difficulties of supervision; **Central** but it is hoped that the much revised estimate for the repairs, which now **Provinces** figures at lis. 13,993, will be found to meet all remaining requirements. During the year under review, Rs. 3,210 were spent on the work, the total expenditure amounting to Rs. 11,722. An additional Rs. 773 was devoted to the upkeep of the Asirgarh Fort itself and the minor monuments in the neighbourhood.

"At Burhanpur, conservation was continued during the year on the tomb *Burhanjmr* of Nadir Shah, the first independent prince of the Faruqi dynasty of Khandesh, and the founder of the capital city Burhanpur. As remarked in 'the previous report, the work comprises principally the refacing of the dilapidated external walls with plain ashlar masonry, in which only the squared outlines of the mouldings and projections, and no carved decoration, will be repeated. This refacing has now been carried up to a height of some 19 feet above the plinth of the tomb, and only the parapet remains to be completed. A sum of Rs. 576 was spent on the work during the past year, making a total expenditure to date of Rs. 7,935 against a sanctioned estimate of Rs. 9,775.

"On the maintenance of the group of monuments at Burhanpur a sum of Rs. 899 was spent during the year. These comprise the Fort (Plate XI, c. & d), erected originally by Add Shah I, the 5th of the Faruqi line, but subsequently much repaired after Akbar's annexation of Khandesh in 1600 to which period the Zenana Baths (now the Dak Bungalow) are asenbable, the tombs of Nadir, of Adil Shah, of Shah Shuja, and of Nawaz Khan; and an open colonnaded pavilion of stone, apparently of the Mughal period and known as the Raja-ki-chhatn.

"An interesting group of monuments maintained in the Saugor District *Eran* are the fragmentary early Gupta remains at Eran, with which are associated four historical inscriptions that have been of especial value in the determination of Gupta chronology. One, now in the Calcutta Museum, records the name of Samudra Gupta, the 2nd of the Gupta line, another on a great stone column *in situ* 47 feet high, gives the name of Budha Gupta and is dated in the Gupta era 165, corresponding to 484-5 A.D. A third, incised on the chest of a huge boar some 11 feet high, mentions the name of Toramana, the Hun chieftain who came from the Punjab and overthrew the Guptas, establishing himself as ruler of Malwa in Central India some time prior to 500 A.D. The fourth inscription is engraved on a small stone pillar, afterwards converted into a lingam, which is located some half a mile away to the south-east on the bank of the river. It is a posthumous record of a chieftain Goparaja, who came to Eran with the powerful king Bhanu Gupta in G. E. 191, or 510 A.D., and was killed there in a great battle, his wife afterwards burning herself on his funeral pyre. This is believed to be the oldest record of Sati immolation in India. The existence of these inscriptions indicates that Eran, under the name Erakama, was included in the Gupta Empire, and was a place of considerable importance at this early period.

"The colossal boar mentioned above, representing the Varaha incarnation of Vishnu, originally stood in a small temple, of which only the ruined lower

Central Circle portion now exists. The fragmentary ruins of several other small temples are included in this group of remains, and in one of them is a great sculpture of Vishnu, to whom the collection of shrines and relics was dedicated. The image wears a *dhoti* and sacrificial thread, and holds a sword and goad. At its back is a large round shield. Outstanding in the group is the great pillar referred to above, which is ornamented with a typically Gupta bell-shaped capital surmounted by a square abacus decorated with lions in relief and crowned by a double-headed human figure with a halo. As recorded in the epigraph it bears, the shaft was erected as a standard of the god Vishnu by the two brothers Matu and Dhanya Vishnu, the latter of whom, on the death of his brother, also erected the temple containing the Boar incarnation. The statues here are of special interest as being among the oldest known Brahmanical images in this part of India."

Eastern Circle "The most important work executed during the year was the conservation of the Siddhesvara temple at Bahulara in the district of Bankura. Work here was commenced during 1922-23, but most of the repairs were executed during the year under report at a cost of Rs 3,840. The temple is one of the finest examples of brick temple architecture in Bengal and much care has been taken to restore the temple to a structurally sound condition as well as to a more reputable appearance (Plate XII, a & b). For this purpose special bricks had to be manufactured in large quantities at the site, in order to fill up gaps in the mouldings and ornamentation at the base and all over the exterior face of the edifice. A strong scaffolding too had to be constructed around the temple and raised to a height of 65 feet. Plants that had grown on the building were eradicated, debris and loose earth removed and the masonry repaired, so as to render the top watertight. Cracks in the walls of the temple were filled up and the corbelled entrance to the passage leading to the shrine was relaid in cement. A strong door with expanded metal netting was provided at the entrance and bats were cleared from their shelter inside the shrine. The compound of the temple was, also, dressed up and levelled, and measures were taken to protect the earlier funerary stupa-like structures discovered in the course of clearing the south side (Plate XI], c). The original enclosure wall of the compound was repaired where necessary and it is now intended to provide two iron gates at the northern and western entrances to the compound.

Gaganesvara "Another important monument under special repair was the Karambera enclosure at Gaganesvara, in the Midnapore district. The enclosure now consists of the remains of a *chatuksala* stone temple of the 15th century, which about a century later was converted into a mosque. The conservation of this monument was taken in hand during the year 1922-23 and was brought to completion during the year under review. Considerable difficulty was again experienced owing to the fact that fresh batches of masons had to be imported several times when the earlier batches had been disabled by attacks of pernicious fever for which the place has acquired an unenviable notoriety. Breaches in the enclosure wall were made good and the roof of the cloisters was neatly pointed with cement mortar from above and rendered watertight. The

trabeate arches of the cloisters, which had in several instances been badly **Bengal** damaged, were repaired by propping up the overhanging stones with neat piers of roughly dressed laterite stone set in lime mortar (Plate XII, *d*) The main gate on the north side was put in order by grouting cracks and filling gaps in the door jambs, inserting iron joists beneath the broken lintels, and providing a wooden door of suitable ancient pattern. The mosque standing in the courtyard was also subjected to a thorough overhauling during the year. Trees and jungle on the roof were eradicated, cracks in the two existing domes were grouted and the open joints of the fallen dome properly pointed. The bulging portions of the walls on the south-east and north-west were dismantled and rebuilt in cement mortar, and some chhajja stones were replaced. The grounds enclosed within the compound and the surrounding land to a distance of 15 feet were dressed and levelled, and stones collected in a corner of the compound. A standard enamelled notice board has also been fixed at the gate. The monument has now been taken on to the books of the P W D and a *chaukidar* will be appointed to look after it.

"At Gaur, the ancient capital of Bengal, a portion of the high wall of *Guar* the palace, probably a party wall dividing the public and private apartments of the palace, known as the Baisgazi wall, was brought under special repair. It runs from north to south, a little to the west of the Qadam Rasul and is over 40 feet in height and about 15 feet in thickness. Most probably it dates back to the middle of the fifteenth century and is in certain respects a remarkable structure. It is, however, so completely overgrown with big trees and jungle that no attempt has hitherto been made to preserve it, although it stands on the list of protected monuments. As almost all other monuments at Gaur have by this time received attention, a beginning was made during the year under review with the task of clearing away jungle, cutting the trees and removing the roots from the masonry. Further measures for the repair of the scaled-off facing of the walls and for strengthening the core where necessary, will be undertaken as soon as funds are available, and it is hoped that the Baisgazi wall will soon take its place among the sights worth visiting at Gaur.

"The programme of conservation at this centre which was laid out in 1920 *Vishnupur* was completed during the year under review, at a total expenditure of Rs. 10,594, distributed over three years. The work done during the year was of a comparatively minor character, consisting, for example, of the provision of expanded metal doors and windows at the Shyam Roy, Lalji, and Radha Govinda temples at Vishnupur and the Sailesvara temple at Dinar, the fixing of wooden doors at the entrance to the compound of the Lalji temple and gates for excluding cattle at the Jor Bungalow and Shyam Roy temples and the demarcation of the boundaries of several temples and gates at Vishnupur.

"The Shyam Roy temple in the Fort of Vishnupur built in 1642 A.D. is one of the most interesting temples at that place both on account¹ of the elaborate brick ornamentation with which the whole surface of its walls is covered and on account also of its being the earliest example of the *pancha-ratna* (five-towered) type of temple and thus the first attempt to develop set

Eastern Circle multi-towered style of temple architecture peculiar to Bengal. Among the repairs carried out here during 1905-06 at the late Dr. Bloch's suggestion by the District Board was the rebuilding of one of the four corner towers. Unfortunately, the District Board Engineers had no idea as to how the work ought to be executed and the new tower, built of modern bricks, and widely different in general appearance and details of design from the other three old towers remained an eyesore to the visitor. It was therefore decided to dismantle and reconstruct it with specially moulded bricks, in harmony with the design of the other three towers. The bands and mouldings were carefully reproduced, but the ornamentation in brick was left out. The central tower which had been partially rebuilt was also dismantled up to the base of the drum. It was not, however, considered safe to attempt to restore it for fear of increasing the load on the existing walls. The roof was accordingly made watertight and the building left in the condition in which it must have been since the collapse of the central tower.

Maqiiukur

"The mosque at Masjidkur in the district of Khulna, came in for special repairs during the year under review. It was discovered not very long ago when the Sundarbans were being reopened for settlement, and the name of the adjoining locality has been derived from the circumstance of the masjid having been dug out (*khur-to* dig) of the earth and jungle, along with other remains in the Khulna Sundarbans. The construction of this mosque is attributed to a Muhammadan *faqir* named Khan Jahan Ali (colloquially "Khanja Ali") who must have been an energetic pioneer in the fifteenth century. Architecturally it is one of the most interesting monuments in Lower Bengal, and compares well with any of the Gaur mosques of the same date, in respect of structural solidity and graceful proportions. The mosque measures 39 feet 6-inches square internally and has walls 7 feet 4 inches thick. There are three-bays on each side with pointed arch openings, and stone pillars of Hindu design have been employed to support the nine domes. The monument was repaired several years ago by the Public Works Department but certain defects in the execution of the work are now being rectified. Prominent among them is the use of modern size bricks in filling up gaps in the brick work. Steps are now being taken to replace these modern bricks by old bricks of the appropriate size. Other necessary repairs to the roof, floor, door sills and fencing are also being executed, the bulk of which had to be postponed till the next season for want of funds.

Kharaul

"Kharaul is a village about 2 miles due west of Gadi Ky. Station on the Azimganj Barharwa branch of the E. I. Ry. It contains the oldest extant mosque in the Murshidabad District, built in the style of the Chamkatti mosque at Gaur, about the third quarter of the fifteenth century. It has one main room covered by a dome which has long since collapsed and a verandah roofed by three domes (Plate XIII, a. & 6). Except the 8 pilasters, which are of stone, all the ornamentation is of brick. The style of decoration in the *mihrabs* is singularly rich and pleasing. The work done during the year at this mosque

consisted of the setting up of a wire fence round the mosque and the filling of depressions in the compound

" The task of repairing the Basuh and other temples at Nanoor in the *Nanoor* Birbhum district, associated with the memory of the Bengali poet Chandidasa, described in last year's report, was continued during the year under review, and almost brought to completion. Work was commenced during the year at another place in the same district also associated with another Poet of Bengal, more widely known than Chandidasa, namely Jayadeva the famous author of the poem *Gitagovinda*, who lived at Kenduli on the Ajoy river. The existing *Kenduli* temple here is supposed to have been erected in the seventeenth century on the site of the poet's house, and, apart from its historical interest, is of no mean value from the architectural point of view. It is an example of the *Nava-rattui* or nine-towered type of temple, in which one central tower is surrounded by two sets of corner towers at two different levels. Three of the four towers at the higher level have disappeared, but otherwise the temple is in good preservation. The facade of the temple is richly decorated with brick tiles representing the various incarnations of Vishnu and scenes from the *Raiuayana*, including the war between the monkeys and the demons (Plate XIII, c). The monuments was declared protected in 1915 and repairs were executed shortly afterwards in accordance with Mr. Blakiston's conservation notes. The modern post office built in close proximity to the monument is being acquired and the boundaries extended towards the north and west. A few other necessary repairs to the roof and floor, as also to the platform on which the temple stands, are also included in the estimate now under execution.

" Iron hand gates were provided at the side entrance to the compound of *Kusumbha* the old mosque at Kusumbha, about 33 miles to the north of the head-quarters town in Rajshahi district. The mosque here is built almost entirely of stones of different varieties, most of which seem to have been obtained from the remains of desecrated Hindu temples in the neighbourhood. The black basalt from the Rajmahal hills, suitable for fine polish and delicate carving and generally used in old Hindu temples for door-frames, images, &c., has been used for the exquisitely carved *mihirabs* in this building, while granite and sandstone seem to have been used in the walls and floors of the mosque. The extensive ruins in the shape of walls, mounds, tanks, broken sculptures, &c., in the neighbourhood point to the conclusion that Kusumbha or Kausambi was a fairly large walled town in the days of the Pala Kings of Bengal. The mosque dates back from the time of Muzaffar Shah (1490-3 A.I.) and is the earliest, as it is also the most beautiful, mosque in the district. It is built on a high platform approached by a flight of steps with three entrances, all in front. The most noteworthy feature of the mosque is the beautiful stone carving of the *mihirabs* in the west wall, which for richness and delicacy can hardly be surpassed.

" Conservation work in Assam has progressed steadily, and, but for the very heavy overhead charges that are levied in this province by the Public Works Department the whole programme of conservation laid down for the laouineirirs at Sibsagar would by now have been finished.

Eastern Circle

" A very interesting piece of work was commenced this year at Kasomari Mr. K. N.

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Pathar, a place situated near the Doyang river within the reserved Forest area, about 6 miles from Jamguri in the Sibsagar district. The group of monoliths here, with the exception of a single round column of the "chessman" type which predominates at Dimapur, consist of flat monoliths, pointed at the top, with figures &c, carved in relief over them generally known as the 'sword-blade' column. The monoliths are now mostly lying flat on the ground in two rows with 14 monoliths in each row, of which not more than five or six are standing in their original position. The orientation of the rows is roughly north and south, but it is noteworthy that the columns face the Doyang river and the rows are exactly parallel to the course of the river. The biggest of these columns is 10 feet in length. The upper portion of the monoliths is generally carved in relief in the shape of two lotus stalks with two lotus leaves on either side and a lotus bud on the top. Between the two stalks at the bottom is usually carved a dagger or something like the head of a Naga spear. Some monoliths have only two lotus leaves instead of four, others have human figures at the top in place of the lotus bud. The space below the lotus stalks is usually occupied by the carvings of birds or animals such as lions or elephants facing each other, with some symbol like a trident placed between them. A remarkable figure on a monolith in the western row is that of a four-handed deity with a crown on his head, horns on either side, and wearing big ear-rings. Mortice holes in the centre of the top of two of the columns, measuring 1' U' x 11" X " and 1' V x 1" XS" respectively show that unlike the Dimapur monoliths, some of the Kasomari Pathar monoliths were intended to be fastened together at the top. The work of hauling up the fallen columns dressing and clearing the site, erecting a wire fence and digging a trench round it, so as to keep wild elephants out of the area, was undertaken during the year through the agency of the Forest Department, who command the labour in the surrounding forest villages.

Nigriting

" Another monument where special repairs were done during the year under report was the Sibdole temple at Nigriting in the Sibsagar district. This temple is picturesquely situated on an eminence about 50 feet higher than the surrounding level. It was erected in the beginning of the eighteenth century on the site of an older stone temple, the sculptured remains of which seem to have been utilized in building the flight of steps leading to the hillock from the plains below. With its barrel-shaped spire, the temple has a somewhat massive appearance. It consists of a square shrine with four projections on each side of the main face and a porch in front. Beside the main shrine dedicated to Siva, there are four subsidiary shrines dedicated to the remaining four main deities of the Hindu pantheon, which go to form the usual *panchayaiana* or group of five gods. The beauty of the temple, in common with all other Assamese temples, is spoiled by the inevitable corrugated iron shed, called the Namghar or house of prayer. The temple is maintained by Government under an agreement with the Dolois of the temple, who annually pay Us. 50 towards the cost of maintenance. The repairs during the year consisted of

jungle Clearance, replacing missing and worn-out bricks in the walls, filling **Assam** cracks in walls, making the roof watertight and several other items. No Government grant was made; the cost of the work being met out of the accumulated contribution received under the agreement from the *Dolovs*."

"Among the protected monuments in the Madras Presidency which are **Madras** being maintained by the Archaeological Department few are invested with **Presidency** greater historic interest than the hill-fortress of Gooty in the Anantapur Dis-Gooty tract. It is situated about three miles from Gooty Railway Station and consists of a roughly circular group of steep rocky hills rising abruptly from the plain to a height of more than 2,000 feet above the sea level. These hills are connected by lower spurs enclosing in their midst a considerable area of level ground, within which is the old town of Gooty. Round the outside of the cluster of hills run the ruins of a strong wall or rampart, built of stone pointed with mortar, which is strengthened by frequent bastions. The westernmost hill of the group is a precipitous mass of bare rock which towers hundreds of feet above the others and on this is built the citadel of the fortress. It is approached by a winding paved path which leads through numerous small gateways to the summit of the hill. (Plate XIII, *d*). This rock commands the whole of the lower fortifications and the town below, and is defended by a series of ramparts built one above the other along the steep sides of the rock and connected with small gateways flanked by bastions (Plate XIV, *a*). It was supplied with water from numerous reservoirs made in the clefts of the rock to catch the rain and in former days constituted a stronghold which famine or treachery alone could reduce.

"On the summit of the citadel are two buildings which were apparently a granary and a powder-magazine, respectively, and on the edge of a cliff some 300 feet high is a little pavilion built of brick and plaster which is called 'Morari Rao's seal,' and commands an excellent view of the town below. Here, it is said that Morari Rao, the famous Maratha freelance, used to sit and play chess or swing himself (the rings where the swing was suspended are still shown), varying the monotony by occasionally watching a prisoner or two hurled from the top of the adjoining rock. There are many other buildings in ruins, mostly granaries, store-rooms and magazines, and some of these were used by Munro as prisons for refractory hill chiefs. At the foot of the hill is the European cemetery, where rested for a short time the body of Sir Thomas Munro, who died of cholera at Pattikonda in the Kurnool district on the 6th July 1827 when on a farewell tour, as Governor of the Presidency through his beloved Ceded districts. His remains now lie in St. Mary's Church in the Fort at Madras.

"Near the summit of the hill, on the rocks close to the ruined Narasimha temple, are eight inscriptions but owing to their exposed situation all of them are seriously damaged. Three are illegible; of a fourth, only the date (1507 A.D.) can be deciphered; and of the remaining three all that can be ascertained is that they belong to the time of the Western Chalukya King Vikramaditya VI, surnamed Tribhuvanamalla, who ruled from 1076 to 1126 A.D. Their exis-

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tence. however, shows that the fort was a place of importance prior to the Vijayanagar period.

" The Muliammadans do not appear to have taken possession of the fort until, some years after their overthrow of the Vijayanagar dynasty at Talikota. At any rate its name does not figure in the lists of their conquests in their new territory and there is evidence to show, that as late as the end of the sixteenth century it was still in the possession of the fallen Vijayanagar princes who ruled from Penukonda. When Aurangzeb reduced the Golkonda king to obedience he apparently took Gooty from him, but how or when this happened is not recorded.

" About 1746 Morari Rao established himself in the fort and eight years later he made it his permanent residence and repaired the fortifications. It is to this period that the stucco ornamentation of the small gateways shown in Plate XIV, 6, appear to belong. In 1775 Gooty was attacked by Haidar Ali and after a siege of some five weeks the town and lower forts were carried by assault, and two months later Morari Rao was compelled through lack of water to capitulate.

" Although the fortress is thus of exceptional historic interest, neither its fortifications nor the monuments which they enclose are such as to merit elaborate measures of repair, and all that it has been found necessary to do has been to clear them of jungle, to protect them from further decay by underpinning, waterproofing or other minor structural repairs, to keep the approaches and pathways in good order and maintain two permanent watchmen to look after them.

'Chandragiri

" The Raja Mahal at Chandragiri illustrated in (Plate XIV, c) is the historic palace of Ranga Raja, where in 1639-40 the treaty was negotiated and signed which gave the English the strip of coast where Fort St George now stands. Six years afterwards both Chandragiri and Chingleput, which was another of Ranga Raja's capitals, were taken from him by the king of Golkonda and the Raja himself forced to fly for protection to the Chief of Bednur. one of the few of the former dependants of the empire who continued to acknowledge his suzerainty. The existing representative of Ranga's ancient line is the Raja of Anagundi in the Nizam's Dominions. The palace of the Raja as well as the smaller building standing alongside of it and known as the Queen's Palace (Plate XV, a & b), are situated in park-like grounds inside the fortress of Chandragiri. Of the early history of the place not much is known, but the style of the fort, ruined temples and the palaces, indicate that they all belong to the seventeenth century. Tradition relates that the fort existed prior to this date, but, if so, it must have been considerably enlarged and improved in later times. The Raja Mahal is a big oblong building running from east to west with the front facade facing the south. It has a frontage of about 160 feet and is 50 feet in breadth. It consists of a ground floor, a second floor and a terraced roof with an ornamental parapet and a lofty brick and plaster tower in the centre, with two little side turrets facing the south and at each of the four angles of the building (Plate XIV, c & d). The total height

of the palace from the top of the central tower to the ground line is about **95 feet** **Madras Presidency**

"The method of construction is peculiar and the reason why the building is still standing to-day, is mainly due to the excellent quality of the plaster and mortar employed in its construction. This fact is particularly noticeable in the remarkable series of flat arches and coffered plaster ceilings within the building. The brackets supporting the balconies and the little rafters carrying the projecting eaves and cornices of the roof and towers above, are all made of cut stone bedded in mortar and there are no signs of timber work anywhere. The ornamentation was in stucco but much of this work has perished. The structure stands on a stone basement, but the walls are built of rubble in mortar with here and there patches of brick work all of which was plastered over. The parapet and stepped towers on the terraced roof are built, of brick.

"The ground floor is provided with a handsome vaulted running the entire length of the northern facade. The floor above is carried on massive pillars and cross arches with square coffered ceilings in between each group of four pillars. In the centre is a lofty hall with two smaller rooms on each side of it and flights of steps at each end of the long corridor leading to the upper floor. The plan of the latter is similar to the ground floor except that the central hall is loftier and has a gallery running round it, thus forming a fine handsome apartment which was apparently used as a Darbar Hall. The roof line is pleasingly broken by the group of towers in the centre and at the corners of the building. Altogether, it is one of the finest specimens of Indo-Saracenic architecture in India.

"The Queen's Palace is in the same style and constructed in a like manner but is a much smaller building. It has a frontage of 92 feet and is only 16 feet in breadth. The curious mixture of rubble and brickwork used in the construction of these buildings does not lend itself successfully to "pointing" as a means of arresting further decay. At the best, such a process of repair would have produced a very unsightly appearance and accordingly it was decided to re-plaster the walls where necessary in order to render them watertight and proof against the growth of vegetation in the joints of the masonry. Both buildings are now in good order and the grounds are being kept clear of all rank vegetation.

"Many interesting examples of buildings in the Indo-Saracenic style may *Hampt* also be seen at Hampi in the Bellary District. The best of them, including the 'Lotus Mahal,' are situated in the Zanana enclosure. The group of stepped turrets above the roof line of the latter building are similar to those adorning the Chandragiri palaces described above. On the north side of the enclosure, guarding a small entrance through the outer wall, is a lofty Watch Tower in the same style; and there is a similar tower on the opposite side, in the south-east corner of the enclosure. (Plate XVI, 6). Probably they were used by the ladies of the Zanana for watching events outside the high walled enclosure" without themselves being seen. A flight of steps leads up to the top floors of both towers, from which a delightful view of the whole panorama of this

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wonderful city can be obtained. Both towers were found in a very decayed condition, the one illustrated in Plate XVI, being cracked from top to bottom as though it had been struck by lightning. The building was grouted, pointed and replastered where necessary, the basement repaired and proper drainage provided. All the buildings in the Zanana enclosure and the Elephant Stables and Guard Room near by, which are also in the same curious style of architecture, are now in good repair. Like most of the monuments at Hampi, the costly special repairs required to prevent further decay and, in some cases, total collapse of the monuments, have already been completed and the chief task now is the execution of annual repairs, such as patch plastering, removal of rank vegetation and providing proper drainage around the basements of the buildings. The latter is a very important item as when pools of stagnant water are allowed to remain near the basements, settlement of the foundations is almost inevitable and ugly cracks may appear in the walls requiring radical structural repairs before matters can be put right.

" Another costly item of conservation work at Hampi is the upkeep of several miles of roads and pathways leading to the various monuments. The cross roads have been provided with strong iron signposts and the buildings with notice boards giving the name of each monument. With the help of the illustrated guidebook prepared by the writer in 1917 and which is on sale at the Kamalapur Travellers Resthouse, the visitor to Hampi has no trouble in finding his way about these interesting old ruins. All the roads and pathways maintained by this department are in good order and the roads are fit for motor traffic, but the seven miles of road from Hospet railway station to Kamalapur Resthouse, which is maintained by the Local District Board, still remain in bad condition. If the Board is unable to find the funds for the proper upkeep of this road, the Local Government might, it is suggested, assist them with a small annual grant for the purpose, for, unless the road is maintained in good order, it is very difficult for the public to visit this out-of-the-way but fascinating spot.

Sadras

" The Dutch Fort at Sadras was blown up when no longer required for military purposes by the British, and covered as it was in cactus and rank vegetation presented a most dilapidated appearance when first taken in hand by this department. Its interest is mainly historical. It was an important trading settlement of the Dutch in 1647, and famous for the fineness of the muslin produced by its looms. The Dutch erected the original fort close to the sea. Inside it are the remains of the houses of the officials, a church and an old cemetery. Many of the tombstones are curious specimens of the sculptor's art, the oldest dating from 1695. Sadras was taken by the British in 1795, but was given back to the Dutch in 1818, and did not finally pass into the hands of the British until six years later. The main gateway, which is in better condition than the rest of the fortifications, and the cemetery within the fort are being carefully maintained from further decay. The rest of the fort is too dilapidated to justify any attempt at repair, other than that of keeping down the heavy growth of rank vegetation.

" One of the most perfect specimens of military architecture in Southern **Madras** India is the old fort at Vellore with its picturesque moat (Plate XV, c & d). **Presidency** According to local tradition it was built by one Bomnu Reddi (or Naidu), Vellore a native of Bhadrachalam on the banks of the Kistna. The fine old Siva temple inside the fort is said to have been built before the fort itself and to have taken exactly nine years to complete. It was dedicated to Jalakantesvara, or ' Siva residing in the water '

" About the middle of the seventeenth century, the Sultan of Bijapur seized Vellore and its first Muhammadan ruler was one Khan Khan, who was followed by Muhammad Khan. In the time of the latter is successor, Abdulla Khan, (1676) the Mahrattas besieged the fort for a long time and eventually took possession of it, Abdulla Khan retiring to a spot about three miles west of Vellore, where he built a town which he called Abdullapuri and a palace, the ruins of which are still extant. Thereafter the fort remained in the hands of the Mahrattas for some years until they were finally ousted by the Muhammadans under Daud Khan who came from Delhi about 1708. Later on, the fort and district became one of the wealthy tributaries, of Muhammad Ali who at the close of the war between the French and the English in 1763 was established as Nawab of the Carnatic. It was in conjunction with his forces that the British, a little later, successfully besieged Vellore and compelled Muztafa Ali, its *qiladar*, to pay a heavy indemnity and a few years afterwards the Company placed a British Officer in the fort with a small garrison to ensure the revenue from the district being regularly collected. From 1778 onwards, Vellore again played an important part in the conflict between the French and the English and in 1781 it was actively besieged for five weeks by the Mysore army under the direction of experienced French officers. It was the scene also of much bloodshed during the Sepoy mutiny of July 10th, 1806, when most of the British officers of the garrison were treacherously murdered in their houses. Before night fall over 800 of the mutineers had paid the penalty with their lives and 600 more were made prisoners and subsequently brought to justice.

" The fort is now being used by the Police Department as their Provincial Training and Central Recruits' schools, with the result that the fortifications and buildings within the fort are being carefully maintained in good repair. As the fort and temple within are protected monuments, all conservation repairs are carried out by this department. This year, they have consisted in clearing the ramparts of vegetation, repacking some of the disturbed cut stone work of the inner rampart, and carrying out the usual annual repairs to the temple of Siva.

" At the request of His Britannic Majesty's Consul at Pondicherry, the *Pondicherry* writer was deputed to visit the Church of England Cemetery there in order to inspect the repairs recently carried out to this old monument. As the French Municipal authorities have repudiated all responsibility for the upkeep of the cemeteries at Pondicherry, both Church of England and Roman Catholic, it was decided that the former cemetery should in future be maintained by this department as a protected monument, since the Church of England

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Community at Pondicherry is too small and too poor to undertake the work itself. The Government of India in 1922, sanctioned as a special case, a sum of Rs. 300 for the work of repair, from the contingent grant allotted for the Southern Circle

"In the cemetery are a number of tombs about a hundred years old, a few dating back to 1814, when Pondicherry was still in the hands of the English. Some of the name plaques unfortunately have been removed; but among those which have survived are the names of many British Army Officers and officials of the East India Company's Service together with their wives and children as well as of two sea Captains.

"The repairs carried out, included patch plaster work, whitewashing, repairs to compound walls, providing proper drainage and removal of weeds. The cemetery is now in good order.

Anakapalli

"The conservation of the Buddhist remains situated on the Bojjanankonda hill near Anakapalli railway station in the Vizagapatam District was carried out at very little cost. The work consisted mainly of grouting, pointing and plastering, removal of vegetation and the rebuilding of the watchman's shed which was damaged by the severe cyclone that visited this district during the year under report.

Jaugada

"The condition of the Asoka Rock Inscription at Jaugada in the Ganjam District has recently caused some anxiety owing to the deterioration of the engraved surface of the rock. As it is the oldest and one of the most valuable ancient monuments in the Madras Presidency, the Archaeological Chemist in India was asked to inspect the rock and advise as to its preservation. He visited Jaugada in November 1923, and his report will be found on another page. In May 1924, he supplied the Executive Engineer at Berhampore with the requisite preservative for coating the inscription in order to arrest further decay. At his suggestion also a screen was erected to prevent the sun's rays falling on the inscription.

Chingleput

"The Fort at Chingleput dates from the later Vijayanagar period and resembles the fortifications at Hampi in being constructed of roughly dressed stone hewn for the purpose and carefully fitted together without mortar. The brick parapet walls with gun embrasures, the ruined portico facing the lake and some of the gateways belong to later times, when the fort was occupied by the French and the British.

"In the middle of the fort is a large and strange looking three-storeyed building resembling a gigantic dovecote more than anything else. It is square in plan and rises in tiers or square blocks with arched openings round each storey, the latter diminishing in size towards the summit which takes the form of a flat terraced roof. It is built in the Indo-Saracenic style and was originally crowned with an ornamental brick and plaster dome-shaped tower like those adorning similar buildings at Hampi, Gingee and Chandragiri of the same period. It is known as the Ther Mahal, or Raja Mahal, and was originally used for the state apartment of the later Vijayanagar rulers when they held their courts alternately at Chingleput and Chandragiri after the destruction of

their capital at Hampi. The building is of masonry throughout, not a single piece of wood being used in its construction, and it originally had small steps inside leading up to each storey. The steps, together with the tower that once crowned the building, were dismantled when the fort was converted into a Jail in 1802, and the building is now provided with outside steps ascending and descending the Mahal. The building has undergone so many changes in recent times in order to adapt it to modern requirements, that there is very little left of architectural interest. But like the fort, the Mahal is of considerable historical value and it is now maintained in good repair as an ancient monument, although it is allowed to be used as a dormitory for the lads of the Chingleput Reformatory School "

" The programme of work in Burma for the year under report consisted of 33 items, at a total estimated cost of Rs 80,000, of which the Local Government contributed Rs 5,000 from Provincial lands and the Imperial Government Rs 75,000 out of Central Revenues. From this sum of Rs 80,000, Rs. 53,330, that is nearly three-fourths, had to be allotted to Mandalay for the upkeep and maintenance of the Palace buildings and its grounds and of the 48 *pyatthats* on the Fort walls. The amount of money spent on the Mandalay monuments has, of late years, steadily increased, and the question of the future maintenance of these Palace buildings and *pyatthats*. is now becoming acute. In the opinion of experts, few of these buildings can last for more than another fifteen or twenty years without extensive renewals. They are all in wood, and were built as far back as 1859, much of the material used in the Palace having been obtained by dismantling the already old Palace at Amarapura. Despite all the care and trouble which have been bestowed on their maintenance and preservation, many of these buildings are rapidly reaching a stage when they will be past all ordinary repair even the large amounts now being spent on them being insufficient to prevent the steady process of decay. If these interesting monuments are to be perpetuated, they must eventually be restored and renovated almost in their entirety. Then permanent maintenance entails an ever recurring expenditure which increases on an expanding scale, and as time goes on it is to be feared that there will be practically nothing left out of the funds available for the preservation of other interesting buildings at Pagan and elsewhere in Burma. Besides these wooden structures, the Fort walls must also be taken into account. They were built, as are all modern Burmese walls, with mud mortar, and they are now deteriorating visibly. As they are five miles in extent, the amount of money that will be required- if they are to be thoroughly repaired and kept in good order will not be small. As a matter of fact, an estimate for this work made a few years ago amounted to Rs. 80,000 and although patching here and there as funds permitted has, since been carried out, the amount required will be substantially more now than at the time the estimate was made. say. one lakh.

" That the Palace buildings and the *pyatthats* at Mandalay are unique of their kind and the only models of civil wooden architecture in Burma cannot be disputed the Palace above all, being the only one left of a long series of

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such buildings in this province, and a precious witness of an order of things for ever passed away. But if all these (that is, the Palace, the *pyatthats*, and, the walls), have to be perpetuated, it is clear that the present allotment of Rs. 75,000 a year by the Imperial Government, is far too meagre for the whole province. Should it be decided that these last vestiges of a unique city are to be preserved without prejudice to other monuments in Burma, there should be a special grant for them, and such a grant should be not less than Rs. 40,000 yearly for a few years. This sum would allow of more radical measures of restoration, with new materials, of the Palace and *pyatihats*. The situation is one which must now be faced squarely, if these buildings are not to be allowed to crumble down within two or three decades.

" Besides the usual annual repairs, special repair works were also undertaken to the buildings on the Palace platform. An experiment was made of substituting a cheaper mode of gilding in lieu of the costly gold-leafing, which would swallow thousands of rupees, but it did not prove wholly successful. On the other hand, the experiment of preserving and saving the wood of the roofs by leaving a space between the end of the roof joists and the carved eaves boarding has been a great success and is being extended to other buildings. The Watch Tower, which was in a dangerous condition has been thoroughly repaired, the unsound portions of teak pillars were removed and replaced by sound ones. It was proposed, as a protection for the wood to use ruberoid, but, for obvious reasons, the proposal was not approved. The *pyatthats* on the Fort walls have been earth-oiled and repaired and in one case practically rebuilt, but many of them are in a bad state of decay and two of them almost on the point of collapse. The total cost of maintenance and special repairs to the *pyatihats* and the Palace buildings amounted to Us. 21,685 exclusive of departmental charges. This amount does not include the sum expended during the year on the *Pakhungyi* stone paving and construction of parapet walls around the Palace enclosure, both of which items have been debited to the construction of the garden on the Palace platform, mentioned below. The latter amounts to Rs. 13,108 exclusive of departmental charges.

" The construction of the parapet walls round the Palace enclosure has now been completed, and much saving has been effected by the use of broken bricks and of Mandalay Hill gravel. The east and west entrances to the Palace have also been repaired, and there remain only a few portions of *Pakhungyi* stone paving and gold-leafing to be done. As mentioned in last year's report, the actual laying out of the lawns has been completed. The pipes for the distribution of water are being laid.

" Some reference was made in last year's report to the proposal put forward by the Palace Garden Committee for taking over charge of the garden outside the Palace platform. It has now been finally decided by Government, that the Archaeological Department is not to be responsible for the garden in question, which will, it is presumed, remain in the care of the Cantonment authorities. It has been in their charge for over twenty years, and there are no reasons why it should not continue to be so. Moreover, it is felt that the

Committee is no longer required for so small a garden as that on the Palace **Burma** platform, which is only a few acres in area; and that, now that the garden has been laid out, the opportunity may conveniently be taken of bringing the work of this Garden Committee to a close. Accordingly the Committee is to be disbanded and the Superintendent, Archaeological Survey, the Executive Engineer in charge of the works and the Superintendent. Botanical Gardens, Maymyo, are henceforth made solely responsible for the upkeep of this area. The Director General of Archaeology, who is widely experienced in the matter of gardens, will be consulted from time to time as occasion arises.

" Special works at Pagan during the year under report consisted in the *Pagan* continuation of the repairs to the Tilommlo and the Sulamani temples The Tilommlo temple was built by King Nandaungmya (1210-1234 A 1-) when he became King, and is later in date than the Sulamani, which was built by Narapatisithu, Nandaungmya's father, in 1183¹ They were built almost on the same plan, each having two storeys on a basement and each being surmounted by a *sikhara*. But there is more historical interest attaching to the Tilommlo, which is the larger of the two Nandaungmya was the issue of a lesser queen of King Narapatisithu and, as his elder brother Zeyathua, born of the Chief Queen was living, he had, according to customary laws, no right to the throne Besides these two, the King had three other sons Nevertheless Nandaungmya's mother's devotion to the King and the boy's amiable and gentle manners had endeared them to the King (Narapatisithu), and as a consequence the mother succeeded in obtaining a promise from the King that he would nominate the prince, her son, his successor Subsequent!}, at a ceremony held for naming the heir-apparent, Narapatisithu made his five sons sit round a white umbrella, the King then made a solemn vow that he would nominate him as crown prince towards whom the umbrella of itself inclined It inclined towards Nandaungmya, say the chronicles, but they do not tell us by what trick the mother obtained that end To commemorate this event, Nandaungmya when he had become King, built a temple on the spot whereon this singular occurrence took place, taking the Sulamani as his model. The new monument he called "Tilommlo" which means that, the umbrella willing it and the king also, he had succeeded to the throne

" The works at the Tilommlo temple during the year consisted in repairing or renewing the battlements on the first terrace and the arches over the main entrances, the missing bricks being replaced and the broken rings completed. Repairs were also undertaken to the pediments over the arches of the side entrances and to the small niches flanking them, wherein were enshrined figures of *dvarapalas* (Plate XVII, Figs. a & b). The repairs to the main building and the reconstruction of the inner circuit wall have now been completed, as well as that of the four short flights of steps, and the brick paving of the platform.

¹ For a brief description of the Sulamani temple, see pp 82 and 83 of last year's Annual Report.

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Mons. Charles
Duroiselle

the cracks and making watertight the roofs of the arched gateways, and the necessary repairs to the outer circuit walls were also taken in hand during the year. The body of the wall was done in brickwork and mud mortar and the coping was laid in lime and cement mortar to render it waterproof. Repairs to some portions of the walls and the arches over the gateways still remain to be done. For this work as well as for clearing the compound of debris, a sum of lis. 3,000 has been provided in the budget for the next official year.

"The repairs to the mam building of the Sulamani were finished last year. During the present year, repairs were undertaken to the four gateways. They are dome-shaped structures with cylindrical stupas crowning them. The east and the south gateways are in a fair state of preservation, but those on the north and west have almost disappeared. No restoration has been attempted; they have simply been preserved as they were found, by grouting all the cracks and making them thoroughly watertight. The only work that now remains to be done to this temple is the damage of the compound, which is expected to be completed next year.

"Special repair works were also undertaken at the Paya-thon-zu, the Thambula and the Nandamanya temples at Min-nan-thu, near Pagan. The works done here involved the preservation of the unique frescoes inside the temples, and the waterproofing of the buildings. These paintings are of great importance for the history of Buddhism in Burma, and it would have been a thousand pities had they been allowed to disappear. The pictures are executed on the plaster facing, and as the latter peeled off it took the painting with it. To prevent this, the cracks and holes in the plaster were carefully grouted with mortar and edged off. For the sake of the historical and artistic interest of these pictures, it is highly desirable that every effort should be made to conserve these three buildings.

Hmawza

"Among the several other monuments to which minor repairs were carried out may be mentioned the Lemyethna temple at Hmawza (Old Prome). This shrine shelters three stone sculptures bearing effigies of the Buddha. There were originally four, one at each face of the central pile, but one has disappeared. The technique of the sculptures shows them to belong to the late Gupta period. The Lemyethna is a square building of unpretentious dimensions with four small vaulted corridors. During the year under report, part of the roof over these corridors caved in and the wall declined slightly out of plumb. Owing to the heavy rains at Hmawza, this would have endangered the stability of the building seriously, had not repairs been taken in hand at once. The roof was repaired and the walls strengthened by means of bolts and fish plates at a cost of lis. 372.

Mrohaung

"The repairs to the Shitthaung temple at Mrohaung in Arakan were continued during the year. With the help of Rs. 2,500 contributed by Government and Rs. 371 obtained from public subscriptions, the Trustees succeeded in cleaning away the debris from within the three enclosure walls, and in re-

building the latter, on the model of the portions that remained. The narrow passages leading to the temple on two sides were also widened."

In the Central India States the Archaeological Department has been chiefly concerned with the conservation of the Hindu temples at Khajuraho in Chhatarpur State and of the Muhammadan monuments at Mandu—the capital of the

Kings of Malwa—m Dhar State. At Khajuraho the main programme of works, which had been in progress for many years past, was brought to completion in the previous year and there remained only a number of relatively petty items to be done at the Chaturbhuj, namely, the Visvanatha, Kandana, Varaha and Devi Jagadamba Temples. These have now been finished off at an additional cost of Rs. 5,903 the funds for which were provided by the Darbar.

At Mandu, the estimates which were sanctioned for the repair of Malik Mughli's Mosque the Dharmasala, Tower of Victory, and tomb of Mahmud Khalji, as well as for the Ashrafi Mahal, the Hathi and Alarnigiri Gates and the Sat Kothri, have now been finally disposed of, but there is still much to be done before the other outstanding estimates can be completed and it is hoped that the State Engineer will see his way to speeding up the work. The Dhar State is much to be congratulated on the admirable manner in which the work of conserving this unrivalled group of monuments is being done, and I welcome this opportunity of putting on record my sincere appreciation of the efforts made both by the State Engineer, Mr. Dighe, and by Mr. Deshpande, the Supervisor, who has been in personal charge of these buildings for the last fourteen years. But it must not be forgotten that every month of procrastination means a little more damage done by the jungle roots and creepers to the fabric of these buildings and that it behoves us therefore to push on with the work as rapidly as possible, until we are satisfied at least that the risk of such damage has been removed. Even after all the work of the last twenty years, there are still many valuable and well preserved structures in Mandu which are completely enveloped in jungle, besides an infinitely larger number, which are now too far gone to be saved. Even though we may not at present have the funds to take in hand the repair of all we should like to, it is up to us to do everything possible to arrest preventable decay.

At the request of the Indore Darbar my Assistant, Mr. B. L. Dhama, visited Un in the Khargon Pargana, Zila Nimar, and drew up a note on the preservation of the highly interesting group of Hindu and Jain temples described by Mr. R. D. Banerji at pp. 61 ff. of the Western Circle Report for 1918-19. At Un, the mahamandapas of the temples are conspicuously larger than at Khajuraho, but in other respects the temples at the two places are generally similar and approximately of the same age. Unfortunately, Un has been used as a quarry by State contractors in the building of roads and tanks, and most of the temples (there are ten still existing) have been sadly despoiled and mutilated. Even so, however, they constitute a magnificent group and it is earnestly to be hoped that the Darbar will be able to carry out the measures requisite for their preservation.

Indian States
Rajputana
Ajmer

From Ajmer in Rajputana the Executive Engineer reported the sinking of corner of the Baradari No. 2 on the Anasagar Bund. The sinking is attributed by him to the shrinkage of earth which has taken place owing to the continued lack of draught and exceptional dryness of the ground. For the present, the sunk corner has been supported by a temporary scaffolding at a cost of Rs 378, but after the subsidence has completely stopped, it is proposed to underpin the foundation and also to dismantle and rebuild the disturbed part of the superstructure.

Kashmir
Jami Masjid at
Srinagar

The re-building operations at the Jami Masjid at Srinagar in Kashmir, of funds had been in suspense since 1918, were restarted in October 1922, and it then became evident to Mr. Avery, who is carrying out the work, that the high west wall of the prayer chamber would have to be entirely dismantled, since, it was found on examination that practically every stone of the plinth was cracked and the space between the inner and outer faces of the wall was filled with mud. The dismantling of this wall involved the destruction of the mihrab, but neither artistically nor archaeologically could this be accounted a loss, as both the mihrab and its ornamentalities were late, decadent work of the Sikh period entirely out of harmony with the rest of the mosque. Before, however, this west wall could be reconstructed it was necessary to settle in detail the design and material of the new mihrab, and for this purpose Mr. Hargreaves was deputed to Srinagar in order to design a mihrab which might be in keeping with the pre-Mughal style of the mosque and at the same time be simple, massive and impressive without introducing any unnecessary new features. Mr. Hargreaves' design has met with the full approval of the Secretary and members of the Mosque Committee. It provides for the use of chiselled brick with fine joints in the west wall of the prayer chamber "This fine brickwork", writes Mr. Hargreaves, "will, in the interior, extend to the whole area between the double columns which support the wooden walls, but, will not include the mihrab and its surroundings which are to be of polished stone covering an area 25 feet, in height and 20 feet in width. The form of the new mihrab is based on that of the entrance openings in the courtyard and the windows of the outer wall, relief being obtained by raising and recessing the planes at the jambs and encircling arches. The only ornament, save the bosses in the spandrels and in the centre of the small upper panel, will be inscriptions in relief on the jamb and arch of the mihrab proper and in the arched area above them." The Mosque Committee expressed a strong desire that the ninety-nine names of God (with which Aurangzeb is said to have adorned the mihrab and which crowned the cornice of the recently dismantled one) should again appear on the west wall, and this has been duly provided for. While at Srinagar Mr. Hargreaves drew up a detailed note, illustrated by photographs, on the work already completed at the Jami Masjid and also advised the Mosque Committee on certain points referred to him. The work of rebuilding the high western wall of the prayer chamber and the mihrab has been started and it is hoped to complete the entire conservation of the mosque by the end of 1925.

SECTION II

EXPLORATION AND RESEARCH

In the field of exploration, it is natural this year to give the premier **Introductory** place to the remarkable discoveries made by the Department in Sind and the South West Punjab ; for it is safe to say that no such epoch-making discoveries have ever fallen to the lot of an Archaeologist in this country. Hitherto India has almost universally been regarded as one of the **younger** countries of the world. Apart from palaeolithic and neolithic implements and such rude primitive remains as the Cyclopean walls of Rajagriha no monuments of note were known to exist of an earlier date than the 3rd century B C, when Greece had already passed her zenith and when the mighty empires of Mesopotamia and Egypt had been all but forgotten. Now, at a single bound, we have taken back our knowledge of Indian civilization some 3000 years earlier and have established the fact that in the 3rd millennium before Christ and even before that the peoples of the Punjab and Sindh were living in well-built cities and were in possession of a (relative!) mature culture with a high standard of art and craftsmanship and its developed system of pictographic writing.

The sites where these discoveries have been made are at Harappa in the **Harappa and Mohenjo-daro** Montgomery District of the Punjab and at Mohenjo-daro more than 400 miles long been known to archaeologists as the find-place of a certain unique class of seals engraved for the most part with the effigy of a bull and bearing inscriptions in an unknown pictographic script. More than half a century ago some specimens of these seals were obtained by Sir Alexander Cunningham and published in his "Report for 1875"¹. Other specimens were subsequently acquired by the British Museum and published by Dr. J. F. Fleet in the *Journal of the Royal Asiatic Society* for 1912. But, though examples of these seals were thus well known to Orientalists, and must have been constantly seen by Mesopotamian experts in the British Museum, the secret of their age and character had baffled all investigators until a few months ago when the fresh materials available from Harappa and Mohenjo-daro enabled the riddle to be partially solved. At Harappa itself excavations had been started at my request by Rai Bahadur Daya Earn Salmi in 1920-21 and the results obtained by him were described in his Report for that year. For lack of funds, however, the operations could only be conducted on a very limited scale and the finds were correspondingly meagre. During the past year the excavations have again been resumed and with decidedly more fruitful results as will be apparent from the summary of them given below. The site of Harappa though manifestly that of a great city covering a vast area and containing many strata of successive buildings, will probably never prove so lucrative as that of Mohenjo-daro, for the reason that

¹ Vol. V, p. 108 and Pl. XXXIII, fig. I.

Harappa and Mohenjo-daro it was further removed from the main centre of the Indus culture in Sindh, and cannot, therefore, be expected to have been so rich in articles of luxury. Like Harappa, Mohenjo-daro has also been known to the Archaeological Department for many years past. But until our recent excavations there was no suspicion that the remains which lay buried there dated back much earlier than the Kushan kings, to whose age belonged a large number of coins found on the surface of the site as well as the casing at any rate of the ruined monument which crowns its highest point. The excavation of this site was begun by Mr Rakhal Das Banerji in 1921-22, and it is to him that we mainly owe the subsequent discoveries that have been made there. But owing to his continued illness no official account of his operations could be published in the Report for that year; and indeed, it was not until the summer of 1924 that an opportunity was given me of seeing the collection of antiquities recovered by him, which I then ordered to be brought to headquarters and compared with the finds from Harappa. That the finds from the two sites belonged to the same stage of culture and approximately to the same age, and that they were totally distinct from anything previously known to us in India was at once evident. So impressed indeed was I by their novel character that I lost no time in publishing an account of them in the *Illustrated London News*, my hope being that through the medium of that widely read journal I might succeed in getting some light thrown on their age and character by archaeologists in other countries. This hope, I am glad to say, was at once fulfilled. In the following issue of the *Illustrated London News* appeared a letter from Professor Sayce pointing out the close resemblance between these objects from the Indus Valley and certain Sumenan antiquities from Southern Mesopotamia, and a week later there appeared in the same Journal a longer article from the pens of Messrs. Gadd and Sidney Smith giving a more detailed comparison of the pictographic scripts and other antiquities found in the two countries. Some of the analogies suggested by these two writers are fanciful, but most of them are undoubtedly correct and there can now no longer be any doubt that the Punjab and Sind antiquities are closely connected and roughly contemporary with the Sumenan antiquities of Mesopotamia dating from the 3rd or 4th millennium before Christ. Simultaneously also the same conclusion was reached by Dr E. Mackay, *Director of the American Expedition* at Kish, who in an unpublished letter to me pointed out the similarity between the ceramic wares found at Mohenjo-daro and at Kish, and also brought to my notice that a seal identical with those found at Harappa and Mohenjo-daro had been discovered in the debris beneath a temple of Hammurabi's time (circa 2100 B.C.).

Now that these important facts of their age and affinities have been established, much interest is naturally concentrated on the discoveries at Harappa and Mohenjo-daro, and there has been not a little wild writing in the Press on the subject. It is very desirable therefore that a full and authoritative account of the excavations up-to-date should be published as soon as possible. On the other hand, it is evident from my perusal of the reports written by the excavators that many pit-falls are likely to be encountered and that it will be safer

not to issue any detailed Memoirs on the subject until the excavations have progressed further and we can feel our way with relative certainty in this new and unexplored field. For this reason I shall probably postpone the publication of the work hitherto accomplished until the close of the season 1925-26, by which time I anticipate that many of our present doubts and difficulties will have been solved. Meanwhile the brief summaries given below of the past year's operations will suffice to give an idea of how the work is progressing. One feature of these remains which seems to me to emerge clearly from the facts before us is that the civilization of which we have now obtained this first glimpse was developed in the Indus Valley itself and was probably as distinctive of that region, as the civilization of the Pharaohs was distinctive of the Nile. In the marvellous forward progress which mankind made during the neolithic, copper and bronze ages, the great river tracts of the then inhabited parts of the world played a most important part, for it was in these tracts that conditions were found most favourable for supporting a dense and settled population—namely fertility of the soil, an unfailing water supply, and easy communications. and it was, of course, among such large and settled populations that civilization had the best chance of making progress. The debt which in the early stages of its development the human race owed to the Nile, to the Danube, to the Tigris and to the Euphrates is already well known. But how much it owed to the Indus and to the Ganges, has yet to be determined. But, though the civilization of the Indus will probably be found to have had its own distinctive characteristics, I surmise that it will also be found to have formed part and parcel of a much wider sphere of culture which embraced not only Southern Mesopotamia and India, but probably Persia, and a large part of Central Asia as well, and which may even have extended as far West as the Mediterranean—where the early Aegean civilization presents certain somewhat similar features.

What these discoveries in India may ultimately lead to, no one can at present foresee, but it is hardly possible to exaggerate their importance for the ancient history of this country. Even within the borders of Mesopotamia itself, the study of Sumerian culture is still at an early stage, and numerous problems await solution. Of the many known sites where Sumerian culture is represented very few have been adequately explored, and although much knowledge has already been gleaned from them, it is clear that there is much more still awaiting the excavator. The majority of scholars hold that the Sumerians who are on all hands admitted to be entirely distinct both linguistically and in other respects from all other races in that region, were an intrusive element in the population; and various attempts have been made in recent years to derive them from one region or another outside and to the east of Mesopotamia. The fact that at Harappa and at Mohenjo-daro, where the present materials were discovered, seals, etc., of Sumerian type are found to lie near the surface in city sites covering very large areas widely separated and remote from the sea, with clear evidences of multiple strata lower down proves that, whatever the history of the Sumerians in Mesopotamia may have been, a culture closely

Harappa and Mohenjo-daro

akin to theirs must have been widely disseminated in the Valley of the Indus, and have undergone a development reaching back incalculable centuries on Indian soil. If, therefore, those scholars are right who consider the Sumerians to have been an intrusive element in Mesopotamia, then the possibility is clearly suggested of India proving ultimately to be the cradle of their civilization, which in its turn lay at the root of Babylonian, Assyrian and Western Asiatic culture generally. It is obviously far too early, however, to regard this as more than a reasonable hypothesis, but the mere stating of the problem shows what fascinating vistas are now being opened up, and emphasises the need for pushing on with the exploration of the Indus sites on an extended scale and with as little delay as possible.

Among the many problems suggested by the new discoveries one of the most interesting will be that of the script in which the seal legends are written. It is manifest from the formation of the characters themselves that originally the writing was a pictographic one, one of the commonest characters for example on our Indian seals bearing still the obvious likeness of a fish. In the Sumerian usage of Mesopotamia, each one of these characters is said originally to have represented a single word, without phonetic element, but pronounced as a monosyllable, the characters being thus analogous to a numerous class of Chinese ideographs in use to-day in the Far East. At a later period the characters appeal to have been used by the Semitic peoples in those regions not only in their pictographic but also in their phonetic value, thus giving us an interesting parallel to the condition of affairs still obtaining in Japan today, where the Chinese characters are sometimes given both the meaning and the (approximate) sound of the original Chinese, sometimes only the meaning of the original with the pronunciation of the corresponding Japanese word, while sometimes only the Chinese pronunciation of the character, divorced from its meaning, is used phonetically as a sort of syllabary wherewith to write the polysyllabic words of the local language. That this multifarious application of the characters composing a script may lead to complications rendering its decipherment extraordinarily puzzling at times, is obvious, and it will be no easy problem to determine which method of reading the characters is to be followed in the case of our Indian records from Harappa and Mohenjo-daro, as we have at present no means of determining whether the script was used in India in its pictographic or its phonetic value or in a combination of the two. In India the materials are at present too scanty to permit of even this initial problem being dealt with and it is essential that they should be augmented as extensively as possible, if we are to make progress in the direction of their interpretation.

Let it be added that the funds available this year have been so meagre that the excavators have been able to do little more than dig a few more trial trenches on the surface of the vast mounds at Harappa and Mohenjo-daro. What is now required at both these sites and at others of the same age in Sind and the Punjab and Baluchistan is a well organised and comprehensive campaign of excavation conducted on a scale comparable to that attained at

Knossos. From a digger's point of view, Mohenjo-daro is an almost ideal site, **Introductory** and when adequate funds are forthcoming for its excavation there is no doubt that it will prove a rival to that or any other site of the prehistoric age.

"At Mohenjo-daro work was confined this year to an altogether new **Sind** mound, to the north of the modern cart track, which in contradistinction to the sites previously excavated was occupied almost entirely by secular buildings. *Mohenjo-daro* After clearing the surface of brushwood and jungle digging operations were begun by sinking a 10' trial trench in the centre of the mound running east and west. Before two feet of earth had been removed a number of brick walls were exposed with cross walls at intervals indicating the existence of a series of rooms. The excavation was then deepened till the floor level of the rooms was reached, roughly at a depth of 7 feet below the original ground level. Besides giving an idea of the nature of the buildings to be found here this first trial trench also yielded a variety of interesting minor antiquities, including three square seals of steatite engraved with the device of a *lhinoceros* or unicorn and bearing a few letters in the Indo-Sumerian pictographic script, already familiar from other finds from this site as well as from Harappa.

"In a second trench sunk at right angles to the first one and running north and south a well with a system of connected masonry drains and watch channels was exhumed (Plate XVII, *d*) Excavation here was extended to a distance of 160 feet north of the first trench and brought to light a succession of well built domestic dwellings. The very limited funds available for excavation at Mohenjo-daro did not permit of an all round extension of the trial trenches so as to expose the complete structures to which the walls and looms belonged. Digging operations were, however, extended along the south of the main trench, to a distance of 40 to 50 feet west from the spot where the well and bath drains had been discovered. An idea of the nature of the remains here uncovered can be obtained from a view taken from the west and another taken from the north-east (Plate XVIII *a* and *b*) Portions of five buildings were brought to light in this area separated one from the other by narrow streets (Plate XVII, *c*). That they served as residential houses is obvious, and one of their most striking features is the substantial character of their construction. The walls are generally built of solid brick masonry in mud mortar the size of bricks in common use being 11" x 5 1/2" x 2 1/2" the ratio of the length, breadth and thickness thus being 4 : 2 : 1, which is admirably suited for the purpose of bonding. Two well baked bricks of larger dimensions measuring respectively 17" x 8 1/2" x 3" and 10" x 8" x 2 1/2" were met with in the course of digging, but they cannot be definitely assigned to any of the existing buildings. In two blocks a number of niches measuring from 2' to 2' 9" in length and 9" to 1' in depth, have been left in the thickness of the walls. The floors of several rooms were paved with brick tiles, the pavement being often sub-divided by brick-on-edge partitions. Rectangular masonry piers measuring from 5' to 7' in length and 3' to 4' in breadth were discovered in four places and were probably the bases of pillars on which the roof was supported.

Western CircleMr. Madho
Sarup Vats

"The site of Mohenjo-daro is proving very rich in finds and the present year's excavations have been particularly prolific in certain classes of minor antiquities. Especial mention attaches to the discovery of the square steatite seals of the Harappa type of which ten more specimens were secured this year as against three discovered at the same place during the excavations of 1922-23. Seven of these seals are illustrated in Plate XIX. They are of various sizes ranging from 9/10" sq. to 2" sq. and in most cases bear the effigy of a bull and a pictographic legend. Among other antiquities recovered at the site may be mentioned a large number of chert implements, a collection of shell and mother-of-pearl objects, terracotta toys, and painted pottery of different shapes and patterns, various kinds of domestic objects of stone and copper, and a number of polished black stone cubes probably used as weights."

Northern CircleRai Bahadur
Daya Ram
Sahni
Harappa

"The exploration of the ancient mounds at Harappa was resumed again in the season under review and good headway was made with it. It is evident, however, that a great deal of further excavation will be necessary before we can hope to gain anything like a clear understanding of the unfamiliar monuments with which we are dealing. The first task during the past season was the expansion of a part of the long trench drawn across site F in 1920-21, where certain well-preserved walls pointed to the possible survival of a large dwelling. On the resumption of work at this point one of the walls referred to was followed up for a length of about 80 feet. There were also two other walls in a fairly good condition running parallel to it on either side. These, however, turned out to be all that had survived of the buildings. That the structure was an important one is evidenced by several interesting objects which came to light in it. In 1920-21 it had yielded a well-preserved seal and a pair of faience bangles of excellent workmanship, and it has now given us three more seals (Plate XIX) and the painted neck of a large earthen jar (Plate XXI, a). The decoration on the latter, which was executed in black before the vessel was burnt, consists of a broad band with three rows of interlaced circles and a scalloped border at either end. The patterns beneath this band represent reeds or ears of corn. Of the seals found in this area the best preserved is No. A336. It bears the figure of a unicorn standing to left and an inscription in the same "Indo-Sumerian" characters as are found on other seals from Harappa and Mohenjo-daro.

"Four other trial trenches were dug in site F in places which appeared most favourable for examination. One of them to the west of the main trench disclosed at the depth of about 8 feet a well-preserved water reservoir lined with brick and provided with a narrow covered channel (Plate XX, fig. a). By the side of the tank was standing a large earthen jar with its pointed bottom fixed in the ground. It was filled with earth in which were several smaller jars and terracotta figurines. The exact purpose of the reservoir has not yet been ascertained. In one of the sites explored at Mohenjo-daro in Sind, Mr. Banerji brought to light a tank analogous to the one found at Harappa and is of opinion that it was used as a *charammtakundu*, i.e., a receptacle for the holy water used for the washing of the sacred image,

'but **in** face of our almost complete ignorance of the people **ami** religion to **Punjab** which these remains belong this opinion cannot be regarded as more than a **Earajypa** mere surmise. Another trial trench which had to be cut through a thick layer of earth and debris revealed a huge mass of broken earthen vessels of different shapes and designs varying in size from small earthen bowls and ciucibles to large jars of the type referred to above. These vessels must undoubtedly have been used for domestic purposes. Other portable objects found here included three seals (Plate XIX, figs. Hi, 17 and 19) two of which are composed of faience and contain only geometric patterns. The third seal is m ivory and contains a legend of one line without any animal device. What appears to be a faience chess-piece also deserves mention. The structural remains brought to light in this trench consisted of two thick walls running parallel to each other at a distance of about 2 feet. They are broken at both ends and contain no openings for doors. These walls came to light at the depth of 11 feet below the surface but above them and intersecting them at tight angles were two others that must be assigned to a considerably later date. Two other trenches at this spot revealed a corner of a brick building in which two outthens were vessels containing human bones **lav** buried. These are the only **utns** so far met with at Hatappa.

"The opetatinns were then shifted to the mound nunked A—B in General Cunningham's plan, on the east side of which some tal diggings had been earned out in the year 1920-21. The object of this year's work was to obtain a general idea of the stultification of this lotys mound before opetdtions on a larger scale. Were embarked on for this purpose a trench about 140 feet long and 25 feet wide was drawn in continuation of the previous excavatoinns referred to above. Two other trenches were also sunk at light angles to it towards the west. Owing to the deep accumulation of earth and msuficiency of funds the virgin soil could not be reached anywhere. A poition of the mam trench was, however, carried to a depth of some 20 feet above the surrounding fields or about 35 feet below the highest point of the mound. This resulted in the determination of as many as seven successive layers of buildings indicating a very prolonged occupation of the site with, no doubt, other strata still unexposed below them. In the topmost stratum, which occurred at the depth of 13 feet from the summit, of the mound, was revealed a round brick granary standing about six feet high. By the side of the granary was lying an earthen vase (Plate XXI, fig. b), 5" in height, and painted in black colour. With a low of four winged antelopes with long antlers stretching back over their bodies. The next three strata were devoid of any structural remains though the lowest of them was packed with a large number of undulating stone rings of the same character as those described by General Cunningham. What purpose they served remains a mystery. In the fifth stratum from the top two brick structures were observed. One of these is a square room with thick walls **and** paved interior which was divided into two smaller chambers at a later **date**. A narrow covered dram in its south wall **and** two low masonry benches on the inside seem to point to its having been used as some sort of an image shrine.

**Northern
Circle**Rai Bahadur
Daya Ram
Sahni

though it is difficult as yet to say whether idol worship existed in those early times. In this connection it is interesting to observe that the operations of 1920-21 brought to light at this very spot the defaced terracotta base of a statuette which might have been an object of worship. The other structure found on this level is a confused mass of brick remains in which a thick wall, thirty feet in length, resting partly on a solidly built platform stands out prominently. A small square seal of white plaster in perfect preservation (Plate XIX, fig. 21) was sticking to this wall. The next lower stratum is represented by the somewhat better preserved structure which had been laid bare in this area in 1920-21 and a number of tunnels left by the brick diggers. The seventh stratum will probably be found to be occupied by a building of considerable magnitude though so far only a portion of its floor has been exposed. This floor consists of two courses of brick laid as stretchers and headers on a strong substratum of pounded brick. As it was considered inadvisable to dismantle this structure, the examination of the earlier strata was postponed to the next season when it is proposed to extend the operations to a wider area. Several small objects were found on the floor mentioned above, the most interesting of which is a seal in fine-grained yellow steatite with a deep cut inscription, but no device (Plate XIX, fig. 15).

"The sites F and A—B and some of the other mounds bid fair to yield many more valuable relics and the deep ravines cut by ram water afford convenient places for reaching the earlier strata with comparatively little trouble. One of these ravines immediately to the south of mound A—B was partly explored during the recent operations and disclosed several interesting relics. One is a beautifully shaped but incomplete vase (Plate XXI, c) the upper part of which is adorned with a branch of a *pipal* tree. Another object is a handy combination of three copper instruments (Plate XXI, 22) soldered together by their looped ends. They are a sharp-pointed awl, a double-edged knife and a pair of pinies possibly intended for surgical instruments.

Bharwain

"In June 1922 the Director General was informed of the existence of a remarkable collection of paintings of the Kangra School in the possession of a Mahant at the village of Dharmasala, 2 miles distant from Bharwain on the road from Hoshiarpur to Dharmasala and I was directed to inspect the pictures and to try to acquire them for the Department. This I did in the following year. The present Mahant, who is an intelligent youth of about fourteen years, gave me an interesting account of the history of his temple and showed me a *farman* dated in Samvat year 1727, in the reign of Aurangzeb. The paintings in his possession, which comprise two separate sets, are said to have been presented to Mahant Thakurdas, grandfather of the present Mahant, by a certain Judge in Jammu about 35 years ago. They are in an excellent state of preservation and fine examples of the Kangra School of painting. I did not succeed in persuading the Mahant to present or sell these paintings to the Archaeological Department, but with his permission had nine of them photographed.

" One of the two sets referred to above illustrates in correct sequence each of the thirty-one stanzas of the *Siva-Mahimna-Stotra*. The composition of this poem is attributed to Pushpadanta, a *gandharva* who had incurred the displeasure of Siva by listening to his secret conversation with his consort Parvati, and talking about it afterwards. He was condemned to become a mortal on the earth and was born at Kausambi as Katyayana-Vararuehi, the celebrated grammarian. The name of the author of the paintings which are inscribed with the text of each verse they illustrate, is not known.

Punjab
Hindu and
Buddhist
Monuments
Bkarwan

" Five pictures of the *Siva-niazhmna-stotra* series were photographed. One of them which illustrates stanza 17 of the hymn, depicts Siva seated with Parvati on the Kailasa mountain. In front of the god We observe the king Bhagiratha standing with hands folded and praying the deity to send down the river (ranges to fertilise the earth and to till up the seven oceans again, which had been drunk up by the sage Agastya. The next painting, which depicts verse 18, shows the god starting on a campaign against the demon Tripura. On this occasion, Siva made the earth his chariot, Brahma his charioteer, the sun and the moon the wheels of his chariot, the mountain Meru his bow and the god Vishnu the arrow. The Gandharva-*raja* considers all this elaborate preparation for the destruction of an insignificant being to be unnecessary but justifies it on the ground that the deity has not to obey the dictates of any body. The third picture has for its subject the episode (verse 19) of Vishnu receiving from Siva his favourite weapon, the *chakra* (Plate XXII, c). In the painting we see the five-headed and four-armed Siva seated with Parvati on a lotus seat and in front of him the four-armed Vishnu with a tray containing a thousand lotus flowers which he has brought as a present to Siva. One of the lotus flowers is miraculously stolen by Siva with a view to testing the devotion of his petitioner. Vishnu rises equal to the occasion and as his eyes are as beautiful as lotus flowers he immediately plucks one of them out and substitutes it for the missing flower. The next picture illustrates verse 22 of the *stotra*. Siva is disgusted to see Brahma pursuing, in the form of a deer, his own daughter Satarupa who has assumed the form of a doe, and cuts off one of the heads of the offending deity who is reputed originally to have had five heads. Brahma is ashamed of his conduct and the consequent humiliation and turns into a *nakshatra* named Mnga-siras on which Siva's arrow at once transforms itself into another *nakshatra* named Ardra, in order that it may continue to harass its victim (Plate XXII, d). The picture is a faithful delineation of the story with the only difference that Brahma and his daughter are shown in their original forms instead of those of a deer and a doe. The subject depicted in the last painting that was photographed is the universal aspect of Siva. Wise men praise the god separately under the names of the Sun, the Moon, Vayu, Agni, etc. Pushpadanta takes exception to this, because does not Siva embody in himself every thing that exists i

" The other set of paintings in the possession of the Mahant at Dharmasala includes 50 pictures devoted to the Krishna legend. The Mahant informed me

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that they illustrate a Sanskrit poem of the name of Viharisataka. This work seems to be unknown, but there is a book called Vihari-satsei written in Braja-bhasha in Samvat 1719. Four pictures of this series were photographed. They depict respectively the well-known children's game of

moon

Chintpurni

"Chintpurni is the name of a small village two miles west of Bharwam. It is famous for a temple of Durga under the name of Chhinnamasta goddess, because Durga is said to have cut off one of her heads to feed a certain demoness. This episode is painted in detail over the main entrance to the temple complex. The temple, which consists of a nearly square enclosure, has been renovated in recent years. A part of the original shrine, which is said to have been erected about a hundred and fifty years ago, has, however, survived and is decorated with several wall paintings representing Hindu mythological scenes. One of the episodes, which is not of frequent occurrence, depicts the slaying of Sahasrabahu, the king of the Haihayas by Parasurama, for having carried off by force the Kamadhenu of his father Jamadagni.

The prehistoric excavations at Bilsar, started in the year 1922-23,

were continued at site F. The chief object of these operations was to ascertain whether the temple of Mahasena mentioned in the duplicate inscription of the time of the Imperial Gupta king Kumaragupta, engraved on the two round pillars at Bilsar, was really situated to the west of the *torana* as had been suggested by General Cunningham. A small area in this direction was partially excavated in 1922-23. This clearance was extended during the year under review and a rectangular area amounting to about 105'X 80' was excavated down to the level of the original floor of the temple as disclosed on both sides of the *torana*. The entire extant portions of the round pillars which were meant to be visible above the ground have thus been exposed to view. It should be observed that the bases of both of these pillars are square, as is invariably the case in the Gupta pillars known to us. The missing portions of the shaft and the capitals which they supported were unfortunately not found. They presumably lie buried further to the west and a search will be made for them as soon as more funds become available. In the matter of structural remains, the excavations brought to light some brick ruins in a coarse style of construction and the remains of one or two rooms of the Kushan period which it was not considered advisable to follow up.¹ There was, however, no trace of the temple of Mahasena anywhere in the area excavated, which would certainly not have been the case had the temple lain to the west of the *torana*. This confirms my view expressed in this report for the preceding year that the temple of Mahasena must be looked for in the opposite direction.

¹Excavation on this side is unfortunately barred by houses which occupy the area to the east of the *torana*. The only portable objects found were some well-preserved earthen vessels, a few carved bricks and a terracotta tablet containing the Buddhist formula *ye dhamma*, etc. This sealing is the only

Buddhist relic unearthed at this site, but it is enough to establish the existence of Buddhist monuments at Bilaar. These antiquities have been deposited in the Provincial Museum at Lucknow. One of these object is a stone plaque (ht 51") m Gupta style which bears in high relief a two-armed goddess with an oval halo, seated on a cushion, and holding a child on her left thigh. In the absence of any distinctive emblems, it is impossible to identify the figure with certainty It might be Duiga with Karttikeya. Another relic which deserves special mention here is a round hollow terracotta flesh rubber which was acquired from an inhabitant of the village who had found it on the same site The larger face of the object is roughened with indentations in concentric circles, made obviously by pressing the wet mould against a sieve with fine meshes The narrower side is embossed with a skilfully executed device consisting of a man standing with his legs inserted into the mouths of two crocodiles with upraised tails.

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At Sarnath no systematic excavation was carried out during the year 1907 under review beyond the clearance of the greater part of the first fore-court of the temple of Queen Kumaradevi and the digging entailed in the cutting of the channel to the east of the second gateway of this temple, to which a reference has been made in the Conservation. The first fore-court has been dug to its original level, where a number of small rooms came to light, the foundations of which are constructed with stones obtained from the temple of Queen Kumaradevi. A number of small objects also were picked up here including some copper vessels which came to light when the debris around the second gateway was being cleared away. These copper vessels are being cleaned and as they were found after the close of the financial year, they will be dealt with in the next year's report

Sarnath

" Lakha Mandal is a small village in Khat Baundar of J aunsar-Bawar standing at the junction of the Maidgadh or Kuthar nala with the Jumna, at an elevation of 3,650 feet above the sea level. It lies on the extreme edge of the Dehra Dun district and is a place of considerable archaeological interest. The best way to reach it is via Chakrata Cantt from where a narrow steep path leads to Lakha Mandal which is about 22 miles distant. The last two miles of the journey from the hamlet of Bhattar are particularly difficult, especially on a wet day. Lakha Mandal is picturesquely situated in a valley from where the visitor can obtain a pleasing view of the snow crowned mountains. Jamnotn, the source of the Jumna, is stated to be 30 miles from this place and is frequently visited by the inhabitants of Lakha Mandal, who congregate there in large numbers on the occasions of festivals held in the months of Baisakh and Sravana

Lakha Mandal

" In ancient times Lakha Mandal possessed a large number of temples dedicated to Saiva and Vaishnava deities Only one temple, however, (Plate XXII, a) has come down to us It stands in the middle of the village, and consists of a square enclosure surrounded by a wall constructed with the material of ancient temples. The buildings on the site are a modern dharmasala, a wooden shed for pilgrims, an ancient temple which is standing intact and a

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roofless chamber marking the site of another ancient sanctuary. The principal temple occupies the southern portion of the enclosure and faces, towards the east. It is built in the same northern Indian style as the sanctuaries at Dwarahat, though it seems to be a century or two later in date. The principal shrine consists of a cella 10' 8" square externally and 5' on the inside. The ceiling is flat composed of stone slabs as is the case at the Sun temple of Katarmal near Almora. It is dedicated to Siva and the original linga is still worshipped. In harmony with the character of the temple, we notice a figure of Lakulisa on the lintel of the cella, Chamunda on the right jamb, Mahish-asura-mardini in one of the central niches on the outside and smaller images of Karttikeya riding a peacock, Ganesa and Kubera higher up on the walls. In the cella are collected a large number of well-preserved Brahmanical images removed from other ancient sites and worthy of detailed examination. The original floor around the temple and over the rest of the courtyard is hidden under a pavement constructed in modern times with stones obtained from this and other ancient sites.

"The other ancient temple which stood on the northern portion of the site has completely disappeared and I was unable even to trace its foundations. In its place we now find a modern roofless chamber measuring 21' X 20', in which the original large-sized black stone linga with its square pedestal is still standing in its original position. This temple appears to have been a magnificent edifice, but whether it was identical with the sanctuary mentioned in the large stone inscription of the Princess Isvara lying in the temple described above is as yet difficult to say. Unlike the temple in the southern half of the site, this shrine was built in slate stone, a fine grained black stone possibly touchstone, being employed for the numerous statues which adorned the monument.

"In front of this shrine are seen two well executed black stone images half buried in the new floor referred to above. Locally they are described, as the Pandava brothers Arjuna and Bhishmasena. As this identification appeared for obvious reasons to be impossible, I had one of these images completely exposed. The result was a standing image (ht. 5' 10" exclusive of the tenon) carved in the round (Plate XXI, 4). The statue is fixed in a square masonry basin provided with an outlet for the escape of water and is evidently standing, *in situ*. I had no time to expose the lower portion of the other image but there is no doubt that both together formed a pair, though it is difficult to say whether the second image is now standing in its former position. Each of the images holds a mace and has every appearance of being a *dvarapala*. Moreover one of these images has a defaced epigraph in front of its base which seems to read Vijayah. I have therefore no hesitation in identifying these images as the door-keepers Jaya and Vijayah which flanked the entrance to the temple.

The material of the temple has become scattered but door-jambs, amalakas, frieze-stones and a large number of statues in black and brown varieties of stone remain on the site. They include a black stone slab bearing the seven

Mothers in relief with Lakulisa at one end and Ganapati at the other. There are also two or three well-preserved representations of Siva piercing the demon Tripura, and other reliefs depicting the dance (*tandava*) of Siva. The deity has eight arms which hold various symbols. A peculiarity of this relief are two female musicians playing on a lute and a pair of tabors respectively. A more interesting sculpture in this collection is a bas-relief (ht. 3' 6") which represents a four-armed male and a two-armed female deity standing side by side with oval halos round their heads. One of the hands of the god holds a staff, the top of which is broken off, but which was probably a trident. In two of the remaining hands the deity holds a lute. The female holds a garland between her hands and there is the bust of a bull with a bell round its neck at the lower right corner of the slab. According to Mr. T. A. Gopinath Rao's *Hindu Iconography*, the male deity should be identified as Virabhadra, a *gana* of Siva, though he quotes no authority for his view. I learn from Mr. H. Krishna Sastri that the *vina* is the distinctive emblem of Dakshinamurti but not of Virabhadra. It appears to me that the deity in question is neither the one nor the other, but most probably Siva with his consort Parvati (PL XXI, .)*

"The Lakha Mandal temple was brought under the protection of the Ancient Monuments Preservation Act in the year 1909. A great deal of conservation work is needed including the removal of the modern floor from the courtyard and the restoration of the original floor. This work will possibly reveal foundations of other shrines to which the numerous images mentioned above belonged. For the rest of the sculptures a suitable shed at a convenient spot in the temple enclosure would be extremely desirable.

"Ohakranagar was visited at the suggestion of Col H R Nevill, C.L.E. ~~Chakranagar~~ I.C.S., Collector of Agra. This is the name of a small village on the south bank of the Jumna in Tahsil Bharthna, District Etawah. It can be approached from Etawah, whence a metalled road leads to Bakewar, distant 12 miles and thence to Lakhna about 2 miles. After that the visitor proceeds by a kaccha road to Ohakranagar which is about 8 miles distant from Lakhna. There is a comfortable Forest Bungalow at Ohakranagar. The modern village is little worthy of note, but the old city, the site of which lies 2 miles to the west of the present village, must have been a place of great antiquity and importance. Locally these ruins are believed to represent the ancient capital city of Ekachakra, where, according to the 13th Book of the Mahabharata, Bhima, one of the five Pandava heroes, destroyed a man-eating demon named Vakasura. Ekachakra is also mentioned in the Mahavanso as one of the chief cities of India in the time of the Buddha. General Cunningham was inclined to identify this ancient city with Ara in the Shahabad District, though he admits that there are no ancient remains of any kind at Ara or its neighbourhood, and that all his enquiries failed to discover any trace of antiquity. The site at Ohakranagar is very large and appears to be one of the most ancient sites I have come across. Unfortunately only a few inscriptions of a comparatively late date have so far been noticed at Ohakranagar. These are short

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votive records inscribed on statues of Jain Tirthankaras which are said to have been found in the ancient remains near Chakranagar and are now worshipped in a modern Jain temple in that town. These images were installed on the same day in Samvat 1335, but make no mention of the old city and throw no light on its ancient history.

"The ruins consist of a vast *hera* about three miles in circuit and visible from a long way off. In all probability the site was originally occupied by a walled city surrounded by a ditch on three sides, the fourth side being protected by the Jumna river. No portions of the old enclosure walls are now visible anywhere though their position is clearly marked at some places by continuous lines of mounds strewn with buck-bats and potsherds. The inner citadel is divided into two portions by a lavne running down to the river on either side. The portion adjoining the river is being gradually cut away by the river, though what remains is still worthy of examination. The other portion of the citadel which is standing to a great height appears to be the most promising part of the site for exploration. In an exposed section of this mound Col Nevill discerned a series of well defined strata the lowest of which contained very large burned bricks, some of which bore ancient Brahmi inscriptions. In one of the lower strata Col. Nevill found a copper coin of Menandei, a number of seals and sealings and some good terracotta objects. One of the sealings was sent to me for decipherment some time ago. It contains a seated bull and below it a legend of from very minute *uksharm*, in Brahmi characters of the Kushana period, which read *Panchasa m dh*. The meaning of the legend is not clear. It may be an official title or possibly the name of a person. I myself examined the precipitous side of the mound with care but did not find any inscribed bricks in it. Perhaps they have fallen down and been buried. The largest bricks noticed in the remains at my visit were 18" in length and 3" in thickness. No well preserved monuments are visible anywhere in these ruins except a magnificent well built of *kawhir* blocks about 22 feet in diameter, the stonemasonry wall being more than 8 feet in thickness. I also noticed in the ravine mentioned above a polygonal *llnga* with a few fragmentary sculptures placed around it. These ruins were declared protected under the Ancient Monuments Preservation Act in 1914, and arrangements will be made for their exploration as soon as practicable."

Kasia

"Kasia was again visited in August 1923, when the Superintendent had the honour of showing His Excellency the Governor of the United Provinces over the Buddhist ruins. These interesting remains stand in urgent need of repairs. A few years ago Mr. Khree Za Rhee, representing the Buddhist community of Calcutta had offered to pay for the restoration of the great Parinirvana stupa and the shrine in which the well-known black stone image of Matha Kuar was originally installed. An estimate amounting to Rs. 11,741 was prepared and the donor deposited in the Government treasury at Gorakhpur the first instalment of Rs. 5,000 in 1920-21. Owing, however, to an increase in prices of materials and labour, the estimate had to be revised two or three times, and the estimated cost rose to Rs. 26,766. Mr. Khree Za Rhee was

informed of this and requested to state how he proposed to defray the balance of the amount required. In spite of repeated reminders from the Public Works Department of the "United Provinces, Government, no reply had yet been received from him and the local Government have suggested that the sum deposited by Mr. Khēe Zā Rhee should be refunded to him. As the Buddhist Temples at Kasia have been accepted by the Government of India as a Central Charge, it is necessary to arrange for their conservation from (Central) Revenues at an early opportunity. The most pressing need is the provision of a suitable system of drainage "

"Thanks to the removal of the Small Cause Court which occupied the central area of the Shanwar Wada at, Poona, it has now become possible to proceed with the excavation of the old Palace Buildings referred to in previous Reports. During the year under review a sum of Rs. 7,800 was allotted for this undertaking and substantial progress has been made with the removal of what remained of the modern buildings as well as of the accumulated earth and debris in which they were enveloped. Entering the Palace on the south side of the first courtyard, where four finely dressed stone pillar bases had previously been uncovered, and proceeding towards the inner courtyard, a porch has now been exposed to view from the centre of which a paved stone passage way leads to a long open verandah running at right angles to it. This verandah is approached by a flight of five steps and lies immediately in front of the Palace. At this point indications of ten square pillar bases have now been brought to light. At the east end of the verandah is a small room, and at the west a second verandah runs lengthwise facing the great fountain known as the Hazari Karanja, while on either side of the porch referred to have been found remains of other verandahs also. The main walls of the inner Palace have now been completely exposed and prove to embrace an area of 130 feet square, while within them are many other lesser walls subdividing the interior into a series of rooms. Besides these buildings several terraces have also been revealed as well as traces of various tanks, water channels and fountains with their inlet and outlet pipes (Pl. XXII, b) "

Owing to my absence from India on leave during the summer of 1923, it was not possible for me to include in the Report for 1922-23 an account of the work done at Taxila. In the present report, therefore, I shall deal with the results of my excavations here not only during the year under review, but during the preceding year also. Unfortunately the drastic reduction effected in my budget by the Jönköpings Commission had left little margin for excavation or indeed for anything except the bare maintenance of the more important national monuments. All, therefore, that could be accomplished at Taxila during these two seasons was the excavation, partial or complete, of five Buddhist monasteries and the further clearance of certain structures in the Sirkap. Of the Buddhist monuments the most interesting was that unearthed in a mound called Pippala (Pl. XXIV) situated at the foot of the hills between Mohra Moradu and Janhan, about 400 yards south of the road leading to the latter place. The remains brought to light at this spot are of two

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Taxila cells

distinct periods. To the east is the courtyard of a monastery dating from Kushan times and consisting of an open quadrangle in the centre with ranges on its four sides. The courtyard is the basement of a square stupa facing north and close beside it the ruins of three other smaller stupas. This early monastery, which is constructed of diaper masonry of the typical Kushan pattern, must have fallen to ruin before the 4th century of our era, for at that time a second monastery was erected over the western side of it, completely burying beneath its foundations all that remained of the old cells and verandah on this side. At the same time also the rest of the early monastery was converted into a stupa court by dismantling and levelling with the ground everything except the stupas in the open quadrangle and the back wall of the cells*, which was now to serve as an enclosure wall—probably five or six feet in height—lor the new courtyard. Later on another small stupa (G on plan) was constructed near the north-east corner of this court where it rests on the foundations of the cells of the early monastery numbered 4, 5 and 6 on the plan. The only small antiquities recovered in this part of the excavation were a coppei coin (illegible) found in the core of stupa No. G and some remains of kanjur pilasters and brackets with bulls seated back to back and a few stucco heads fallen from the other stupas.

The later monastery is built of heavy semi-ashlar masonry and is exceptional! well preserved. Though its scale is considerably smaller, its plan is generally similar to that of the monasteries at Jauhan and Mohra Moradu. It comprises, that is to say, a court of cells on the north with a Hall of Assembly, kitchen and refectory on the south and the converted stupa court described above to the east. The Hall of Assembly, kitchen and refectory resemble the corresponding chambers at Mohra Moradu and Jauhan, but one feature worthy of notice is that the dividing wall between the kitchen and dining room is constructed not of solid stone masonry like the outer walls, but of rubble stone and mud resting on a low plinth of stone. The same method of construction is also followed in most of the interior walls of the Court of Cells, the stone plinth being only a foot or two in height and the wall above it being composed of rubble stone loosely laid in mud and, no doubt, originally covered with mud plaster. The method of construction here exemplified is particularly interesting, as it explains why so many of the walls at Taxila have been found standing to a height of only one or two feet and when excavated presented an almost dead level surface at the top—the fact being that they formed merely the foundation plinth for mud walls which for the most part had become completely disintegrated. I had long suspected this method of construction, but hitherto had not been able to discover definite proof of it. The Court of Cells was of two storeys and consisted, as usual, of an open quadrangle with cells for the monks on its four sides and a pillared verandah, two storeys high, in front of them. In the centre of the court was a rectangular depression about a foot in depth paved with stone which received the rain water from the roof and from which it was carried out

through a drain on the western side. Access to the upper storey (which has now entirely perished) was provided by a flight of stone steps which ascends at the side of the passage way leading to the kitchen and Hall of Assembly. Of the twelve chambers now standing on the ground floor one, on the eastern side, served as an entrance lobby from which a double flight of steps descended to the court of stupas on the east. In another cell at the south-east corner (31) was found a fine example of a stupa in almost as perfect preservation as that in the monastery at Mohra Moradu (Plate XXIII. fig. 4). This stupa and the cell in which it stands merit particular notice as the floor level of the cell is $2\frac{1}{2}$ feet below that of the rest of the monastery, and this circumstance as well as the character of the stupa itself leave little doubt that the monument dates from a period long anterior to the building of the monastery. I surmise that, like its counterpart at Mohra Moradu, the stupa was built originally in one of the cells of the early (Kushan) monastery and then incorporated into the later monastery when the latter was erected on the ruins of its predecessor. As it stands, the stupa is about 8 feet in height and consists of three diminishing tiers, the topmost surmounted by a dome and originally crowned by an umbrella, many pieces of which were found lying at its side. The lowest tier was once decorated with a series of Ionic pilasters alternating with lotus rosettes but the Ionic pilasters were afterwards covered up by a coating of plaster and replaced by somewhat coarser pilasters of the Corinthian order (Plate XXI, fig. 5). The second tier was plain save for the figure of a Dhyani Buddha on the north side (Plate XXIII, fig. 3) and at the base of the dome was another series of eight seated Buddhas, of which two on the south side are still partially preserved. Traces of gold red and black paint were still visible on the monument, at the time of its excavation. Originally the stupa cell was entered through a doorway opening from the courtyard, but this doorway was subsequently blocked up and replaced by a window at a higher level. It remains to add that outside this monastery on the north side is another small stupa built of diaper masonry in the same style as the early monastery, and later on enclosed by a wall of semi-ashlar work forming an ambulatory passage around the monument. The low reliefs adorning the base of the stupa are preserved to some extent on its east and south sides and exhibit the same class of workmanship as the figures on the south side of the Mohra Moradu stupa though they are by no means in such good condition (Plate XXIII, fig. 5). Among minor antiquities of interest from this monastery were a circular stamping die of terracotta with linear and floral designs from room 21 (Plate XXIII, fig. 2), a small stone grinding mill from the kitchen, a miniature umbrella of copper; an antimony rod surmounted by a bird; an iron key and part of lock, and a variety of coins including punch-marked and issues of Sasan, Kadphises I and II, Kamshka, Vasudeva, and a number of Sassanian coins of Hormazd II, and Shapur II and III. The excavations on the north side of the monastery yielded, besides other objects, several arrow heads, both flat and three or four sided, a mother of pearl ring, a crystal ear reel and a broken silver casket.

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The four other Buddhist monasteries which I have excavated are situated little to the south-east of the Dharmarajika Stupa : one on the mound called Khader Mohra (compare the map, Plate XXX in my "Guide to Taxila"), the second and third about 500 yards to the east and south of it respectively, and the fourth completing the square, as it were, at the south-east corner. Though by no means so well preserved as the remains at Pippala, the buildings laid bare on these four sites are nevertheless of considerable interest, and help to throw further light on the evolution of Buddhist monastic buildings as well as on the local methods of building construction. Unfortunately the limited scope of this Report does not permit of my including in it the plans and photographs which are indispensable to a lucid description of these monuments, and I shall, therefore, defer my account of the excavations on these sites until I can issue a separate Memoir on the subject. In the meantime, however, I may note that all four monasteries, together with the principal stupas attached to them, were originally founded during the Kushan period but subsequently added to and repaired, their last renovation having taken place at least as late as the 4th century A.D. In the earliest parts of these structures the masonry employed is of the small and large diaper pattern, and in three of the buildings the same feature is exhibited that we observe at the Pippala monastery, viz., the outer walls are built of solid stone throughout and the inner ones of rubble in mud on a masonry plinth. Later on some of the plinths were made of pebble with an infilling of *kanjur* but for the most part the masonry is either of the diaper variety, characteristic of the Kushan period, or of the semi-ashlar kind which was in vogue during the 3rd and 4th centuries A.D. The layers of charcoal and burnt clay which covered most of these remains besides other signs of burning in the cells and courtyards make it only too clear that one and all of them had been destroyed by fire (a fate which sooner or later seems to have overtaken most of the buildings of this class at Taxila) and it is not surprising, therefore, that the only small antiquities that have survived are those which are more or less indestructible. Among them the coins of the following issues especially deserve notice. From Monastery A, local Taxilan (*Obv* lion, svastika and tau-rine) and issues of Vasudeva; from Monastery B, various issues of Soter Megas, Kadphises I, Kamshka, Huvishka and Vasudeva including a hoard of 241 of the last king (*Obv* king at altar; *Rev*. Siva and bull); from Monastery C, Azes I and II, Gondophares, Soter Megas (10 in one lot), Kadphises I, Kamshka, Huvishka and 2 uncertain issues; from Monastery D, Azes II, Hermaeus, Soter Megas, Kadphises, Kamshka, VaBudeva, Vakka-Deva (type *obv.* elephant; *rev.* lion). Among other noteworthy objects were a copper statuette of Maitreya, a copper *triratna* surmounted by three chakras, two small Gandhara reliefs (one portraying a well modelled monk's head and the other a cock), a collection of twelve copper vessels and another collection of twenty one earthenware vessels of various shapes.

The remarks made above as to the indispensability of plan B and photographs to a lucid description of these monuments apply with equal force to

ray excavations in the Scytho-Parthian city of Rirkap Little by Little the Northern Circle Taxila various areas excavated during past years in the Lower City are being linked up streets and houses and shrines are being systematically cleared, and eventually (in four or five years time, if adequate funds are forthcoming) there will have been disclosed a complete plan extending over some thirty acres of this part of the ancient city in the meantime, little would be gained by giving a piecemeal account of the progress made from year to year, and indeed, such an account could hardly be made intelligible without republishing in each Report a plan of the whole complex, and it would certainly be both tedious and perplexing for the reader to follow For the present, therefore I shall do no more than remark that the past two seasons have been devoted to the clearance of the blocks denominated in the plan I', A, A', B' and IV and to the further examination of the mncj city wall hard by the northern gateway As a result, of these operations it is now possible to obtain a much clearer idea of the lay-out and character of the buildings in this quarter of the city, and it has also become manifest that the lowest stratum of remains on this site runs beneath and is, therefore, earlier than the inner line of fortifications Thus, immediately to the west of the northern gate there is a series of small water channels and tanks constructed in rubble and plaster which extends beneath the foundations from the outside to the inside of the wall The point is of interest because it has hitherto been assumed that the inner fortifications (which are of stone masonry) were contemporary with the founding of the city, and that the outer fortifications (which are of earth and now known as the Kachcha Kot) were a subsequent addition intended 'to protect the suburbs which had grown up as the population increased In the light of the new data it now seems more probable that the Kachcha Kot marks the original line of the city's defences on the north, and that the inner walls were not constructed until some time later (probably about 100 B.C.), the shorter circuit for their alignment being adopted either in order to save expense or possibly because the defence forces at Taxila were not at that time strong enough to man the longer line

Of the smaller antiquities recovered in the course of these excavations in the Lower City of Sirkap some typical examples are reproduced on Plates XXV-XXVI. The bronze lion reproduced in figs 1 and 1a on the first of these plates is a very spurted piece of work and, incidentally, is an interesting example of what can be achieved by skilful chemical treatment The plaque of grey stone (fig 5) on the same plate is one of many such plaques decorated with a variety of designs which have been found at Taxila and on the North-West Frontier Several broken plaques of a very similar pattern and of the same age were recently seen by me in possession of dealers at Luxor and at Alexandria in Egypt, and I think it not improbable that the Indian examples may be traceable to Alexandrian prototypes. In this connexion I may also note that I saw at Luxor a ram's head handle of a dish identical with that figured on Plate XXVI, fig 6, and that the cloven-hoof silver spoons from Sirkap are of precisely the same form as spoons found in Hercuhmum. On the same

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Circle
Tanxila**

Plate (XXVI), the copper toy cart (fig. 4), inkpot (fig. 5) and jug (fig. 8) are deserving of special notice, the last mentioned, with its dolphin handle, being a particularly good specimen of Indo-Parthian metal work, of which another striking example, from the Mahal site, is reproduced in fig. 3 of the same plate. On the following plate (XXVII), figs. 1-3, are metal finger rings, the first decorated with *triratna* symbols, a pair of fishes, a *svastika*, *vajra*, lotus and other floral designs, the second with a winged Victory (*Nike*); and the third with a sleeping lion with the legend in Kharoshthi • *Mahaiana putra dhalada pnyasa*. Figure 4 is the head of a terracotta figurine of strikingly Hellenistic style and very similar to certain heads, also garlanded, from the mound of Akra near Bannu. The glass flask shown in fig. 10 is of a sea-green colour. Among the coins recovered during the past two seasons in the Lower City are many punch-marked and local Taxilan as well as issues of Apollodotus, Philoxenus, Maues, Azes I and II, Gondophares, Soter Megasthenes, Kadphises I and Hermaeus.

Another spot inside the walls of Sirkap which also yielded numerous minor antiquities of value is that known locally as the Mahal, situated on high ground in a dip at the western end of the Hathial spur. Whether the name "Mahal" is due to a tradition among the people of a palace having once stood here, I could not ascertain, but the remains revealed by a series of trial trenches which I sank across the site are undoubtedly those of a large and massively built structure containing a number of spacious courts and rooms with their doorways and steps still clearly defined. Moreover, the small objects found among the debris suggest a greater degree of luxury than is common among the buildings of the lower city, and the position, too, would have lent itself admirably for the building of a palace. Among the finds brought to light by the trial trenches, the most interesting was a group of metal vessels (Plate XXIII, fig. 1), including 14 goblets of bronze, 10 ladles (one of them inscribed), 3 bowls, 4 cups, 4 saucers, a jug, a small vase, a spoon, 3 dishes, 19 mirrors (one with ivory handle complete) and a beautifully finished perfume holder of agate. All of these objects, of which examples are reproduced in figs. 1, 2, 3 and 7 of Plate XXVI and in figs 7, 8, 10 and 11 of Plate XXVII were found concealed in one of the thick masonry walls. The legend on the inscribed ladle is in Kharoshthi and reads as follows —

«

*Tkutukusa, danamukho samhe chatuchie tittaratame
Tachhaitlae Kushaviam parigrahe.*

Another object of great interest found on this site was a conical Assyrian seal of about the 6th or 7th century B.C. portraying a worshipper standing in front of a winged human headed Scorpion God (fig. 5). The coins include local Taxilan and issues of Maues, Azes I and II, Gondophares, Kadphises I, Kadphises and Hermaeus alone. The masonry of which the building was constructed is rubble repaired with small diaper and the period to which the buildings are to be ascribed appears to be the late Parthian.

" In his account of Wu-la-shi¹ (Urasa) Hmen-tsang states that ' to the south-west of the capital, 4 or 5 h, is a stupa about 200 feet or so in height which was built by Asoka-raia. By its side is a Sanghrama in which are but few Hazara District 'its capital was Mangali on the Mangal stream, in the centre of the track lying to the north of the Rash plain. The city has now disappeared but a few traces of its walls are still to be seen " While recessing at Abbottabad the writer availed himself of the opportunity of inspecting the site, for if the identification be correct it was probable that some mounds at least would still mark the remains of a 200 feet stupa and its adjoining monastery. That any such stupa was built by Asoka is improbable, as all the stupas attributed to Asoka by Hmen-tsang, which have hitherto been identified or excavated on the Frontier are of Kushan date. Mangah lies on the right bank of the Mangal stream which here winds roughly to the west through a wide and deep ravine with precipitous sides some 100 feet high.

North-West Frontier

Mongol*, supposed site of the capital of Urasa

" There is no village on the hite but a few houses stand on the edge of the cliff. The whole aiea is now cultivated and, when visited on August 9th 1923, was covered with magnificent crops of maize which, unfortunately, rendered close examination of the surface impossible. Save for some revetments seemingly of Sikh date no traces were found of the walls mentioned in the Gazetteer. Fragments of pottery were everywhere noticeable and a villagei stated that small earthen pots were frequently found in the fields. According to the few people met with on the site no ancient coins are ever recovered, but this statement may be only another example of the deceit, to which, according to the pilgrim, the inhabitants were peculiarly prone.

" The area over which pottery fragments are found and which lies between the Mangal stream and another smaller *nala* on the north, coincides pretty closely with the " 7 or 8 h " in circuit assigned to the capital by Hiuen-tsang. After going over the supposed city site, search was made for the stupa. Any stupa 4 or 5 ft to the south-west must lie on the other side of the Mangal ravine. When on the western end of the city site a mound was noted about half a mile to the south-west on the left bank of the stream. A path descends steeply into the ravine and climbs the opposite precipitous bank, but heavy rain had so swollen the stream, that it was necessary to make a detour of nearly one and a half miles to reach this spot by way of the Hazara Trunk Road. The mound lies close to the edge of the cliff, is some 50 yards square and rises about 6 feet above the adjacent fields. It is covered with stones but the debris is not that of a ruined Buddhist monument, and there is, moreover, nothing to mark the site of the second structure mentioned by Hiuen-tsang. Pottery fragments, which may be modern, cover the mound; and close by is a Muhammadan cemetery.

" Though this mound did not mark the sought-for site it was plain that if the direction given by the pilgrim was even approximately correct it could not be far away. About a furlong to the south-east rises a grassy hill marked

¹ *Beal, Buddhist Records of the Western World, Vol 1, page 147.*

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4,219 feet in the Survey Maps of the District, and just such a spot on which the Buddhist monks delighted to raise their shrines. Climbing the hill from the northern end a small level area is reached and here are distinct traces of basements of the Kushan period. About fifty yards to the south, a little higher up and on the summit of the hill on a larger level area are further traces of the foundations of a much larger structure of similar date. These clearly defined (but scant) remains may mark the sites of the stupa and sangharama mentioned by Jñān-tsang, though the site is rather south than south-west but much depends on the part of the city from which he took his bearing. The stones still in position are the large heavy blocks of diaper masonry, and that they are so few in number is easily accounted for by the proximity of the Hazara Trunk Road which winds round the foot of the hill, the site having provided excellent material for bridges, culverts and road metal. The site awaits further investigation after the crops have been cut, and the south-eastern portion has yet to be examined. In the bed of the ravine is a masonry tank of Sikh date, fed by springs, and now much dilapidated.

"Judging from Hiuen-tsang's account, the capital of Urasa must have been insignificant and of little importance in the seventh century and the scanty remains of the two Mangali monuments compare unfavourably with those noted in last year's report at Bedadi and Zaro-dhen some 18 miles to the north.

Hund, the
ancient
Udabhandā

"A site in the Peshawar District, which from its geographical position must have been a place of importance at a very early date is Hund, the ancient Udabhandā, the Ohind of the numismatists, the eastern terminus of the old road through Gandhara from the Khyber to the Indus. The walls of the fortifications, within which lies the present village, were brought under the operation of the Ancient Monuments Preservation Act in 1920 and an inspection was made on the 13th January 1924, the route taken being as Shahbazgarhi and Swabi to the village of Ambar, up to which place there is now an excellent road which follows more or less closely the ancient route from Mardan to the Indus. From Ambar it is about three miles across the fields due south to Hund.

"The protected city wall is of Muhammadan date and its perimeter 1,400 yards. It is square in plan and is pierced in the centre of each face by a gateway, on each side of which are four regularly placed bastions. The southern gateway has almost entirely disappeared, but turrets of the others still exist. The walls and bastions are of rubble masonry, the gateways, where preserved, of small brick. The walls generally are much ruined and the cost of effective conservation would be prohibitive and out of all proportion to their importance.

"Along the exterior face of the southern wall the villagers deposit their stable refuse and later, when they remove this for distribution over the fields,

¹ Watters On Yuan Chwang, Vol. I, page 266, states that the stupa was about four miles to the south-east of the capital not south west, as given by Beal

they dig up also to a considerable depth the mپیگنated soil beneath In North-West Frontier so doing they have, here and there, exposed ancient diaper masonry walls running under the present circumvallation, from which it is plain that the latter does not mark the alignment of any more ancient city wall. The present notification is built of the larger stones of diaper masonry walls of earlier monuments, put together, however, in the usual style of Muhammadan rubble constructions. South-west of the village, on the western edge of a high mound, is a beautifully preserved length of Glandhara walling of the semi-diaper, semi-ashlar type. Some sixty feet are already visible, and as the ground to the south is high this wall probably runs a considerable distance in this direction. A large area to the south and east of this wall is considerably higher than the adjacent fields and marks undoubtedly the former existence of important monuments of the 3rd-5th century on this site. The villagers say that walls exist under most of the fields adjacent to the village, and as ancient foundations are traceable everywhere inside the fortifications, and walls, some of great thickness, are everywhere visible on the south in the high cliffs of the river bank, it is plain that the former city was considerably greater than the present village, which without overcrowding shelters itself within the four walls of the fort. The 20 h which Hiuen-tsang attributes to the circuit, of this town seems in no way exaggerated as the Indus has undoubtedly swept away part of the ancient site on the south.

"Near the hill *hvj*m on the north side of the village is a semi-circular foundation, some 12 feet in diameter, seemingly of ancient date and probably the base of a stupa. The other half of the foundation is hidden under a modern platform and incutment.

"Coins of the Indo-Ureeks, Kushans, and the Shahi Kings of Ohind 'Hund' and Kashmu have all been recovered at Hund, but on the occasion of this inspection the villagers strongly affirmed that no ancient coins were ever found. The few coins they produced were modern Kabuli or late Muhammadan and Sikh pieces. The villagers appeared to be somewhat apprehensive and an assumption of entire ignorance possibly seemed the wisest attitude to adopt. The Khan of the village presented me with a fragmentary Sarada inscription in ten lines. Unfortunately, the centre of the stone has been much damaged and many of the characters obliterated. Impressions of this inscription were supplied to the Government Epigraphist of India who has reported as follows:—"The inscription in question is very badly damaged, and consequently does not admit of a complete text or translation. It is written in Sanskrit language and the Sarada script of about the 10th century A.D. The date given at the end, of which only the last portion is seen, apparently gives the name of the season and the month as well as the day. In line 8, we find the name 'tsvara,' perhaps as a synonym of Sambhu, and in line 9, possibly the names Sambhusindhu and Chhandasana (?). The words like *kritam Sambhoh* (line 2); *tasyaishd Jdrtti* (line 3), *Ma?tdapam* (line 5) and *kntam Jeirtti* (line 8) would indicate that it is a Saiva inscription recording the construction of a temple."

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Mr. H. J. Hargreaves

"Another inscription from Hund on a similar white marble-like stone is to be found in Burnes' *Cabool*, p. 120, with an illustration, and is supposed to be in the Indian Museum, Calcutta.

"The unexcavated remains at Hund are of infinitely greater archaeological importance than the city wall and I am of opinion that the ancient monuments under the ground within a radius of two miles of the village should be protected under the Act as was done in 1909 in the case of the monuments of the Taxila area.

"North-west of the village and about a mile and a half away two mounds are visible but as it was imperative that Mardan should be reached before nightfall they could not be visited on the occasion of this inspection.

"The site is worthy of further examination and an endeavour will be made to establish friendly relations with the 'people of the village. It is not unlikely that very valuable archaeological discoveries may be made at this spot, which was from so early a period the gateway to India, and by which, must have passed most of its invaders."

Central Circle

Mr. J. A. Page
Nalanda

"A description of the famous Buddhist University of Nalanda has been given in previous reports, and it will suffice here to repeat that the area extends some 1,000 feet N. S. by 800 E. W. and contains the remains of numerous brick stupas and viharas beneath its debris-strewn mounds, a prominent feature in the general arrangement of the site being the long main central avenue traversing it north to south, which separates a range of stupas on the west from a corresponding line of monasteries on the east.

"A remarkable characteristic disclosed in the mounds excavated is the sequence of monastic structures erected on the ruins of earlier ones on the same spot. Of the multiplicity of levels so far revealed, however, none can lay claim to a higher antiquity than the 6th century A.D.; though the legendary association of the Nalanda site with the person of the Buddha and his contemporary disciples encourages the hope of still earlier finds.

Monastery No. I.—During the past year opportunity was taken to explore further the possibility of still older structures existing beneath the lowest strata of occupation already disclosed, and for this purpose trial pits were sunk at the south-east corner of the courtyard, and beside the open colonnaded *chabutra* along its east wall, subsequently in and about the west entrance vestibule, as well as in two places along the east external facade; and finally, at the junction of this monastery with that designated as Monastery No. I-A to its immediate south-west. Investigations had necessarily to be limited to sinking pits, owing to the existence of the many levels and remains above, which, could not be disturbed in the work. However, sufficient evidence came to light in the course of these trial diggings to make it perfectly clear that the brick paving in the courtyard disclosed some two years ago—representing the ninth level of occupation on the site, and attributable to about the 7th century A.D.—belongs definitely to the earliest building erected here; none of the pavements disclosed in any of these recently made pits antedates it.

**Bihar and
Orissa**

" The stratigraphic evidence afforded by the earth through which the several pits were sunk goes far to confirm the assumption made in the last year's report that the reason for the extreme depth of the foundations, which descend some 7'-6" beneath the lowest level of occupation, is to be found in the relatively high level of the subsoil water on the site, for these foundation walls descend through virgin soil of a clayey nature, altogether free, for the most part, from any signs of brick debris, pottery, ashes, or other indications of human occupation within its depth. Moreover, the bottommost foundations were found submerged in water, which remained some 3 feet above them even at the end of March.

" The levels of paving and the fragmentary remains of the walls and foundations disclosed are being recorded in careful survey drawings of the monastery, and when these are completed it will be possible to co-ordinate the remains in plan, elevation and section, and assign to each stratum of occupation its approximate date between the 7th and 12th centuries A.D., during which period the several monasteries on this same site were erected."

" In the absence of an adequate staff for this survey work its progress is inevitably slow, but it is hoped that the necessary drawings for the complete elucidation of the remains will be available within the coming year.

"*Monastery No. 1-A* — Further excavation on this site disclosed an earlier level of occupation some 3 feet below the brick-paved courtyard previously brought to view, and the remains of this earlier stratum have been opened up in the north-east quarter of the building (Plate IX, c). This earlier level, again, is represented by a buck pavement in the courtyard and one of concrete in the verandah, the earlier monastery conforming to the same plan as the later one on the higher level. Pits carried down to foundation level in the courtyard and in the verandah failed to reveal any earlier strata of occupation, which here are thus limited to two.

" An interesting feature is the way the outer wall of this monastery and that of Monastery No. I, which it adjoins at its north-east corner, intersect and overlie one another, according to the periods when the successive structures were erected on the ruins of their predecessors. Thus, Monastery No. I, the four lowest walls of which form, as it were, a complete square of themselves, was patently the first to be erected. Then, on its collapse, Monastery No. 1-A was constructed, with walls also forming a complete square, and so overlapping at the corner the lower ruins of Monastery No. I. Then, with the ruin of Monastery No. 1-A, the walls of Monastery No. I are made to follow the complete square again and so in turn overlap Monastery No. 1-A.

" The process is repeated, in all, five times within a height of some 20 feet measured from the lowest foundations, three of the levels being apparent in the wall face of Monastery No. I and two in that of Monastery No. 1-A. The identification of these different outer facings of the monasteries with the complicated levels and pavements revealed inside the structures, again, must await the completion of the comprehensive survey drawings under preparation.

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Monastery I-B (Plate X, a & b), immediately west of that designated it adjoins, was further excavated during the year under review, and an earlier level revealed in the lower concrete pavement that was found to exist in the monks' cells enclosing its colonnaded inner court. This earlier paving lies some 6 feet below the upper one.

" Pits carried down to the lowest foundations, which occur some thirteen feet down from the top paving, failed to disclose any earlier level of occupation. So that here, as in Monastery No. J-A adjacent, the levels of occupation are two only. Other pits sunk to foundation level at the junction of the party walls between Monasteries Nos. 1-A and 1-B revealed clearly the incidence of construction and rum of these two contiguous structures, and afforded definite confirmation of the evidence, recorded in last year's report, indicating that Monastery No. T-B antedates Monastery No. 1-A.

" It is now very apparent through the relative levels of the outer walls here that Monastery No. 1-B was erected first, then, after a certain interval, Monastery No. 1-A was built, sandwiched in between Monastery No. 1-B and Monastery No. I to the north-east. Subsequently Monastery No. 1-B was destroyed and later rebuilt; and finally Monastery No. I-A, again, likewise fell to ruin and was re-erected.

" These indications of two separate stages of occupation visible in the outer walls of both monasteries here thus confirm the independent evidence on this point disclosed in then respective interiors as mentioned above.

¹¹ *Monastery No. 4 (Plates IX, add, and XXVIII)* ~ The bulk of the excavation work done during the past year was on the adjacent sites Nos. 4 and 6. The northern hall of site No. 4 was partly cleared during 1922-23, and progress was made in removing the earth from the upper levels of the remainder, which have now been exposed except for a small area of high ground in the south-west corner of the monastery, on which the chaukidar's shed is erected. This shed will be removed and erected elsewhere when the excavations are resumed and the whole of the monastery site is exposed to view.

" Further clearance in the north-west corner of the enclosing verandah down to an earlier pavement level—representing the second from the top—has been carried out (Plate IX, a), and the evidence thereby revealed confirms the view advanced in last year's report that the sequence of erection and destruction that befell Monastery No. I, adjacent to the bouth, was shared also by this Monastery No. 4.

" The same remains of an early colonnaded verandah, subsequently filled in by a solid wall built directly on the vitrified debris of the earlier monastery, are as clearly apparent in the courtyard here as in Monastery No. I; but from present indications it would appear that the total number of structures erected on this site of Monastery No. 4 did not exceed four, against the nine levels of occupation revealed in Monastery No. I. However, further exploration is needed before this point can be definitely settled.

" Outside the monastery and projecting from the east wall towards its northern end were found three drains, one vertically beneath the other, each serving as an outlet for drainage from the monastery courtyard (Plate IX, d).

All three are comprised within a total depth of sixteen feet. A fourth drain was also disclosed some two feet lower still, slightly to the north of the series of three, and a deep pit subsequently earned down in the north-east corner of the courtyard was successful in revealing the existence of the four pavements—all of brick, except the top one of concrete—served by these drains, each pavement representing an earlier monastery erected on this same site. These earlier brick pavements occur respectively ten feet, sixteen feet, and eighteen feet below the topmost concrete paving of the courtyard. Curiously enough, no trace of the second pavement down was found in an excavation previously made in the corresponding north-west corner of the monastery, which was carried to the bottom foundations, though all the other pavements were clear to view at this point.

"During the clearance of the same eastern front of the monastery, a subsequent outer facing of the centrally projecting *ba* about the shrine chamber also came to light. Certain of the cells along the east side of the monastery have been cleared down to the foundations, which occur some 34 feet below the level of the topmost paving of the verandah. Here, again, four separate pavements corresponding with those uncovered in the courtyard were disclosed. A few finds were also made here which will be noticed later at the end of this account.

"The entrance vestibule in the west side was also excavated down to the next earlier pavement level—the second from the top, corresponding with that disclosed in the verandah adjacent. The arrangement here repeats almost exactly that of the entrance of Monastery No. 1 with its side niches and columnar porch; and here again, as in Monastery No. 1, the original entrance was found to have been subsequently covered over by a wide external stair affording access to the higher and later levels built on the ruins of the earlier monastery. A feature of interest exposed about the centre of the courtyard, was a deep narrow well of circular shape, which descended some 33 feet to water level. In the clearance of this well a number of *chatu* were brought up, several still intact and indistinguishable from those in use at the present day—though they must be at least 1,000 years old.

"*Site No. 5 (Plate IX, b).*—The exposure of the remains here has involved the removal of a great quantity of earth and debris, the uppermost layer not having been laid bare until a depth of some eight feet had been excavated. An axial trench carried tentatively across the middle of the site from west to east proved all but abortive, and it was not before a deep diagonal trench had been sunk across the north-east corner of the site that the remains of internal walls began to appear. The outer face of the four-square enclosing walls of this structure, it should be remarked, was uncovered in the previous year, but the work of clearing the interior did not commence till the year under review.

"Clearance is still in progress, and the remains uncovered do not as yet reveal what the structure containing them was. Its plan differs considerably from that of the monasteries previously disclosed. As far as is at present apparent, the structure seems to have been erected round three sides of an

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Mr. J. A.
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courtyard, the fourth side of which was formed by the east wall of Monastery No 4 adjacent (Plate IX, b).

" The three sides of the structure contain small square cell-like chambers entered through doorways opening on to the inner court, either directly or through what appears in the lower levels to be a kind of verandah. The back or east wall accommodates a second row of such chambers, in which, however, no trace of any door opening has been found to exist. This circumstance Tathai suggests that these back chambers were entered through an opening in the roof, and perhaps served as stores.

* The habitable chambers around the inner court might possibly have been a kind of annex for the residential accommodation of monks, or, perhaps, visiting pilgrims. No evidence of any sanctuary or inner chaitya—features that occur in the monasteries previously excavated—has yet come to light. A good deal of clearance, however, remains to be done here, and it is possible that further exploration may reveal more conclusively what purpose the building used to serve. It is, however, already apparent that the structure exposed contains within itself no less than three separate levels of occupation, the lowermost being represented by a brick pavement preserved in the inner court.

" *Main stupa site Ao 3*—Several of the little votive stupas along the south side of the main stupa were opened up from the top, and in two of them were recovered deposited bricks engraved with characters. Estampages of these inscriptions have been sent to the Government Epigraphist, and his transliteration and translation of them are awaited.

' Of the finds made in the course of the excavations at Nalanda none is of such importance as to merit detailed description. A Saiva sculpture however is worthy of notice, since it corroborates the evidence of Hindu influence at this essentially Buddhist site, which had already been noticed in previous years. Another curious find was a gaming die, which seems to suggest that the Buddhist brethren in residence here were not altogether above the amusements of less austere humanity. Similar gaming dice had previously been recovered in Monasteries Nos I and 1-A as well as on many other Buddhist sites."

Eastern Circle
Mr. K. N.
Dikshit
Janpur

" Kasipur, a village about 3 miles to the north-west of Barisal, the district headquarters, is locally famous for the shrine of Vnupaksha. The enshrined image is of black basalt about 4 feet in height and of great iconographical interest, inasmuch as it represents a form of the god Siva, that is seldom to be met with in Bengal, the usual form in which the deity is worshipped being an image, or a Bara-Uauri image or more rarely, the ten-handed Sadasiva. In the Kasipur example, the god is represented as three-eyed, four-handed, standing on a lotus seat with the attendant figures of Parvati and Ganga characterized by their respective vehicles, the lion and crocodile on the left and right respectively, and tiny figures of Kartikeya and Ganesha above on either flank. In his upper right hand Siva holds a trident (*trishula*) encircled by a serpent; in the lower right, a rosary (*malamala*); in the upper left, a skull-headed staff (*khatvanga*); and in the lower left, a skull-bowl (*kapala*). These

attributes are all characteristic of Siva but no other four-handed Siva image with all these attributes is known. Siva has all the ornaments which a male god is supposed to wear, and has high matted hair (*jatajuta*) and the *Urdhm-Unga* indicative of his vow of celibacy. At the top of the slab over Siva's head is shown an umbrella and on the pedestal below Siva's feet, the bull Nandi. The attendant image of Ganges is peouhai by reason of the three-hooded serpent on her head and the lotus stalk in her left hand. The conception of Siva, as depicted in the present example seems to have been exactly analogous to the image of four-handed Vishnu, with the attendant images of the goddesses of Earth and Wealth or Wealth and Learning. On grounds of style, the image can be attributed to the early Pala period or to about the ninth or tenth century A.D.

"About half a mile distant from the Virupaksha shrine, is another shrine of local repute dedicated to Mahamaya. The goddess is placed in a corrugated shed, and seems to be the eight-handed Malnsha-mardini. Artistically, the image is much inferior to the Virupaksha image and the stone, moreover, has undergone much wear and tear. Of the eight hands, the right ones are comparatively well preserved, while the left ones are all but lost. The special feature of the image is that a demon (*asura*) is actually brought into view from the severed trunk of the buffalo, while the head is lying at a distance. The lion of the goddess fixes its paw in the body of the buffalo, and the goddess places her right foot over the body of the demon (*a.sui*), holds his head with her proper left hand and strikes him with the *Insula* held in her lowest right hand. Other hands hold a sword and a lotus and one is in the gift-best-owing attitude.

"Jogin-bhavan about eight or nine miles to the north-west of Bogra town, contains a modern *maih* establishment of the Natha-pauthi. It is on what is probably an ancient settlement. The earliest antiquities here are some Sivalingas supposed to be consecrated by Virakhnath, one of the earliest *pur* of this faith. Several old black basalt images, such as are commonly found in the Varendra country, *eg.* Chamunda. Hara-gaun, the seven thotheis, Saiasvati and Mahishamardini, have been enshrined in the modern temples in the enclosure. Several architectural fragments lying about in the compound and the ornamental brickwork fixed in the front wall must, have belonged to older temples on or near this site.

"At a short distance from Jogin-bhavan is a mound called Salibahan's and some 300 feet in length by 250 feet, in breadth. It is most probably the site of an ancient monastery as the hollow in the centre of the mound indicates that the building was planned round a central courtyard. There are several tanks in the vicinity prominent among which may be mentioned the Dadhisagar.

"Radhesvar temple.—This temple is situated at the junction of the metalled roads leading to Kenduh from Durgapur and Kajbandh station on the main line of the B. 1. Ky. The name of the temple is interesting, as it means the

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'Lord of the Radha country' which is another name for that part of Bengal which lies to the west of the Bhagirathi river or roughly the present Burdwan Division. The image enshrined in this temple is probably the largest in Bengal, the diameter of the image being 1'-2" and that of the Gaun-patta 3'-6". The material of the image is black basalt. On the body of the image is incised a representation of itself. Although the temple stands on the top of a wooded slope, elevated above the surrounding ground level, the floor of the shrine is at least 3' lower than the stone threshold of the new arched opening, the difference being due to the rebuilding of the temple more than once. The last repairs that the temple underwent in 1912-13, just before the monument was taken over by this Department, are responsible for the addition of some altogether new features, which will have to be removed anon.

Nahapara

"The discovery of an image at Mahakali in Munshiganj subdivision by a Muhammadan cultivator and its removal to a Hindu temple has been referred to in the report for 1922-23. Efforts were made to secure the image for the Dacca Museum, but without avail, as the present owner declines to remove the image from its consecrated position. The image is that of Khasarpana Lokeshvara who is represented in the *Illasana*, holding the stalk of a lotus in his left hand. The five *dhijdm-buddhas* are shown above in miniature shrines, which are probably meant to represent caves in the hills indicated by the presence of peacocks and other birds among them. The image which shows unusual fine workmanship, is illustrated in Plate XXX, c, along with the figure of Panmsabari (Pl. XXX, 6), another interesting Buddhist image, also found at Bijrajogini and described in last year's report.

**Hamabhitia,
Uhandipur**

"*DmrardsiM and Patalactandi*—Sufficient attention has not hitherto been given to the remains of the pre-Muhammadan period in and around Gaur. The rampart walls of the old Hindu city to the north of Gaur which extended from the old Bhagmithi on the west to the Mahananda on the east and which comprised within its limits the great Sagardighi tank (an undoubtedly Hindu construction as its longer sides run north and south) still exist to a large extent and in some places use to a height of some 30' to 40' above the level of the surrounding fields. The southern wall of the old city crosses the Malda-Gaur Road near the sixth mile and is generally looked upon as delimiting the northern extension of the Muhammadan city of (Jam). The south-western corner of the city wall is close to the bed of the old Bhagnathi river, where an octagonal stone work bastion still stands to a height of some 25' to 30' above the level of the river and a few stone pedestals and architectural fragments from old Hindu temples are worshipped as the goddess Patalachandi. The stone work consists of big ashlar facing stones and a hearting of boulders and may possibly have been intended for the protection of the salient of the city wall against the inroads of the river. It seems likely that it was built by Hindu rulers, but the growth of trees and thorns did not permit" of a closer examination. The north-west corner of the old city wall is the Dvarbasim gate in the village of Ramabhitia Chandipur. The goddess Dvarbasim is a modern image placed in a niche against the jamb of the arched opening of the gate build-

ing, but it is likely that in pre-Muhammadan times a guardian goddess of this quarter of the city had her shrine in the vicinity. The present gate is an imposing building of the Muhammadan period, the superstructure of which is in Gaur brick and the basement built of stones which may have been obtained from the ruins of ancient Hindu buildings. The date of the building cannot be far removed from that of the Dakhil Darwaza. Further research ought to make it clear whether the ancient city of which the walls are to be seen near Dvarbasmi and Patalchandi, is identical with the Itamavati founded by Itamapala, which according to his contemporary Sandhyakarananda, the author of the Kamachanta, was 'sanctified by the precious streams of the Ganges and the Karatova (—Mahananda) running along the (it),' and the environs of which were included in the list of Parganas in the Sarkai of Jamiatabad (Uaur) by Abul Fazl in his Akbarnama.

"The village of Murcha-Vishnupur is situated some 10 miles to the north-west of the town of Maida, on the north bank of the Kahndi river, on an alluvial plain. It was drawn to it by Mr. Bhowani Prasad Neogy, Deputy Magistrate, Malda, who has recently been making a careful examination of ancient remains in the neighbourhood of Malda. The Ekdala fort, which afforded a safe retreat to Iliyas Shah, the Sultan of Bengal, when Firoz Shah Tughlarj invaded Bengal, has so far baffled all attempts at identification. But in Murcha-Vishnupur we now have a site which may well prove to be the true Ekdala. The name Ekdala is given in Bengal to a piece of land enclosed within one and the same branch of a river (ek=one, dal 01 daha—a branch). The Ekdala Port (to which Jhyas Shah retired was not more than 10-12 miles away) from the capital Pandua, and offered an impregnable position with water barriers against which a land force, however strong, could hardly make any impression. The present site, though not called Kkdala, is known locally as the Mureha or Fort. The branch of the Kalmdy forming a loop round the Murcha is locally known as the Kalapahar and is about 400 yards in breadth. There is another almost complete loop of the Kahndi just to the south-west of the Murcha loop, which offers a second line of water defence on the south and south-west. A number of bays or marshes on the north and west and a broad channel running parallel to the Kalapahar for some distance on the north-east and then bifurcating into two, constitute an almost continuous second line of defence, with the exception of a small strip of land to the east of the Kalapahar, which offers no natural advantage. On examination, it was discovered that this position was fortified by a broad earthen rampart and ditch running in a semi-circular curve throughout the whole length between the channel on the north-east and the Kahndi on the south. The unmistakable ruins of the rampart and ditch point to the conclusion that the area encircled by the Kalapahar was intended to be doubly strengthened on this side. In the island itself, there are low mounds in the northern part, built over by modern habitations, where stray ancient bricks can still be picked up.

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"About eight miles from Malda on the left bank of the river Kalmdī is overhanging the river, rising steeply to a height of 45 to 50 feet above the level of the water during the winter months. The mound is conspicuous from a long way off and is known variously as the Garh (fort), Kanthal or Pul (high ground) of Nagrai. The ruins here still extend over an area about a mile in length and half a mile in breadth, but the city must obviously have been broader still at some time and large portions have been washed away by the river. Numbers of bricks from the mound are to be seen lying in the bed and on the precipitous bank of the river. The vertical section of the mound as exposed by the action of the river shows that about 4' to 5' below the highest point of the mound occurs a stratum full of bricks, potsherds and other small antiquities of pre-Muhammadan date. Elsewhere the level of the mound gradually descends, with the result that the antiquity bearing stratum, is almost on the surface. Pieces of stone can be picked up in parts of the mound, in the extreme south-east of the mound, there are signs of early Muhammadan occupation, as pieces of painted and glazed bricks are to be seen in the vicinity of a Muhammadan tomb. Detailed examination of this site is likely to prove interesting, as it is the nearest site of a Hindu city, in close proximity to the cities of Gaur and Pandua. The site well deserves to be brought under the Ancient Monuments Preservation Act.

Harauaqr

"About a mile to the north of the city of Azimganj is Baranagar, on the left bank of the Bhagirathi. The village is situated within the zamindari of the Raja of Natore and contains several temples built by Ram Bhabani of the Jaisankari family, who lived in the middle of the 18th century and is still remembered in Bengal for her piety. The best temples at Baranagar are the group of four temples arranged round a courtyard known as the Char Bangla temples. Each of them is rectangular in plan, about 24' to 24'-8" in length by 9'-2" in breadth with walls 3'-1" in thickness standing on platforms 3' to 4' high, having a front facade with three arched openings and a curved cornice roof of the Bengali type. All the temples contain three Sivalingas each, which are still being worshipped. The northern and western temples are the best decorated temples of the group, the terracotta tiles, floral mouldings and figures ornamenting the front facade of these temples constituting some of the best specimens of decorative brickwork in Bengal. Scenes from the war between Rama and Havana described in the Ramayana are depicted on the facade of the northern temple (Pl. XXIX, a and b). The western temple has panels of the ten incarnations of Vishnu, scenes from Krishna's life and some crowded battle scenes. The temples are still in a sound condition, but the accumulation of water in the low courtyard has already affected the foundations of the plinth and the growth of trees and jungle, if not regularly checked, is likely to develop into a serious danger. The temples certainly deserve to be protected under the Ancient Monuments Preservation Act, if the owners can be persuaded to come to an agreement with Government in regard to their maintenance.

"The Bhabamsvara temple, situated at a short distance from the Char Bangla group is apparently named after the builder, **Rani Bhabani**. In plan,

the shrine 16 octagonal with a verandah on all sides, furnished with arched openings. The shrine has a tall octagonal bell-shaped dome rising to a height of about 50 feet, while the verandah has a teiraeed sloping root. The "verandah walls are sparsely decorated with figures, which are not of a high order. The temple is in fair preservation, but its occasional use as a shelter for cattle and the growth of jungle on the lot do not tend to improve its condition.

"In the adjoining temple of Madan (Jopal, is worshipped an ancient bronze image of Vishnu of excellent workmanship, and assignable to the Pala period. Vishnu is depicted wearing all the ornaments and having all the usual attributes but in the order Chakra, (Jada, Sankha and Padma, beginning with the upper right hand. The attendant figures on either side are male figures holding lotuses, in place of the goddesses Sri and Saisvati. The background is completely covered with leogryphs and other decorations and a kirtimukha is shown on the top. The grace and delicacy with which the body of the main figure has been drawn entitles this image to rank high as a work of art.

"Among other temples in the locality mention may be made of a temple of the Jai Bangla type near the Mathban on the residence of the Jai priests of the Natioe Ifaj family. The appearance of the temple has been completely spoiled by whitewash. Another interesting temple is the isolated small hut-roofed temple close to the Lohajung Akhara, which has a nicely ornamented facade.

"About 11 miles to the west of Pampur Poaha is the Milage of Kumarpur, *Kumarpur* which lies within its boundaries two ancient mounds going back at least to the Pala period, known as the Mokarmu and I'paibun mounds respectively. The former mound overlooks the Kajshai (Jodagari) Road from the level of which it rises gradually to a height of 20 feet. At the highest point it is crowned by a Muhammadan tomb, the walls of which are overgrown with big trees and the masonry is full of earth and debris. Last year the village, acting under the leadership of a man who is supposed to have had a vision in his dream, cleared the floor of all the debris and were rewarded by the discovery of the actual tomb. The tombstone is of polished black marble with two inscriptions, one on each side of the tomb, consisting of black marble letters inlaid in a ground of white marble. The inscriptions contain merely imprecatory verses and are of no historical interest. On grounds of style the tomb must be dated to the middle of the seventeenth century. Steps are being taken to protect it under the Ancient Monuments Preservation Act.

"The Uparban mound, which lies to the north of the village, was several years ago excavated by Kumar Sarat Kumar Roy of thearendra Research Society. From the ruins of the walls, which are still to be seen at the site, it appears that the mound was the site of a monastery or vihara, with an open courtyard in the centre, surrounded by rooms. Many antiquities from Kumarpur have been added to the collection of the Varendra Research Society.

"In a field west of the Uparban mound a bronze image of Vishnu (Pl. XXX, d.) was discovered some time ago, and was acquired by the writer during his visit to Kumarpur and presented to the Varendra Research Society's

Eastern Circle Museum at Rajshahi The image is 10 inches in height and is inscribed on the pedestal with some indistinct letters, which seem to belong to the 10th century A.D. Vishnu is here represented as standing with his upper hands holding the sankha and lotus, and with his lower hands holding by the head, two little figures, which represent the personifications of his remaining two attributes chakra and gada. The waist cloth shown in horizontal 'curves' as clinging to the body is worthy of note. All the figures wear the usual ornaments and have halos behind. Garuda, the vehicle of Vishnu, is shown below on the pedestal as a kneeling figure. The image is a valuable addition to the collection of the Society's Museum.

"One of the most interesting additions made recently to the Kamrup Anusandhan Samiti's Collection is a bronze image of Vishnu (?) discovered in the ruins of an ancient temple near Jodibugarh. The image is peculiar in that there is no object held in any of the four hands, all of which are in the *tribhanga* pose (bent at the elbow and wrist joints) and the *kartan-mirda* (the attitude in which the index and little fingers point outwards and the middle and ring fingers are tucked in). The throne on which the god stands has parrots at the four corners (technically called a *bhadrasana*). The figure wears a short close fitting loin cloth, crocodile shaped ear-ornaments (*maleara-kundah*), a crown (*mukula*) and sandals. Of the two female attendants, the one on the right holds a bud and a dagger (?) and the one on the left has her hands in a peculiar dancing mode. Probably the former was intended to represent Lakshmi and the latter, Sarasvati. But the absence of any of the other regular attributes of Vishnu makes it difficult to hazard this identification with confidence. The image is a fine specimen of Assamese art and it seems likely that it dates from the late Pie-Ahom period, or about the 11th-12th century.

Pandv

"The steamer transshipment station on the Gauhati side is named Pandu-ghat after a rock-cut shrine close by, supposed to belong to the five Pandavas but in reality containing five rock-cut figures, four of which represent Ganesa. The biggest of these figures is 5'-6" in height. They hold the usual attributes characteristic of Ganesa and have sankhas on the ear. One of the figures is a female deity, probably Durga. The Pancha Pandava shrine is regularly worshipped and a structural house is built to enclose the rock-cut figures.

"Two more figures cut in the open rock below, facing the river represent the sun-god and Indra respectively. The latter divinity is shown as a two-armed standing figure, with two female attendants by his sides and his vehicle the elephant below. The objects in his hands are not clearly discernible, but the right hand probably holds the thunderbolt and the left seems to hold a lotus.

Kamla, Ithya Ithi

"Midway up the western slope of the Kamakhya hill, are to be seen numerous cuttings in the rock. They include, among others, temple miniatures of the Orissan Sikkha type with small Sivalingas enshrined in them, and rock-cut niches with figures of Ganesa and Kirtimukha. It is likely that there were many more rock excavations which have since been demolished by earthquakes. A heavy ceiling piece with a medallion adorned with a flying *apsara* or heavenly nymph is lying close by and is locally known as Narakasura.

" The stone gateway, leading to the top of the hill from the west, probably dates from the time of Nara Narayana, the Koch king who lepaned the Kamakhya temple. The doorway has a pointed arch and the wall sinlace is decorated in places with lotus medallions and heraldic looking lions on either side of the gate. Appraoching the Kamakhya temple from this side one comes across a modern temple called tl'e Ghantakarna, into the basemenl ol which, stone fragments from older temples have been built. One of these fragments is a beautifully carved frieze in which the uppei band represents a sries of garlands and the lower scroll-work, m which some very spirited representations of animals occur. Only foui animal figures of the senes, *mz.* a buffalo, a deer, a lion and a tigei, uie extant, but the qualitv of the art manifested m them is unsurpassed in Assam.

" Hajo is situated 14 miles to the north-west of Amingaon and 15 miles *Haiv* to the south-east of Nalban Kv Station. In old days it must, no doubt, have been a place of pilgrimage, but there are few antiquities left- which can be definitely traced back to a date earlier than the fourteenth or fifteenth century. All the shrines here are located on hills: the one containing the Ilavagriva Madhava temple being failed Maniparbata, the one containing the Kedaresvara and Kamalesvar temples Madanachala, while the lull on which the Muhammadans later established the Poa Mecca mosque is known as Garudachain. The Jlayagriva Madhava temple m its present form does not seem to be oldei than the sixteenth or seventeenth century. It is built oi stone and consists ol a shnne and a pillared hall ur front, besides seveal other sheds. There are three inscriptions in the temple, none ol which is pnoi to the Ahom period. The outside walls ol the shrme are decorated with figure sculpture, the elephant frieze at the basement being specially worthy oi mention. The managers oi the temple having refused to come to an agreement with Government, the temple has been removed from the list ol protected monuments.

" The Kedaranatha temple is also a stone temple, the object oi worship m which is a Siva-hnga ol rough-hewn stone with small natuial hollows on its surface, which are supposed to lcpresent l'arvati and Ganga. From an inscription on the south-west side ol the temple it appears that wholesale lepaus to the structure weie done (>v one Taiun Bar Phukan during the reign oi the Ahom kmg Rajesvarasimha. Some oi the material used m the construction oi the present temple was undoubtedly derived from the rums oi older temples, but there is no evidence to show that any portion oi the existing stiuctuic is of a very ancient date.

" The Kamalesvaia, Kamesvara and Ganesa temples are distinctly more recent than the lTayagma and Kedaranatha temples. The J'oa Mecca Mosque stands on the highest oi the hills n< the neighbourhood oi Hajo. The mosque is built ol brick and is now m a very ruined condition. It had three dome? •all of which have iallen in. The inscription stone lying inside the mosque and the stone tomb oi Ghiasuddin outside are protected monuments.

" Deopani is the name oi a river which is crossed by the Golaghat Dima-*DenjKiit*, pur Road near the 27th mile. About | mile ofi the main road, there were 2

Eastern Circle images lying in the jungle, one of Chandi and the other of Vishnu, the latter of which has now been removed to the Kamrup Anusandhan Samiti's Museum at Gauhati. The Chandi image is 5'-9" in height and is much worn out and broken. It represents the goddess in a standing posture holding a trisula in her upper right hand and a mirror in the upper left; the lower right hand seems to be in the gift-bestowing attitude while the lower left is indistinct. The figures of Ganesa and Karttikeya are to be seen at the two sides and on either flank stand two female companions or attendants. The other image is of much greater interest (PL XXX, a). It is a very fine example of the ninth century art of Assam and is inscribed in characters similar to those of the Harjara inscription from Tezpur. The right hands and the feet of the image have been broken off, and the halo behind the head is lost. The left upper hand holds the conch and the left lower the gada. Vishnu has all the usual ornaments, the *kaustubhu* and *srivatsa* symbols, the sacred thread and the long cable-like garland reaching to the knees (*vanamald*). The expression of the face and the treatment of the lower lip and the crown are characteristic of the late Gupta sculpture. The inscription is engraved on the right side of the image and consists of four lines in very corrupt Sanskrit verse."

Burma Circle

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"As may be gathered from previous volumes of this publication and the pages of the provincial reports of the Superintendent. Old Prome or Srikshetra, an important site in Burma, where the most ancient finds as yet discovered in this province have been made. Thus, besides a goodly number of sculptures which, on stylistic grounds, may be assigned to the Gupta period, there have been found epigraphical records which, on paleographical grounds, may be attributed to the Vth—VIIIth centuries A.D. Besides, the monuments there, such as the Bawbawgyi, the Payagyi and the Payama pagodas, form a class by themselves, examples of which have not been found anywhere else. * However, a curious point to be noted is, that while, in the Pali commentaries compiled in the 5th century, mention is often made of some old places in Burma, they appear to be absolutely silent about Srikshetra, which is as old at least as those places. There can be no doubt that Srikshetra is one of the oldest Buddhist centres in this province and the native records and traditions themselves assign its foundation to a remote antiquity, the finds made there also support this view and we shall probably not be far wrong if we assign its foundation to about the beginning of the Christian Era.

"During the year under report, the base of the Bawbawgyi pagoda, which had been covered up with debris for some centuries, and a mound near the Yahandakan village close to the Bawbawgyi pagoda, were selected as the spots most likely to yield interesting results. In previous years, some of the most important finds at Old Prome had been discovered among the debris covering the lower terraces of the Bawbawgyi. These comprised a Pali inscription on a small piece of stone broken in three fragments, containing an extract from* the Vibhanga, a book of the Abhidhamma-pitaka, in a South-Indian script

* Excepting perhaps the small one known as Bu-paya at Pagoda. But the Bu-paya is much later than those at Prome and only a copy of the latter.

closely allied to the Kadamba, belonging to about the 6th century A.D. and **Burma Circle** an earthenware vase containing minute pieces of bones, ash and fragments of Mons. Ch. a silver scroll with an inscription in the same script as that on the stone just „ „ mentioned. Detailed accounts of the writer's excavations at these two sites during the year under review are given in his Provincial Annual Report for the year 1923-24. Here only the chief results are summarised. Contrary to expectation, the base of the Bawbnwgyi was found to be very dilapidated, the terraces, which are three in number, being in a wholly ruinous condition. The bricks with which the terraces and their retaining walls were built have deteriorated to such an extent, that they could only have been preserved at an inordinate expense and it was decided therefore to cover them up again. Pl. XXXI, *a* and *b* give two views of the pagoda, the first figure showing the terraces before and the second after excavation with the terraces uncovered.

" Among important finds made there, mention may be made of the Pyu or old Indian numeral symbols engraved on bricks which were found built into the terraces and their retaining walls (Plate XXXU *c-f*). Plate XXXI, *c* and *d*, shows the mound near the Yahandakan village after excavation. This site is an old Pyu burial ground, measuring 54 feet by 34 feet, the longer side running north to south. Here I uncovered at least a thousand earthenware urns containing bones, while a thousand or more were left undisturbed. They were arranged in rows and in layers on small brick terraces receding towards the top. The urns measured from six to nine inches in height. Most of them crumbled away when touched, and only a few were found in a fair state of preservation. These urns contained charred bones and ashes, and either in them or quite close to them were found iron daggers or nails. Near the middle of the mound and buried a few feet below the surface were fragments of a stone slab, the largest measuring 3 feet, 5 inches by 2 feet 10 inches by 10 inches which to judge from its smooth surface appears to have been intended for an inscription, though no letters were found on it. The most interesting find, however, was an iron plate pierced with 43 nails of three different sizes, varying from 7" to 11" in length. The largest nails are placed in the centre (Plate XXXI, *a* and *b*). This plate was found with other iron implements consisting of a large iron pin, iron hooks and four iron rods one end of which is barbed, close to the stone slab above mentioned. The purpose of the iron plate with its 43 large nails is a puzzle, the nails being so close together in a small area (18" x 11") that they could hardly have been driven into a piece of wood without the latter splitting. Whether any symbolism connected with funeral rites attached to it is not known, but perhaps future excavations will throw some light on the point. The burying of arms or implements with their owners was an almost universal custom, and the presence of the daggers in some of these urns may perhaps be thus explained. The burial of nails, which were so numerous in this mound, in, on or near the urns, is not quite so easy to explain. This burial of iron objects with the dead is perhaps associated with the popular belief that the spirits of the departed have a horror of metal. Thus, the burial of such objects near the remains

Burma Circle would drive away the spirits which once animated them, and procure peace
DiuroloaeU* ^{anc* BaletA to A^} villagers living round about the cemetery. Up to this day, this belief is still strong among the Burmese, and this is why, in the districts, any one who has to go out of the village after dark, is careful to carry something made of metal • a *dah* or a spear, or the like which may serve against beast or man, but above all drive away from the bearer roaming spirits who shiver at the proximity of metal

" Besides the remains of brick walls round the mound and traces of small terraces for the urns, no vestiges of any building were found. There may, however, have been a wooden structure on posts erected over the mound; this seems to be indicated by a peculiar dust, found here and there which, on close examination, appears to have been formed by wood.

Mekkhaya

" In March 1924, M. Duroiselle visited the site of Mekkhaya, an old fort in Kyaukse District. It was one of the forts built by King Anorata (1044-77) to ward off the inroads of the Shans settled in the north and north-east of Burma. It is situated to the north-east of Pagan, at a distance of about 50 miles as the crow flies, and can be reached by cart from Smgaing, a railway station near Kyaukse. A small village, bearing the same name has been established quite near it. The fort itself, which was built at the confluence of the river Myit-gne and the Zawgyi stream measures roughly 1,400 feet by 950 feet, and is now in ruin, only traces of the walls and moat being left. The village above mentioned has been built partly on the wall and moat on the north side; and the erosion of the bank of the Zawgyi stream, caused by the shifting of its bed, has obliterated almost all traces of the wall and moat on the east. Traces of the walls and moats on the remaining two sides are more distinct, but they are overgrown with almost impenetrable jungle. From what I could make out of the remains of these walls, they must once have looked very much like the walls of Fort Dufferin, Mandalay, with their crenelles and bastions. The moat was fed from the Myit-gne and the Zawgyi, and the fort, for those times, must have been a pretty formidable place for a foe armed with swords, bows and arrows. During the time of King Kyawzwa of Pagan (1287-1300), Mekkhaya was given to Razathmgyan, a Shan, in recognition of valuable services rendered by him during the reign of the king and that of his father Tayokpyem (1254-87). However, Razathmgyan, in conspiracy with his two brothers, who had likewise received similar munificence from Kyawzwa, deposed him, and each proclaimed himself chief in his own town. This was practically the end of the Pagan dynasty, and the beginning for Burma of one of the most troublous periods which ever afflicted her.

" It appears that there were a goodly number of historic records round about Mekkhaya. The tradition of the villagers, who are neither Burmese nor Shans, but Talangs from the lower country settled there by Alaungpra (1753-60), is that all these inscriptions were thrown into the river by the fore-fathers of the present settlers, to do away with all records of the delimitation of lands dedicated to pagodas and monasteries, so that they themselves might encroach upon them.

Within the fort there are a few pagodas, but they are all of recent **Mayurbhanj State** date."

"At the request of the Chief of Mayurbhanj and with the permission of the Director General I spent two months between November 1923 and January 1924 excavating the precincts of the Thakuranf Temple at Khiching in Mayurbhanj State. I was accompanied by Balm Pares! Nath Bhattacharya (later on relieved by Munshi Wahiduddm) Gallery Assistant. Babu Anant Bandhu Maitra, Photographer and Draftsman of the Archaeological Section of the Indian Museum, Mr Pham Bhusan Boso, M.A, Professor of Indian History, Visvabharati, Santmikitana and Babu Paraniananda Acharya, B Sc, now State Archaeological Scholar, Mayurbhanj, all of whom worked hard and had to undergo a good deal of hardship during the two months we were encamped at Khiching. The Mayurbhanj Daibai bore the entire cost of clearance and excavation of the site, and the local officials. Mr. Brmdaban Chandm Panda, the Sub-Divisional Officer of Pamphn and Balm Udhashyam Naik the Saidar of Adipur, rendered me most valuable assistance throughout the undertaking.

"In November we were mainly engaged in clearing the thick jungle which enveloped the ruins on the west and the north. Plate XXXIII, a shows the site as viewed from the south-west after the debris has been cleared. The temple to the right is the shrine of Ohandiasekhara, the linga of which including the *anuluMi* was thrown down by a tree falling on it some years ago. On the main mound to the left is the Khandiya Deul (unfinished temple) buried up to the plinth by debris and behind the Khandiya Deul is the modern brick shrine of the Thakuram, while between the two appears the *kachha* kitchen. In the dilapidated hut behind the temple of Ohandiasekhara were deposited certain stray sculptures picked up from the ruins. Below the plinth of the Khandiya Deul, excavation revealed the foundations of an older temple which we may call the old Siva temple (Pl. XXXVI, b). This temple had evidently collapsed owing to the submergence of the sub-soil. An examination of the pedestal made up of two pieces found just behind the Khandiya Deul indicates that a big image was enshrined in this temple. For reasons which will be discussed in a separate monograph on the monuments of Mayurbhanj it may be presumed that this temple of Siva was built by one of the early Bhanja chiefs, Kottabhanja or Digbhanja, in the eleventh century A.D., and it is evidently this image of Siva to which according to certain copper-plate grants Ranabhanja and his son Kajabhanja were devoted (Annual Report, 1922-23, p. 134). This temple had a shrine with three *ratnas*, that is to say, the outer facade of each of the side walls of the shrine was broken up into three different facets, or pilasters, and not into five facets like the Khandiya Deul and a very large majority of the temples at Bhuvanesvara. Roughly speaking it was about as big as the Rajarani or the Brahmesvara temple near Bhuvanesvara.

"About 22 yards to the north of the foundation of this old Siva temple, we unearthed the plinth of a smaller temple of almost exactly the same type, popularly known, after the name of the lingam that stood on the site till

recent times, as the temple of Jatesvara. The present condition of the **plinth** shows that this smaller temple also collapsed as a result of the subsidence of the sub-soil.

"The Khandiya Deul was probably erected on the foundation of the big temple of Siva with old materials sometime in the fifteenth or sixteenth century. As the images of goddesses installed in the three side niches (Sivani, Vaishnavi j'arvati) indicate, it was intended "to receive an image of a goddess, evidently the image of Chamunda now broken in pieces and installed in a pit in the modern brick shrine under the name Kmchakesvan. In the sanads granted in the eighteenth century to the Bhuiya store-keepers (Dandapats) of the shrine, the goddess is named Khijjingesvan, of which Kmchakesvan is the modern corruption. But before the completion of the Khandiya the capital of the principality was evidently transferred from Khiching to Hanpur and the temple was left unfinished. The image of Kmchakesvan (Chamunda) is probably as old as the big temple of Siva and came to be recognised as the presiding deity of the city when the ruling chief exchanged Saktism (worship of the Goddess Durga as the Supreme Being) for Saivism. Early in the seventeenth century, Maharaja Vaidyanath Bhanja adopted Vaishnavism and the family still continues Vaishnava though Kmchakesvan is recognised as the patron goddess and there are shrines of the goddess at Banpada (within the palace) and at Bahalda. The sub-soil has proved treacherous even to the Khandiya Deul and part of it has sunk causing cracks in the walls.

"A large number of images and finely carved architectural pieces were lying on the surface of the mound itself on which stands the modern shrine of the Thakurani and on the open space to the south and east of it. Many more specimens were unearthed in the course of the excavations including some of the missing parts of the fragmentary pieces found on the surface. A considerable number of fragments still lie buried in the plinth and the thick walls of the Khandiya Deul.

"The architectural pieces of the temple of Siva and of Jatesvara are decorated with scroll work and patterns closely resembling those on the temples of Bhuvanesvara in Orissa and the minor decorative figure sculptures, of which we possess about fifty specimens, may also be recognised as products of the same school. As an example I may cite the smiling female figure reproduced on Plate XXXIV, b. This figure is modelled in the Orissa style, but the subtle smile on the face, the flow of line and the rhythmic action of the limbs invest it with a charm all its own. The bigger figures disclose a different current of influence. The images of the gods and goddesses installed in the mediaeval temples of Orissa are characterised by certain peculiarities of feature, and particularly by their short broad faces. The more regular and pleasanter features of the images of Khiching indicate the influence of the art of Upper India. But what places them on an even higher artistic level than the later mediaeval sculptures of Upper India and Orissa is a touch of real creative power and relative freedom from the conventionality. The material used, soft chlorite, is favourable to delicate chiselling.

" The finest and most majestic of the figure sculptures was the image of Siva **Mayurbhanj State** originally installed in the big temple (Plate XXXIV, a). The head and the broken arms of this figure were found in pieces on the surface of the mound the two attendant female figures in the southern area and the pedestal in two pieces buried in the debris on the west of the Khandiya Deul. The total height of the image including the pedestal is 7 feet 7 inches and the height of the figure from the top of the crown to the feet is 6 feet 3 inches. The face of the god though its modelling is schematic, produces an impression of majesty, as if the deity though engaged in calm meditation were looking benevolently on his worshippers and promising fulfilment of their wishes. Both the attendant female figures are full of grace and animation. The figure on the proper right with her face shown almost in profile is gazing at the flower she is about to pluck, her face lit up by a half-subdued smile. The head of the other figure is slightly inclined towards the right and she is looking downward in a contemplative mood. The arrangement of the drapery of these and other female figures is singular. One end of the loin cloth is hung on the back and arranged in elegant though conventional folds as if flying in the breeze. The scroll work on the pedestal is exquisite and the bull is not only true in form, but adorned with taste and restraint. Two other life-size images, one of a four-armed Siva holding in the left lower hand a human skull to serve as a cup, and another of Bhairava, have been partially restored with fragments, some of which were found on the surface and others dug out of the mound. These images probably occupied two of the niches of the outer wall of the cella of the big temple and are now worshipped by the semi-Hinduised aboriginal tribes of the neighbourhood as two Chandiya Babus or sons of the goddess and named Bhim Chand and Ram Chand. Among the bigger and better preserved sculptures found in the ruins are a dozen upper halves of figures of Nagas and Nagis. Above the head of each is a hood of seven serpent heads. The Naga figures whose hands are intact hold a garland and the Nagis are portrayed as playing on musical instruments. The workmanship of these figures is of very high order and their expression is naturalistic.

" About 200 yards to the south-east of the Thakurani's compound is a small mound called Jtamunda. In 1908 Mr. Kamakhya Prasad Bose of the Mayurbhanj State Service excavated part of this mound and cleared a brick building consisting of three small rooms and a verandah. In the middle room he discovered an image of seated Buddha in the earth-touching attitude (5'-5" x 3'-6") reproduced in Plate XXXII, y. This brick building was probably a Buddhist monastery and in the neighbourhood we have found remnants of a few Buddhist temples. From these and other relics which space will not permit us to notice in this brief summary it appears that under the early Bhanja chiefs Khichimg (Khrjimgakotta) was a prosperous town where Brahmanism, Buddhism and Jainism flourished side by side and a local school of sculpture grew up which while assimilating the best elements of the art of Onssa and Upper India possessed newer elements derived from the direct observation of nature."

SECTION III

EPIGRAPHY

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"Impressions of some 08 different records were received for examination from officers of the Department and other scholars, excluding such e&tampages to be of inscriptions already published in the Director-General's reports or elsewhere. Besides those which are merely votive, or give the Buddhist need, mention may be made of the inscriptions written in characters of the (Jupta type on bricks which Mr. Page discovered at Nalanda, the well-known Buddhist site m Bihar These give complete texts of the *Pratityasa-mutpd* or the *Ntddm-sutrai*, and their exposition in Sanskrit. No inscription of this kind seems to have been found so far in India, the inscribed bricks from Gopalpur in the Uorakhpur district of the United Provinces giving only the text and not the commentary. Other interesting records examined were some copied by Sir Aurel Stem several years ago, which have still to be fully dealt with. These will be noticed m next year's report, since some were deciphered after the close of the year, and better impressions of others are still awaited to settle their readings. Twenty other inscriptions examined are mediaeval, ranging in date from *Samvat* 1148 (=A.J.D. 1091) to *Samvat* 1711 (=A.D. 1644), and two are on images, viz., one on a stone image of Buddha, recording the Buddhist creed, and the other on a brass image of the Jaina goddess Ambika—the attendant deity (Yakshi) of the twenty-second Jama Tirthankara Neminatha. The latter commemorates the setting up of the image by the two brothers Nahatasai and Sn Dharmasai of the Savala (Oswal) sect of the Baniya caste and is dated in the Vikrama-Samvat 1519, Sunday,—26th April, 1462 A.D.

Inscriptums
at Kodavah and
Nanaghut

"Accompanied by Mr Hirananda Shastri, Superintendent for Epigraphy, to Pithapurain, so well-known in connection with the exploits of Samudragupta—the Napoleon of India—and thence to Nanaghut, which latter place is famous for its Brahmi inscriptions and the relics of the portrait statues of Satakarm kings. Some improved readings were made in my article on the rock-cut Andhra inscription at Kodavah (cf. *Archl. Survey Report* for 1922-23, p. 140) which will appear shortly in the *Epigraphas Indica*. In the Nanaghut Inscription, which was studied on the spot, with special reference to a paper for the *Eptgrapha hidica* by Mr. R. D. Banerji on the comparative study of the characters used in the Hathigumpha and the Nanaghut inscriptions, some striking misreadmgs and omissions in the printed text of Dr Burgess (Ellora Cave Temples, p. 60 f. and pp. 65 ft.) were noted for future guidance, in case a revised edition were to be issued, and good photographs * were taken of the inscriptions on both the walls of the cavern Two apparent mistakes may be noted here: (1) in lme 1 *Vedasinm* is to be read *Khandasirisa* (*Skandasnyak*) and (2) in lme 3, *Amgiya* must be read *Ambhiya*. The latter reading—now enables us more reasonably to connect the word with the historical Ambhi,

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king of Taxila, than with the Puramc Anga. This exceedingly important and interesting inscription at Nanaghat, which among others, mentions nianv Vedio sacrifices, deserves to be studied and edited more carefully. The rock on which the inscription is recorded is in a state of advanced decay, the stone peeling oft in layers at the slightest touch. If possible, it should be ticated "without delay with some suitable preservative by the Archaeological Chemist

" The tour part' next went to Bombay to identify and copy some of the Semitic inscriptions preserved in the Prince of Wales Museum which are in the course of publication in the *Epigraphia Indica*. Thereafter, the Superintendent for Epigraphy, Mr Hirananda Sastri, went to Nagpur to examine and copy the Brahmi inscription on the Kirari pillar which has been deposited in the Government Museum there. While at Nagpur he checked his reading of the record *in situ* in order to complete the paper which he has contributed to the *Epigraphia Indica*.

" Mention must be made here of the good offices of Mr Ilaigieaves, the Archaeological Superintendent of the Frontier Circle, who has supplied to Dr. E. Hultzsch, who is issuing a revised edition of the *Corpus Inscriptionum Indicarum*, Vol. I (Asokan Inscriptions), a set of very carefully prepared estampages of the Asokan inscriptions at Mansehra and Shahbazgarh

*Revised edition
of the Asokan
Inscriptions*

" Parts I to VI of Volume XVII of the *Epigraphia Indica*, which were issued during the year, appear solely under the editorship of the Government Epigraphist for India. The important astronomical contributions of Mr R. Sewell, I.C.S. (Retired), viz, The First Arya-Siddhanta, Mean System, The Brahma Siddhanta of Brahma-Gupta (A.D. 628) (True System) and the same by Mean System, occupy the major portion of these parts. The results obtained by the application of the True and the Mean Systems of the Arya Siddhanta differ considerably, apparently on account of the differences in the computed positions of the sun and the moon on the same civil day, and consequently, it is expected that with the help of Mr Sewell's new tables the dates of inscriptions that have been hitherto set aside as irregular could be re-examined with profit. The Brahma-Siddhanta tables, also meant for the same purpose are constructed from Brahma-Gupta's values of the twenty-four base sines of angles in the astral quadrant. Of the few other articles contributed to the *Epigraphia Indica*, I may note the inscription of the 8th year of the Kushana king Shahn Kanishka, cut beneath a Naga figure from the Mathura Museum,— this being the earliest dated Naga image at Mathura. A small record of the Pallava king Vichitrachitta Mahendravarman I of the 7th century A.D. from Mandagappattu in the South Arcot District of the Madras Presidency, states that he created a mansion (*i.e.*, shrine) for the gods Brahma, Vishnu and Siva, "brickless, timberless, metal-less and mortar-less" meaning thereby, that before his time, brick, timber, metal and mortar were the common temple-building materials, but that he discarded them in excavating this rock-cut shrine on which the inscription is cut. Mahendravarman, in introducing this innovation in the construction of temples, says the editor Mr. T. A. Gopinatha Rao, 'was indeed Vichitra-chitta' the 'inventive-minded' in so far as he avoided

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bricks, etc., commonly used by all in the construction of buildings. We gather from some other birudas of Mahendravarman incidentally quoted, that he was a musician. Of the two new grants of the Maitraka king Dhruvasena I from Palitana edited by Dr. V. S. Sukthankar, one is dated in the Valabhi-samvat 207 (= A.D. 527) and the other in V.S. 206. The latter is incomplete, containing as it does only the last plate of the grant¹. Two terms of technical significance occurring in the first are noted by Dr. Sukthankar. One of these, viz. *pravesya* is interpreted by him as that which belongs to the *pravesa*—a term denoting a territorial division smaller than the *akhra*. The Somalapuram Grant of Virupaksha, edited by Mr. K. V. Subrahmanya Aiyer, proves beyond doubt that the Vijayanagara king Vijayabhupati of the First Dynasty had two sons, the second of whom was known by the names Pratapa, Praudha-Pratapa, Pratapa-Devaraya and Praudha-Pratapa-Devaraya, and was ruling as a subordinate of his elder brother king Devaraya II. As the latter also often assumes similar *Inrudas* in inscriptions, scholars like Mr. Gopmatha Rao identified the two names and refused to recognize two different sons to Vijaya. Evidently, they did not understand the significance of the phrase *mj-dgrajdt=prdpu-Ghamdri--rdiyah*, which as an attribute of the younger brother Pratapa-Devaraya, occurs both in the Sasailam Plates of Virupaksha (*Ep. Ind.* Vol. XV, page 8 f) and the present Somalapuram grant. The mistake must have arisen from a wrong reading (") given by Mr. Rice in *Epigraphia Carnatica*, Vol. III, p. 136, where in printing the Sajjalur Plates, he read this same phrase as *niy-dgrajdt=prdpam=anad'i-rdijam* and translated 'obtained the immemorial kingdom from his elder sister'. We do not know of any daughter of Vijayabhupati, elder to Pratapa-Devaraya, who was ruling the unspecified 'immemorial kingdom' and conferred it on her younger brother. More than this, the Satyamangalam Plates of Devaraya II are quite clear in stating that Vijayabhupati had two sons, Devaraya and Pratapa-Devaraya. The only other contribution of importance in the six parts of the *Epigraphia Indica* under review, is the note on the dates of the Gupta Copper-plates from Damodarpur, by Mr. K. N. Dikshit. He reads the date (I.E. 214 of the fifth Damodarpur Plate, in which the king's name is lost, as G.E. 224, and arrives at the important result that some Gupta sovereign must have held sway over North Bengal as late as 224 G.E. or 543 A.D.), that is, eleven years after the date of the Mandasor Pillar Inscription of Yasodharman (532 A.D.).

Progress in the
publication of
South Indian
Inscriptions
(Texts)

"Volume V of the South Indian Inscriptions (Texts) has been taken up, and it is proposed to include in it as many as 1250 inscriptions, to cover 500 pages in print. The first batch of proofs, consisting of nearly 200 printed pages, has already been passed for final printing, thus completing almost half of the volume. Before doing this, Mr. K. V. Subrahmanya Aiyer, the Assistant Superintendent for Epigraphy in charge of the Dravidian section, had to clear up many doubtful points on the estampages, by examination of the inscriptions *in situ*.

¹ The missing plate is now discovered by Mr. Diskalkar, Curator, Wateon Museum, Rajkot and will be published by him shortly in the *Epigraphia Indica*.

" While touring in the south for the above purpose, Mr. Aryar discovered in that part of the Nagamalai hills which lie at a distance of 3 miles from Tenkarai (Madura District) a natural cavern with Brahmi inscriptions of the 2nd century A.D., on which he notes as follows :—

" The spot where this ancient monument exists is popularly known as *Undankal*, and is annually resorted to by the neighbouring inhabitants for making offerings of cooked rice to the Panchapandavas. On the southern face of the hill, at its eastern end, is situated the natural cavern which is shaped like a triangle by the meeting of two boulders, the surface of the hill itself serving as the base. The eastern side of the cavern contains two sets of four beds each, of which one set measures nearly 2' 7" 8" and the other 1' 4" by 6". The first three of the first set of beds contain on their raised pillow side the following three inscriptions :—

- 1 IV) ti lai ku vi ra n
- 2 Ve • ku vi ra n
- 3 Ku tu pi ta n

On the west side of the cavern, similarly, there are two big beds and three smaller ones of the same size as the other eight beds. On the pillow side of the first two beds, is an inscription in large Brahmi characters which leads

4 a na tai ya pi ka n ma ka n vo n a ta n'

The interpretation of these cave inscriptions has been a puzzle from a long time. By reading the 'ns' with the hook nuuk (p) as final w, instead of long na (vide Buhler's *Tafel TI*, 27, XIV), Mr. Aiyar proposes to read a final n and to find m these present inscriptions, at an' rate, proper names ending in the usual Tamil termination n. Thus from (1) he obtains the name Kuviran of Potilai (i.e., Potilāi, a famous hill in the Tirunelveli District) immediately connected with Agastya), from (2) also Kuviram . . , from (3) kutupitan, which as remarked already (vide Bhandarkar Commemoration Volume *Caverns and Brahmi Inscriptions of South India*, p. 333) may stand for *kottumtān*, i.e., caused to be made, and from (4) Von Atari, son of Pikan of Anatal. In this last, it may be remarked the term *anatal* has been taken by R. B. Venkayya to mean 'living' (see his *Annual Report on Ejjengrathy* for 1908, p. 47, para 7). This hypothetical interpretation of Mr. Aiyar, however, rests on the proper value given for the symbol P and the suitable meaning which this would yield in the numerous cave inscriptions of Southern India both long and small, already collected and published in the Bhandarkar Commemoration Volume, pp. 327-348.

" Of the work done in the various Circles the following is a brief summary :—

" The Frontier Circle copied only one inscription during the year at Hund, Frontier the ancient Udabhandapura of Kalhana and the Wāhmad of Alberuni, in the Circle Peshawar District. It is written in the Sarada script of about the 10th century A.D. and records the construction of a Siva temple.

" In the Northern Circle, Rai Bahadur Daya Ram Sahni reports eighteen Northern new inscriptions copied and deciphered. Three of these are short dedicatory Circle records engraved on the pedestals of images lying in the Badannatha and

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Northern Circle

Kalikadevi temples at Dwarahat, District Almora. One of them, which is incised on an image of Vishnu in the former temple, is dated in the Saka year 1105 (A.T. 1183). The other two epigraphs belong to images of Jaina yakshs, and contain no information of historical value. Three other inscriptions were copied from images of Tirthankaras, which were found in the ancient mounds of Chakranagar, District Etah, and are now worshipped in a Jaina temple in that town. These statues were all installed on the same day in Samvat 1335 by certain Sadhus of the Gopalata family of the Mulasangha caste. One small inscription of two lines in Brahmi characters of the Kushan period is engraved on a fragment of a corner railing-post which came to light during the conservation of the large drum attached to the forecourt of the Mam Shnne at Sarnath. The epigraph reads ' *bhadamla Balmsutiya pangahaJca,*' Two of the remaining inscriptions, one in elegant Sanskrit verse and the other in Hindi prose, are engraved on the Govindadeva temple at Brinlaban, District Muttra. The former probably contained five verses of which the first four have been deciphered. The first stanza is devoted to the glorification of Sri Krishna. The second eulogizes the king Akbar. Sanskritised to Arkavara, for, as soon as he came to the throne, all virtuous men became happy and the followers of Vishnu showered their blessings on him. In the next verse we are informed that Maharaja dhruva Manasimha, the son of Bhagavaddasa (Bhagwan Das), the son of Bharahamalla built this temple of Govindadeva. The fourth verse glorifies Manasimha's victories over his enemies. The Hindi inscription which is dated in the year 34 of the reign of Akbar contains the same information. The most interesting inscription copied during the year is a lengthy record of twenty-eight lines* engraved on a red stone slab measuring 3'4" x 1'8" which was found in the town of Ahar, tahsil Anupshahr, District Bulandshahr. This discovery was made known by Mr W. E. J. Dobbs, Collector of Bulandshahr, and the stone has now found its permanent resting place in the Provincial Museum at Lucknow. A contribution on this interesting inscription has been sent by Eai Bahadur Daya Ram Sahni for publication in the *Epigraphic, Indica*.

Central Circle

" Mr J. A. Page, Superintendent, Central Circle, sends a list of seven Muhammadan inscriptions copied in Bihar and Orissa, and of two others copied in the Central Provinces and Berar. The three Pali inscriptions on brick and one on a stone slab copied by him at Nalanda have been noticed above under decipherment of inscriptions.

Eastern Circle

" In the Eastern Circle no inscriptions are reported to have been copied or examined during the year.

Western Circle

" In the Western Circle were discovered 12 votive inscriptions in the chaitya cave at Karle, together with a fragment of another lying near the caves: and an unpublished copper-plate grant of Dhruvasena I was also brought to light. Pandit Madho Samp Vats has sent his contributions for the *Epigraphia Indica* both on the votive inscriptions and the Valabhi copper-plate grant. The former, in no less than ten of them, refer to the place-name Dhenukakata which is already known to us from other published inscriptions, and Prof.

•Senart says that as several *Yavanas* profess to have been natives of that place, it ought to be looked for in the north-west.

"In the Southern Circle, a volume of much interesting work has been done during the year. As many as 447 villages were visited, and 709 new stone inscriptions copied. Besides these, many copper-plate grants were also examined and registered. Five important sets of copper-plates registered in previous years were acquired by purchase for the Madras Museum. Transcripts of the 764 inscriptions copied and listed in the year 1922-23 (covering 1618 pages of manuscript) have been made, compared and kept ready for the press for publication in the *South Indian Inscriptions* (Texts) which are being issued by the Government Epigraphist.

"The premier discovery of the year is the Brahmi inscription at Alluru in the Nandigama taluk of the Kistna District, which on palaеоjgraphic.il grounds has to be assigned to about the 2nd century A.D. From this same taluk-come, as we already know, the three Jaggayyapeta Andhra Inscriptions (Nos. 1202-1204 of Luders' *List of Brahmi Inscriptions*) of Rajan Madhanputa Sirivra Punsadata of the Ikshvaku. Most of the characters of our present inscription resemble those of the inscriptions of Yajna-Siri Satakani 11, while a few others resemble those of the records of Satakani 1 and Ushavadata. The inscription is fragmentary and no king is mentioned. The gifts included appear to have been made to a school (*nikaya*) of the Purvasaibya sect or Buddhist monks. The term *Purvasaibyas* is interesting and has evidently to be connected with the convent Purvasila, which with Avarasila is mentioned by Yuan Chwang in his account of To-na-kie-tse-kia (Dhanakataka), (Beal's *Si-yu-ki*, Vol II, p. 221).

"Near the spot where the above record was discovered lie the remains of a Buddhist stupa, which along with another stupa noticed at Rannreddipal in the same taluk, have been reported to the Superintendent, Archaeological Survey, Southern Circle, for further investigation.

"Of the copper-plates examined, the grant of the early Ganga king Maharaja Indravarman, son of Danavarman, is dated in the Ganga Era 154 and is thus five years later than the Ins Purle grant which is dated in the Ganga Era 149 and was published in the *Epigraphia Indica*, Vol. IV, pp. 360 ft. A similar grant is one of Maharaja Devendravarman, son of Rajendravarman, to whom also belongs No 7 of the copper-plate collection of the Southern Circle for 1918-19. The copper-plates of the Eastern Chalukya king Jayasimha II are the first of that king hitherto known to Epigraphy, and record the grant of the village Penukaparru in the Velanandu-vishaya. This village Penukaparru is evidently the same as Pmakkipparu which occurs as the house-name of a family of Brahmin donors in the Tandantottam plates edited in the *South Indian Inscriptions*, Vol. II, No. 99. A grant of the Eastern Chalukya king Amma I (A.D. 918-925), mentioning a Rashtrakuta subordinate of his who belonged to the Maharrata-vamsa and was the hereditary chief of the city of Manyakheta (Malkhed), is also one of importance.

Southern Circle

" Much interesting information also is available from the large number of Chola records examined during the year. An early inscription of the time of the Chola king, Raiakesanvarman, (*circa* 9th century) records an endowment for an annual prize-competition in reciting a chapter of the Jaiminiya-Samaveda. Another of the period of Ilaiaraja (A.D. 985-1012) states that as a result of a revenue survey of a village made in his time, about 920 *kalam* of paddy was realised in excess of previous years. An inscription of Kulottunga I (A.D. 1070 to 1118) supplies the information that at that time one *kam* was equal to 7 *drammas*.

Another Chola record reveals the fact that when King Ilaiaraja II (A.D. 1146 to 1163) died, leaving only two young children behind him, a minister of his selected, four years after the king's death, a suitable prince of the royal blood to the throne and crowned him under the name Ilaiajahiraja II. This militates, however, against established facts. For, from inscriptions which supply dates with astronomical details, we know that Rajadhiraja II succeeded Kajaraja II, not so very late as four years, but only after a few months. It was during the time of this Kajadhiraja II that the war between the Pandya princes Parakrama and Kulasekhar, for the throne of Madura took place, the former being aided by the Singhalese and the latter by the Cholas. Though the Mahavamsa makes the Singhalese victorious throughout in this war, yet, the Arpakkam inscription copied by the Southern Circle in 1899 has proved that the Singhalese generals Jayadratha Dandanayaka and Lankapura Dandanayaka were defeated and fled. The record under review, copied this year, confirms the statement of the Arpakkam inscription, and goes on to say that the Chola king, after treating Kulasekhara (Pandya) who sought his refuge with the utmost consideration, recovered the Pandya country for him after killing Lankapura Dandanayaka and nailing his head to the gate of Madura.

One of the subordinates of Tribhuvanamalla Vikramaditya VI (A.D. 1077 to 1126) in the third year of his reign (*viz.* 1079), was a certain Bijjana-Chola-Maharaja, of the Kankala-Chola family. This was perhaps the Choda-Bijjana or Telugu Bijjana of the genealogical table (c) of the Telugu Cholas given in the *Annual Report on Epigraphy* for 1900, p. 17.

We know already from two records at Conjeevaram that Achyutaraya, the younger brother of the great Vijayanagara king Krishnaraya, was crowned in Saka 1452 or A.D. 1530 (*Archaeological Survey Report* for 1908-9, p. 186), and that on this occasion he promised protection to many chiefs who were subordinate to him. This is borne out by a trilingual record copied at Kalahasti in the Chittoor District, which is dated in Saka 1454. We learn that the coronation actually took place in the presence of the God Kalahastisvara in Saka 1452 and that on this occasion the king remitted also the customs duties on the exports and imports at several sea-port towns, one of which was Duggarajapattana *z.e.*, Armagon—the first English settlement on the Coromandel coast.

" Ten inscriptions in Maharatti were copied at Tanjore, the seat of a powerful Maharatta Kingdom in the farthest south. One of these gives the

history of the Bhonsle family describing in detail the several achievements of Shahji and his son Sivaji. The genealogy of the family is carried back by fifteen generations further, from that given by Mr Sewell in his *Lists of Atitiquities*, Vol. II, pp. 192 and 193. The inscription must consequently prove valuable in the reconstruction of Maharatta history from its own records

"The work in the Burma Circle, during the year under review, has been very interesting from the importance and varied nature of the epigraphical finds made. First of all, mention may be made of the discovery of a manuscript known as *Slapat Wan Sim*, which contains an account in Tabling of the consecration of *Sima* or ordination halls. It was found in the possession of a Buddhist monk at Kanhyaw in Moulmem District by the Rev. R. Halliday, and with the assistance of another monk U Thilawuntha, *Aqya?naltapandita*, he succeeded in identifying it as a copy of part of the Kalyani inscription m Talamg, which is now being edited by Mr. C. O. Blagden. This important find has somewhat retarded the issue of the *EftM/iap/im Birmanicxt*, Vol III, Part II. This part is to contain a descriptive account, translation and transliteration with notes of the above inscription, but the inscription itself is in fragments of which some parts are missing. Mr Blagden had nearly completed his work, and the greater part of it was already in the press when the above discovery was made and necessitated the recall from the press of almost all that had been already in proof. However, in the interests of Science, it is a happy set back. The manuscript will no doubt help a good deal in reconstructing the whole text, and probably also in ascertaining the sense of some words in the original.

"The next epigraphical finds, but of no less importance, are the Pyu numeral symbols found inscribed on bricks which were discovered at Hmawza, Prome. These bricks were built into the retaining walls of the terrace of the Bawbawgyi Pagoda, and although the symbols are in detached groups, a comparison of them with the figures shown in plate IX of Buhler's *Indian Palaeography* leaves no doubt that they are numbers. Thus on several bricks were noticed the horizontal strokes, somewhat cursive, to represent the figures] to 3, according as there is only one stroke or two or three. No examples of them standing by themselves have been found, but they are found close by the other symbols representing ten or multiples of ten. The symbols for 4, 5, 6, 8 and 9 may also be identified, but that for 7 has not yet been found. So far, these symbols are unique in the whole of Indo-China, and their discovery is expected to throw light on the history of certain Pyu epigraphy to which some uncertainty has attached.

"The next in importance to the above is a short Chinese inscription found on the pedestal of a bronze image of a Bodhisattva. The image was found in the possession of Mr. Ba U, a Chinese resident of Mandalay; and according to him, it was given to his father as a present, by a Siamese Buddhist monk in the course of the latter's visit to Mandalay some years ago. The inscription records that the image was made during the reign of the Emperor Kieng Lung of the Manchu dynasty in the year *Keng in* (1770 A.D.)

Burma
Circle

" Kieng Lung reigned from 173G to 1796 A.D., and it was during his reign that the Chinese were severely chastised and suffered defeats at the hands of the Burmese in their attempt to invade Burma through Yunnan.

" Among the finds reported to have been made in a paddy field at Tavoy in the year under report, there were about 300 small terra-cotta votive tablets bearing effigies of Buddha. Some of them bear writings on their reverse face. Mr. Duroiselle examined eight of them. They are all in Talaing, in characters somewhat cursive and archaic, and record that the images were made by eitam officials of Tavoy. No date is given in any of them, but on paleogeographical ground—, Mr. Duroiselle is inclined to ascribe them to the XIth-XIIth centuries A.D. One important feature that may be noticed among some of these inscriptions is the mention made in them of the town where they have been found. The mention of that name, Davay, that is Tavoy, is interesting, because this is the first time that it is found mentioned in original documents of so early a date.

" Copies were prepared of the inscriptions on Alaungpaya's Clock-tower bell at Shwebo. They contain an invocation for the success of the king's arms and verses or *mantras* in the usual jumbled up jargon of such compositions. These *mantras* are inscribed around the figures of a lion, a tiger, an elephant and a serpent, and their general sense is an invocation to each animal around which they are inscribed, asking their aid and expressing a desire that all the king's enemies may be blotted out.

" Lastly, mention may be made of the examination made by the Hon'ble M R By. Diwan Bahadur L. D. Swanukkannu Pillay Av], CLE., I.S.O., President of the Madras Legislative Council, of the dates mentioned in the inscriptions given in the 'original inscriptions collected by Bodawpaya in Upper Burma.' Mr. Swamikkannu has found from an examination of these dates that Jovian years are regularly used in most of the Bodawpaya inscriptions, while he did not think there was any question of a Jovian year in any of the Burmese inscriptions he had examined previously.¹

Indian Museum

"The epigraphical acquisitions at the Indian Museum were the Patiakella grant of Maharaja Sivaraja of Gupta-Samvat 283, published in the *Bptigrapha Indica*, Vol. IX, p. 285, the Bangarh grant of Mahipala I, published in *ibid.*, Vol. XIV, p. 324 and six short votive inscriptions. One of these last is of the Kshatrapa-Kushana period, and another of the 4th year of Mahindrapala. The remaining four are dated in 782, 925 and 958 of the Newari era, which commenced in 878 A.D.

' The only epigraphical acquisition of the year 1923-24 at the Lucknow Museum was the inscribed slab discovered at Ahar in the Bulandshahr District by Mr. Dobbs. It is being edited in the *Epigraphica Indica* by Rai Bahadur Daya Bam Sahni. It is a collection of ten inscriptions of the time of Bhojadeva of Kanauj and his successor Mahendrapala.

¹ Page* 129-189 of Indian Ephemeris, Vol I, part ii and App. H., pp. 46 to 57 of the Report of the Superintendent, Archaeological Survey, Burma, for the year ending 31st March 1922.

" During the year under review Rai Bahadur Gaunshankar II. Ojha, ourator of the Rajputana Museum at Ajmer, examined and secured copies of some eight new inscriptions. Of these, the most important document from an historical point of view, is a fragmentary Sunga inscription at Ayodhya that has been discovered by Balm Jagannath Das Ratnakaia, B A , and published by him in the Nagan Piacharmi Patnka.¹ the well known Hindi Journal of Benares. It is the first known epigiaph which gives the name of Scnapati Pushyamitra, the founder of the Hunga dvnast}, and mentions that he performed not one, but two *asmmmed/ia* sacrifices Further, it. final}v settles the name of this king to be Pushyamitra, which in manuscripts lias been usually read as Pushpamitra²

**Sanskritic
Epigraphy**
Rao Bahadur
Krishna
Shastri
Rajputana.

" 'Next in importance,' writes the Rai Bahadui, 'is a coppei-plate inscription of Sarvanatha of Uchhakalpa, from Suhuwal in Baghelkhand It records the grant of a village named Vaisvavataka to two persons called visakhadatta and Sakti, as an endowment for the temple of Kartikeyn, which Sarvanatha had built. It is dated in the year 191 of the Kalachun era, and is thus the earliest of Sarvanatha's records discovered so far, being two years earlier than that of his Khoh copper plate, dated K.E 193

" 'The third inscription (also referred to above) comes from Ahai, a village *m* the district of Bulandshahi It was discovered by Mr Dobbs, the Collector of the district, and contains copies of ten different documents relating to some purchases for the temple of Kanchanasn of Kanakasridevi. There are ten different dates in it, nine of which range between the years 259 and 298, the reckoning being of the Harsha era. The remaining date, which is the fourth one in the inscription, is 943 oi the Vikrama era The first date, *i.e.*, 259, refers itself to the rule of Bliojadeva of tlie Imperial Pratihara dynasty of Kanauj. This inscription is of special palcographic interest, for while giving the dates both in words and in numerical symbols, it supplies the correct, symbols for 200, 50, 10, 9 and 8.

" 'Another inscription examined during the year under review, comes from Pandavon-ka-qila at Delhi, where it was found built, into the ninth step inside the qila. It is assignable to the reign of the abovementioned ruler Bliojadeva Though fragmentary, it is interesting, tor it enables us to surmise that at the time of this king Delhi was under the sway of Kanauj, and that the Tomaras established themselves there after the Pratiharas.

" 'Of the remaining four inscriptions, only one requires notice here. It belongs to the reign of Kumbhakarna, the illustrious Rana of Mewar, and being dated in the Samvat year 1491 (=A.D 1434), it is the earliest known record of his rule. The object of this inscription is to assign 14 *tankas* from pubht taxes for worship at the temple of Dharmachmtamam.' "

¹ Vol. V, part 1, pp. 99 C.

² V. Smith's Early History of India, p 198, f. n. 2.

SECTION IV

MUSEUMS

**Indian
Museum,
Calcutta**
Rai Bahadur
Kamaprasad
Chanda

" The reduction of the grant for contingencies in the Budget of the Archaeological Section by Rs. 1,800, as a measure of retrenchment, rendered it impossible to continue the rearrangement of antiquities in the galleries on the scale adopted in the two previous years. The only noticeable work carried out in the galleries during 1923-24 is the reconstruction, out of original pieces and casts, of the old sandstone railing, which once stood round the temple and Bodhi tree at Bodh-Gaya. In the year 1879 Dr. Rajendra Lai Mitra presented three cross-bars and four fragments of coping from Bodh-Gaya, and in 1882 the Archaeological Survey of India presented other pieces including the upper half-medallions of three sandstone rail-pillars. These and four other fragments of granite coping and a granite cross-bar, together with a plaster cast of the famous bas-relief on a pillar showing the sun-god rising in a four-horsed chariot with attendant archers, were built up into a small rail in the southern part of the gallery. This restored Bodh-Gaya rail faced a restored portion of the ground rail of the stupa of Bharhut, consisting of a corner pillar and two arms. In 1922 the restored part of the Bharhut rail was transferred to the northern part of the gallery, and the Bodh-Gaya rail was dismantled and space was thus made available in the southern part of the gallery for reconstructing the latter on a larger scale. This has now been done with the few original sandstone fragments and casts of almost all the typical bas-reliefs on the stones of the old railing still in *situ*, these having been taken with permission of the Mahant of Bodh-Gaya. Casts of some of the bas-reliefs on the medallions, for which room could not be found on the pillars of the restored railing have been exhibited on the contiguous side walls of the gallery. Certain fragments of coarse granite coping stones and a cross-bar of the same material have not been utilised, as these were probably added to the old railing later on in the Gupta period.¹

" Cunningham, recognised in the remains of the sandstone railing of Bodh-Gaya the fence that Asoka erected round the Bodhi tree. Bloch held ' that the older part of the Bodh-Gaya railing was put up in the middle of the 2nd century B.C. about one hundred years after the time of Asoka.'² Bloch also assigns the stupa of Bharhut with its carved railing to the same period.³ But in regard to the sculptures on the Bodh-Gaya railing, Sir John Marshall writes, "Taken as a whole, their style is considerably more developed than that of the Bharhut reliefs and, at the same time, more pronouncedly affected by the influence of western art. Witness, for instance, in the matter of technical treatment, the freer movement of planes leading to more convincing spatial

¹ Bloch, " Notice on Bodh-Gaya," *Arch. Bw. of Ind., Annual Report, 1908-9*, p. 146.

² *Ibid.*, p. 147.

³ *Ibid.*, p. 144.

effect, the more organic modelling of the figures, the relative freedom of their pose and composition, and the effort to bring them into closer relationship one with the other.' On the other hand, says the same authority, 'in point of development the reliefs of Buddh Gaya fall short of those on the *toranas* at Sanchi, which, as we shall see below, are to be assigned to the latter half of the first century B.C. and accordingly we shall probably not be far wrong if we assign the Buddh Gaya monuments to the earlier years of the same century.'¹ A comparison of the Brahmi characters used in the votive inscriptions on the railing of Bharhut with those in the votive inscriptions on the old Bodhi-Gaya railing indicates that the latter is considerably younger in age. One important characteristic of the Brahmi alphabet on the Bodhi-Gaya railing, that distinguishes it from the Bhaihuti alphabet, is the thickening of the top of all vertical lines. This decorative feature is conspicuous by its absence in the edicts of Asoka and his grandson Dasaratha, and also in the Besnagar pillar-inscription of Heliodorus, ambassador of King Antialcidas, but is met with in the alphabet of the *torana* inscription of Bharhut and a few other votive inscriptions, whereas it is a regular feature of the alphabet of the decidedly later inscriptions of the Kshatrapas of Mathura and of the Kushans. So we may assume that the thickened tops of the verticals in the alphabet of the votive inscriptions on the Bodhi-Gaya railing indicates that this railing is posterior in time to the railing of Bharhut, and if the Bharhut railing may be assigned to the middle of the second century B.C. the old Bodhi-Gaya railing may be safely assigned to the early years of the following century.

"Like other well-known Buddhist railings of the period, the old Bodhi-Gaya railing was built with funds raised by subscription. The largest share of the cost was evidently contributed by the noble lady Kuśāṃgī, for the following votive inscription occurs on fifteen pieces.—

Ayāc Kuśāṃgīyāc danam

'The gift of the noble lady Kuśāṃgī' Two other votive inscriptions tell us who this noble lady was. One of these, on a coping stone in the Indian Museum, reads as follows—

... *IdagimUśa pa/avatiye jivaputiayr Kṣāṃgīyāc danam rajapāsado chetikaśa*

'The gift of Kuśāṃgī, brother's wife of King Indraguṃmitra.. and the mother of Jivamgī sons, to the king's temple'

"The reference to the *rajapāsado chetikaśa* shows that the railing was erected round a temple originally built by a king. The following votive inscription on a pillar perpetuates the name of another member of the royal family:—

śrāv Brahmanīśa pājāratiye Nāgadevaye danam

'The gift of Nāgadeva, the brother's wife of king Brahmanīśa.'

"Brahmanīśa and Indraguṃmitra probably ruled in Magadha and belonged to the Sunga dynasty. Two votive inscriptions give the name of two private donors, Amogha and Budharakṣita of Tāpāna (Tāmraparna).

¹ *The Cambridge History of India*, Vol. I (Cambridge, 1922), p. 221.

**Indian
Museum,
Calcutta**

Rai Bahadur
Ramaprasad
Chanda

" The laonMnution of the Bodh-Gaya lail on a larger scale withcasts brings this great collection of the specimens of the Sunga art, in the gallery nearer completion. Over three-fourths of the floor space of the Bharhut gallery called *m* Anderson's *Catalogue* the 'Asoka gallery,' is occupied by the great ground rail of the stupa of Bharhut, reconstructed in five different blocks with original materials. Along the contiguous side walls of the gallery are displayed Additional fragments of pillars and coping stones of the same monument. Hound about this stone picture-book of India of the early Sunga period (C. 150 B.C.), we have now displayed specimens of sculptures of the later Sunga period from almost all ancient sites To the south of the Bharhut rail on the floor of the gallery, is the Bodh-Gaya rail described above. Along the southern part of the eastern wall, and the eastern part of the southern wall, are exhibited the carved pillars and cross-bars that were excavated by Colonel Waddell at the site of Patahputra. The few intact bas-reliefs on these stones bear a strong likeness to the sculptures on the old railing of Bodh-Gaya in the matter of technique. Higher up, all along the eastern wall, are displayed casts of the sculptures in the cave temples at Udayagin, near Bhuvanesvara in Orissa, of the time of Kharavela of Kalmga and his successors, who were contemporaries of the later Sungas and probably flourished in the first half of the first century B.C. The elaborate bas-reliefs that decorate the four gateways of the great stupa of Sanchi, probably erected shortly after the fall of the Sungas, are Sunga in style and must be recognised as the finest specimens of Sunga art. They are represented in the gallery by one original piece, the figure of a Yakshini, and casts of about a dozen typical bas-reliefs fixed on two wings of the southern wall. Thus, begnning with the entrance hall of the Indian Museum wherein the Asokan capitals and archaic statues m the round from Patna, Besnagar, and Parkkam in the Mathura district are exhibited, we have, here and in the adjoining Bharhut gallery, a magnificent collection that not only vividly illustrates the whole history of plastic art in Northern and Central India up to the beginning of the Christian era, but also provides us with the most authentic documents for studying the people of ancient India.

" Antiquities other than casts from Bodh-Gaya and coins acquired during the year by purchase or received on loan, number 112 (see the List, Appendix B.). This collection includes three lots of neolithic implements (Plate XXXV, a-j) One of these lots (Nos. N. S. 4201 to 4230) was collected by Mr. K. A. Knight Hallows, M.A., F.G.S., of the Geological Survey of India, and presented to the Archaeological Section with the sanction of the Director of the Geological Survey. The two other lots introduce us to two new neolithic sites in Eastern India. The implements of one of these (Nos. N. S. 4183-4187) were picked up from the dry bed of the Sarasvati river where it runs through the old site of Rajgir in the Patna District of Bihar, and were presented to the Indian Museum by Mr. Mrinal Kanti Bagchi, M.Sc. The third lot (Nos. N. S. 4231-4235), from Vaidyapur in the Sadar Sub-division in the Mayurbhanj State in Onssa, has been presented by Babu Paramananda Acharya, B.Sc., the State Archaeological Scholar. Specimens of celts are included in all three lots. Two

of these implements deserve particular notice. One, JJS 4184 is a iagment of shouldered celt, the prototype of copper implements wrfh shouldered cutting edge of which there are four specimens in the Indian Museum (Ga], da 10, Ga. 17, Ga 18). There is another celt of the same typo (C 924) m the Indian Museum from Burma.

**Indian
Museum,
Calcutta**
Rai Bahadur
Ramaprasad
Chanda

" There have been a few notable additions to the collection ot sculpuities from Mathura One of these is a railing measuring 3' (>) by 2' 3", cut out of a single slab of red sandstone (Plate XXXV, /) On the coping js engraved the following inscription in characters that, may be assigned to the beginning of the Christian era —

[Bo]dhilasa putrena Kausiki-puticna ax vara rile no BodhupH-nu Bhaqacata Mahatman[o] vcdila karila pnyalam Bhar/am

' This railing of the noble-souled Lord has been caused to be made by the trooper Bodhiyasas son of Bodhila and Ivausiki May. the Loid be pleased '

" The occurrence of the term *bodhi* as part ol the name of the donoi as well as of his father indicates that they weie probably Buddhists and that the railing is a Buddhist monument The use of *mahafmon*, the 'noble-souled one' with Bhagavan is also remarkable

" Another notable specimen fiorn Matlmra, is a standing male figure, 4' 2" by 2', in archer's posture with the left foot resting on a crouching female. (Plate XXXV, /). The head and the right hand are lost and the image is otherwise much mutilated. The tail indicates that it is an image of Ilanuman, probably one of the earliest images of the great monkov-god

" The Mathura school of sculpture of the Ksliatrapa-Kushan period was succeeded by the brilliant Gupta school of Indian art On the decline of the Gupta art- in the seventh century A.l). there arose two different schools of sculpture in Northern India, one in Bihar and Bengal and the other in upper and Western India. The latter school may be termed the Western school of later Media-val sculpture, and the figure sculptures of this school may be distinguished from those of other schools by their squarish face. Images of gods and goddesses of the later medieval period jound at Sarnath, Mathura, Central India, Bajputana and Gujrat are mostly dmiactensed by a squarish face Plate XXXVI, a, reproduces a sculpture in grey sandstone from Mathura of the later medieval period To the right of the slab is a mutilated figure of Vishnu with attendants, and to the left Siva and Durga with their attendants

" The Eastern school of mediaeval sculpture arose in Bihar in the eighth century A.D. under the powerful early Pala kings The gods and goddesses carved by the artists of this school are not squaie-Jaced like the images of upper India, nor have they puffed up cheeks like the images of Southern India, but are mostly characterised by regular and pleasantei features. One of the sculpuities of this school received on loan from the Dnectoi General of Arclueology in India during the year, is an image of Buddha taming the elephant Nalagm from Bihar (Plate XXXVI, b) which, though not of artistic value, bears at

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Ramaprasad
Cbanda

votive inscription on the pedestal dated in the fourth, year of Mahindrapala.
inscription reads:—

- Mahindrapaladeva-raja amvachchhara¹ chatutthe² ma-*
2. *rgahra-suklapratipaddyam bh%kshu-DDharmmamitra-*
3. *mata Gautama [punyartham]⁶*
4. *dcvaddharmoyam prati*
5. *ditann⁷*),

' In the iourth year of the reign of Sn-Mahindrapaladeva, on the first day of the bright halt of the month of Margasira (Agrahayana=November-December), this pious gift was executed for the religious merit of Gautami, the mother of the monk, Dharinmanntra.'

" Two other sculptures with votive inscriptions dated respectively in the 8th and the 9th year of Mahindrapala have been discovered in the Gaya District.⁸ Mr. It. D. Banerji has identified this Mahindrapala with Mahendrapala (Mahindrapala) of the Pratihara dynasty of Kanauj, whose known dates range from A.D. 893 to 907. The last known date of the reign of his father, the great Bhojadeva I, is A.I). 881, and the first known date of his successor Mahipala is 914 Piosuinably part of Magadha (South Behar) was held by Mahindrapala of Kanauj in the last decade of the ninth century A.I). In the ninth century Magadha was mainly in the possession of the early Pala kings, and throughout the century a triangular conflict was going on for supremacy in Northern India among the Pala Kings of Eastern India, the Gurjjara-Pratiharas of Kanauj, and the Bashtrakutas of the Deccan. The Pratihara occupation of Magadha must have been very short-lived, for at Nalanda, Bihar, Gaya and Bodh-Gaya have been discovered epigraphs dated in the regnal years of all the Pala Kings from Dharmmapala (a. A.D. 800-835) onward, including Narayanapala (c. 880-935) who was probably contemporary with Mahendrapala of Kanauj m the first half of his long reign This image of Buddha dated in the reign of Mahindrapala is a valuable chronological landmark.

" Another notable specimen of the same school also lent by the Director General for exhibition, is a small brass image (Plate XXXVI, c) possessing all the attributes of the goddess Manchi with the exception of the seven boars that draw her chariot.

" Under the Pala Kings South Bihar and Bengal formed one kingdom, and according to the *Ramacharda* of Sandhyakara Nandin, who lived under the later Pala kings, and the Kamauh copper plate grant of Vaidyadeva, Raja of Kamarupa, who was a contemporary of Sandhyakara, Northern Bengal (Yarcdndn) was the homeland (*janakabhu*) of the Pala dynasty. So it is to be expected that Bengal would be included in the central sphere of the Eastern School. The sculptures discovered in different parts oi Bengal justify this expectation. Plate XXXV 11, a, reproduces an image of the Sun-god (Suryu) found

¹ Read ' re.'

³ Read ' Dh.'

• Read *Oautamydh.*

⁷ Read ' yadfta.'

Read ' '

* Read *mdtur*

* Restored by Pandit B. B. Bidyabinod.

» Cunningham's Report, Vol. 111, pp.] 23-124, R. D. Banerji, The Palas of Bengal, *MtmowaojA** Asiatic Society of Bengal, Vol V, No. 3, pp. 63-64.

in a field near, Sundia in the 24 Parganas District, Bengal, and presented to the Indian Museum by Mr. Sailesh Chandra Das-Gupta. The band round the back-slab, consisting of entwined garlands of beads, closely resembles that on the back-slab of the Bihar image of Buddha of the fourth year of Mahmdrapala; and another common characteristic is the absence of decoration in the space between the image and the enclosing band. Sparse decoration on the back-slab characterises inscribed sculptures from Bihar that may be assigned to the ninth century A.D. on palaographic grounds. Thus this image of Surya may also be assigned to the ninth century A.D.

" Though a very large number of later medieval sculptures have been collected from, or noticed in the different districts of Bengal, only two of them, an image of Vishnu found at Baghaura in the Tipperah District and dated in the third year of the reign of Mahipala (c.A.D. 1000-1030), and an image of Chandi dated in the third year (A.D. 1172) of Lakshmanasena and now installed in a modern shrine at Dacca (R D. Banerji's *Bangalarlitihasa*, Second edition, Plates 14 and 28) furnish chronological clues. On the analogy of these images, the fine image of Vishnu from Dinajpur (Plate XXXVII, c) in the Indian Museum may be assigned to the twelfth century.

" The Director General of Archaeology has lent for exhibition six Nepalese banners, three of which bear dated inscriptions, and one small brass image of Tara having a dated inscription on the back. One of these banners, N. S. 4249, dated in Samvat 782, Monday, the first day of the dark half of the month of Karttika (October, 1661) contains evident!) a picture of Vajrasattva, for the votive inscription opens with, 'salutation to that god.' The deity is seated cross-legged His body is coloured blue, his two fore-arms cross each other on the breast, and the hands *hold* the vajra (thunder-bolt). The figure of Vajrasattva is surrounded by attendant deities, monsters and saints. In the right lower corner of the banner is the portrait of a man labelled Amar[^]-simhaja (son of Amarasimha). with a halo behind his head, and to his left a lady, his wife, labelled Sri Janaki. In the inscription below occurs the name of the donor (*danapati*), the coppersmith Amarasimha and that of his wife, Gomadhari. The banner No N S 4253 is of the same date as N. S 4249 and has the same Amarasimha for its donor. It contains a picture of Vagisvara. The deity is seated cross-legged and has twelve arms. Both the uppermost arms are lifted upward and their palms joined above the head. The second right arm holds a lotus with a long stalk. On this lotus two vajras form a cross; and on the vertical vajra is a sword with burning blade. The second left arm holds a lotus with a long stalk. On this lotus is placed a book and on the book stands a vajra. In three corners of this banner are the figures of three deities, and in the left lower corner a monster clad in a tiger's skin and enveloped in fire. The third banner (N.S. 4252) is quite modern. It is dated Thursday, the third day of the dark half of the month of Magha Samvat 958 (A.D. 1837-8, December-January) and contains a diagram, called Sakyamuni's diagram for the removal of distress (*Sakyamuni-durgati-parisodhana-mandala*). The inscription on the back of the image of Tara (Plate XXXVII, d)

**Indian
Museum,
Calcutta
Rai Bahadur
Ramaprasad
Chanda**

In her three

is dated on the 3rd day of the dark fortnight of the month of Magha, Samvat 925 (A.D. 1804-5, December-January). The goddess is three-faced,, six-armed and is seated cross-legged. In her two right upper hands she holds an arrow and a vajra, the third hand being shown in the attitude of admonition. In her three left hands she holds a bow, a noose, and a lotus bud with stalk, respectively.

"A valuable addition to the collection of Muslim antiquities is an astrolabe from Benares acquired by purchase (Plate XXXVII, b). On the reverse it is recorded that the instrument was made by Muhammad Maqim, son of Isa, son of Allahdad Humayuni Asturlabi of Lahore in H. 1048 (A.D. 1638). Mr. G. R. Kaye describes two other astrolabes made by another member of the same family • the Zarquli Astrolabe made at Delhi in A.D. 1680 by Zia-ud-Din, son of Mulla Qasim Muhammad, son of Hafiz Isa, son of Allahdad Humayuni Asturlabi; the same Zia-ud-Din appears to be the maker of the Astrolabe made in 1657 and called Jaipur B. by Mr. Kaye.¹

"Another important acquisition deserving special notice is a collection of carved tiles, twelve of which Dr. Bloch found fixed on the inner side of the city wall of Kundilnagar near Bhishmaknagar, to the east of Sadiya in Assam, while four others he dug out of the debris. Within the wall once stood the small temple of Durga called Tamresvari, now in ruins. Dr. Bloch has pointed out that some of the carvings on the tiles, the figures of a tiger (or lion) and of a peacock, and one of the ornamental patterns, closely resemble those on the monolithic columns found at Dimapur in Assam.² The tiles have been received on loan from the Government of Assam through the good offices of Mr. K. N. Dikshit, Superintendent of Archaeology, Eastern Circle.

"Only seven non-Muhammadan coins have been added to the cabinet during the year,—four South-Indian gold coins, two punch-marked silver coins, and one Indo-Parthian coin of Soter Megas. Coins of the Muhammadan rulers acquired during the year number 57. Of these eight are billon coins issued by Bahlol Shah Lodi of Delhi, and the rest are of the Mughal emperors. An account of the coins will be found in the annexed List of Coins (Appendix B). Two copper-plate grants have been added to the collection by purchase. One is a grant of Maharaja Sivaraja of the (Gupta) Samvat 283 (A.D. 602), found in the Patiakella Zemmdary in the Cuttack District in Orissa, and the other a grant of the 9th year of King Mahipala 1 (A.D. 1000-1030) of Bengal and Bihar (Gauda), which was discovered at Bangarh in the Dinajpur District in Bengal. Both the grants belonged to the collection of the well-known antiquarian, Rai Sahib Nagendra Nath Vasu, *Prachyavidyamahamava*."

**Delhi Museum
Khan Sahib
Maulvi Zafar
Hasan**

"The work of arranging paintings in the new picture cases erected last year in the Delhi Museum has been completed. There are, however, several other paintings and photographs, which cannot be displayed for want of accommodation, and it will therefore be necessary to have a few more wall cases

¹ G. R. Kaye, *The Astronomical Observatories of Jat Singh* (Archaeological Survey of India, New Imperial Series, Vol. XL) p. 27.

² *Archaeological Survey of India. Annual Report, 1906-7, p. 27 and Plate VIII.*

provided for them. Three new standard cases for the display of miscellaneous exhibits have been added, in place of the old and incongruous ones.

**Delhi Museum
Khan Sahib
Maulvi Zalar
Hasan**

"The antiquities other than coins acquired during the year number 18, including 6 engravings by Daniel, 3 paintings, 3 ancient Mughal documents, one manuscript and 5 miscellaneous antiquities (see Appendix B)

"The engravings by Daniel, four of which were received as a present from the Marquis Curzon, have made a welcome addition to the museum collection. Among the paintings one is a portrait of the Prince Azimu-sh-shan, the second son of the Emperor Shah Alam Bahadur Shah and father of the Emperor Farrukhsiyar. He was killed in battle against his brother Jahandar Shah in the year 1712. Another portrait is that of Khwaja Hasan Basri, a well-known Muhammadan saint, and the third represents the king of Bukhara brought as a prisoner to Timur's Darbar. The last painting also bears the name of the artist and the date 994 Hijra (1586 A.D.). One of the Mughal documents acquired during the year is a *Farman* of the Emperor Shah Jahan issued in the 2nd year of his reign, conferring 25 bighas of land in the village of Dudpur, Pargana Koil (Aligarh) upon one Shaikh Hatim. The other document is a *Nishan*, or royal mandate, issued by the Prince Kam Bakhsh, the youngest son of the Emperor Aurangzeb, in the 30th year of the reign of his father, conferring 100 bighas of land in the Pargana of Dadn, Province Darul-Khilafat Shahjahanabad, upon a lady named Sahba *Nishan* was the name given to a royal order issued under the seal impression of a prince, as distinguished from a *Farman* which was issued by a ruling king impressed with his own seal. *Nvtians* are generally very rare. The third document is a *sanad* presented by Mirza Shamsu-d-din of Loharu State. It was issued by Shamsu-d-Daulah Dost Khan Mubanz Jang in favour of one Saadat Ah Khan, appointing him Governor of a Fort in the Province of Hyderabad.

"The manuscript, which consists of 141 issues of the *Akhbar-i-Atraf*, is perhaps the most interesting acquisition of the year. These issues are the daily reports from the 3rd January to the 31st of June 1829, recorded by the court diarist of the Emperor Akbar Shah II (1806-37), and represent specimens of *Waqat-i-Nawisi* or the chronicles compiled in the court of Mughal Emperors. Akbar Shah II, although a titular king, with only a shadow of the royal authority, held a regular court with a show of all the practices of the Mughal 'Darbar, and the manuscript contains very interesting information about the daily life of the Emperor and of the events happening in his court. The following is a short extract from one of the issues:—

روزنامہ

خلاصہ اخبار اطراف معروضہ سوم ماہ جنوری ۱۲۴۹ ع

حضرت محمد اکبر شاہ بادشاہ غازی در قلمہ روزی پذیر بودند - دیور در پہلی شکار ماضی
مرسلہ سلاطین شکر بہادر بنظر گذشتند بعد ملاحظہ مستر طامس نیلاس مٹف زیندانت بہار و کویت
گزارت بہادر قادیار و کرنول گازی بہار و اشرف بیگ و مغل بیگ مختار و امجد بہار و صوبہ عطا نمودہ

Delhi Museum
Kuan Sahib
Maulvi Zafar
Hisan

فرستاده - لافان اخبار کلکتہ مرسلہ مستر طامس تیفالاس مکتف ریڈنگ بہادر ملاحظہ نمونہ خبر رسید کہ مرزا ولید بہادر باتفاق مرزا سلیم بہادر کہ اوارضہ جلوس ہمرکاب برد درگاہ قطب صاحب رفتہ استقبال میان لاف پیرزادہ نمونہ آوردند - میل کالہ مذکور مکان خون داخل شدند - مرزا سلیم بہادر حکم شدہ کہ جلوس حضور بابت عرس مولوی فخرالدین مقررہ درگاہ قطب صاحب حواحد شد ناید کہ زرتھوارہ در تمام ملازمتی تقسیم نمایند و یہ قایم محمد خانی دربان حکم شدہ کہ بہ طامس تیفالاس مکتف بہادر ریڈنگ دہلی و کپتان گرانٹ بہادر ذلعداد و سرداران سلطنت حکم رسانند کہ سوارچی حضور مقررہ قطب صاحب می شود آمدہ حاضر شوند - لغاہ اخبار ملاحظہ کردہ اخیرین خوردہ ہمار مجرب اند! نمونہ بحسب سرنہی در خرابگاہ راتہ غاصہ خوردہ رقت شب آرام فرمودند - امروز ناظر بہت قلعہ و محل عرس نمونہ فرمودند کہ بالغ بہت قلعہ و اخبار شہر بدستور ارسال دارند - مرشدزادہا آمدہ مذکور سرنہی داشتند - سواران ہمرکاب حکم حاضر گردیدند - قدرے میوہ و عرہ تماثل فرمودہ تبدیل پوشاک نمونہ ہسارچی ہمہ سائیدار مقررہ قطب صاحب شدند - سگھی نواخانہ بانسلفی و انگریزی - برشدہ - مفصل لہوال سارچی مرزا عربی نمونہ حواحد شد - فقط

To-day the Nazir submitted the reports of the Fort and Palace. An order was issued that the papers regarding reports of the Fort and the news of the city should be submitted as usual. The princes attended the court and complained of the cold weather. The chiefs attended the court according to the order. His Majesty took a little dried fruit, changed his dress and proceeded to (the Dargah of) Qutb Sahib on a *talk* provided with a canopy. A salute was fired by the Imperial as well as English guns. A detailed account of the Royal departure will be narrated tomorrow'

Delhi Museum
Khan Sahib
Maulvi Zafar
Hasan

"Among the miscellaneous antiquities, the four articles of jade described below are of special interest.

1. Mirror frame, of green jade. In front, sunk panel for reception of glass, surrounded by foliate border in relief. On back, similar foliate border enclosing flower design with clouds treated in Chinese fashion. The design closely resembles work of Shah Jahan's reign (e.g., on dado of Taj Mahal at Agra). At the top and bottom of the frame, in the centre, are little projections with small holes, probably for hanging the mirror against a wall. The frame measures 7" by 6½" excluding the projections mentioned above (PI XXXV111, (/).

2. Dagger handle of dark green jade measuring 5" by 2½", curved at the lower end and ornamented with silver inlay. Work (PI XXXV111, a)

3. Dagger with handle of light green jade. The blade of the dagger, measuring 10½" by 1½", is of *fan-lad* with very fine *jauhars* (damascene marks) and is ornamented at the hilt with gold inlay. The handle measures 4½" by 2" and terminates in the head of a lion, the eyes of which were originally set with jewels (PI XXXV111, b)

4. Trefoil scent box (*ilrdari*) of white jade containing three compartments adorned with foliate designs in relief. A superb piece of workmanship of late Mughal period. It measures 4½" by 2½" (PI XXXV111, r).

"A collection of 531 coins including 19 gold mohurs, 459 silver rupees, and 53 copper coins were added to the cabinet. With the exception of 188 coins which were presented as Treasure Trove finds by the Governments of the United Provinces, the Punjab and Delhi, the Director of Industries of the Central Provinces and the Bombay Branch of the Royal Asiatic Society, all of these have been received on loan from the Director General of Archaeology."

¹¹ The total number of visitors to the Peshawar Museum was 03,487 as compared with 55,058 in the preceding year, an increase of 8,429 which is the institution is fast gaining in popularity.

Peshawar
Museum
Mr. H.
Hargreaves

"The acquisitions during the year numbered forty-nine, thirty-seven being coins and twelve other antiquities. Of the former, 24 silver Mughal coins were purchased from the Curator, Central Museum, Lahore, as being surplus in his collection; 5 silver Mughal coins were received as presents from the Government of the United Provinces; 2 silver Mughal coins from the Government of the Punjab, 1 silver Mughal and 2 other silver coins, (one struck by the Marathas and the other by the East India Company in the name of Shah Alam II), from the Bombay Branch of the Royal Asiatic Society, and 1 silver

**Peshawar
Museum
Mr. H.
Hargreaves**

Mughal and 2 silver punch-marked coins from the Director of Industries, Cen-

antiquities comprise a small bronze female image, a small stone image of four-armed Vishnu, three stucco heads representing the Buddha, a Bodhisattva and a layman respectively, a sculpture of Buddha presenting the conquered snake to Kasyapa, a panel with the Syama Jataka, another with the story of Aanda, a broken pavement-slab bearing eleven Kharoshthi letters, a fragmentary stone *chuigh* with six Kharoshthi letters (recovered from Jamalgarhi and received on loan from the Superintendent, Archaeological Survey, Frontier Circle), part of a circular frieze presented by Lt-Col. C. G. Crosthwaite, OBE., Deputy Commissioner, Peshawar, and the head of a marble image purchased by the Museum.

"Twenty-four books and Annual Reports were added to the Library, eight being purchases and sixteen being presentations from official sources.

"As stated in last year's report, an album of 409 selected photographs of the Museum antiquities, according to the list prepared by the Custodian, has been got together, and visitors can now obtain these prints at short notice.

"For reasons stated in last year's report, the Honorary Curator was unable to complete the revision of the Handbook to the Sculptures in the Peshawar Museum.

"Thirty more images have been provided with neat but substantial shishara pedestals, which not only give them stability but add considerably to their appearance, and the unsatisfactory paper labels of the eleven table-cases containing antiquities have been replaced by neatly written labels on shisham wood.

"Major H. M. Whittell, I.A.S.C., has been transferred to Nowshera and was, therefore, unable to continue the work of drawing up the manuscript catalogue of the coin collection in the Peshawar Museum.

"Necessary repairs to the Museum building have been carried out, and the usual annual yellow colouring and whitewashing attended to. All the doors, windows, staircases and railings have been repainted and revarnished.

"A meeting of Mr. Hargreaves, Mr. Robertson Brown and Col. Cowan was held on the 17th January, 1924, to inspect the grounds and consider means for their improvement. A scheme to cost Rs. 7,000 was subsequently drawn up and submitted by Col. Cowan to the Revenue Commissioner, which has been approved by him as well as by the Chief Commissioner, in general, and it is hoped that the necessary improvements will be carried out during the financial year 1924-25.

"In addition to all Sundays, the Museum was closed to the public for 23 days, the Hall being required for various public purposes, conferences, meetings, Departmental Examinations, etc.

"The conduct of visitors has been exemplary, no damage or loss either to cases or antiquities having been reported, and the staff of the Museum have performed their tasks satisfactorily, credit being due especially to M. Dilawar Khan, the Custodian, for the efficient discharge of his multifarious duties, which at times are not free from anxiety."

The Superintendent, Hindu and Buddhist monuments, Northern Circle continued to act as ex-officio Curator of the Sarnath Museum during the year. In the year 1922-23 about 200 descriptive labels had been prepared, and these have now been fixed to the antiquities concerned. The show-cases were also repainted and lined with grey cloth. As foreshadowed in the previous year's report, attention was given to the re-arrangement of the stone sculptures, some of the surplus duplicates having now been taken out so as to allow of better ones being more appropriately displayed, with suitable spaces between them. The total expenditure on the Sarnath Museum amounted to Rs. 2,764-5-3.

"The only Museum in the Central Circle maintained by the Archaeological Department is that at Nalanda, where a small collection of the finds recovered from the site in the course of excavation is housed temporarily in one of the Archaeological Rest House. The collection has already been briefly described in the previous year's report, and of the small finds made during the year under review brief mention is made in the account of excavation at Nalanda on page 74 (*supra*). For the greater security of the collection, expanded metal frames have been affixed to the glazed door and window openings of the rooms accommodating it, and a framing of wire-netting has been provided for the open shelves on which the less valuable articles are exhibited. The cost of these works, which were debited against the Nalanda Conservation grant, amounted to Rs 231."

**Sarnath
Museum
Rai Bahadur
Daya Ram
Sahni**

**Nalanda
Museum
Mr. J. A.
Page**

SECTION V

OFFICERS ON SPECIAL DUTY.

During most of the year Sir Aurel Stein's work was directed towards the completion in manuscript of the detailed Report on the Archaeological results of his third Central Asian expedition, and the preparation of arrangements intended to assure its early publication together with all materials needed for the illustration of sites, ruins and finds. Between April and the close of December he succeeded in completing the record of his labours as far as they concerned the ground explored by him in 1914-15 over extensive areas of westernmost China, Southern Mongolia and the Tarim Basin. Simultaneously with this task there was finished also the clean drawing of all plans, etc., of ancient sites and buildings as well as of a large scale map of the Lop Desert. This area presents special antiquarian and geographical interest, owing to the numerous ancient remains discovered there and to the early silk trade route from China to the West which had once passed through it, and which Sir Aurel succeeded in tracing.

**Sir Aurel
Stein's work**

"Some time", he writes, "had to be devoted in the early part of the year to the collection of accurate data upon which to base definite proposals for the publication of the detailed Report, a task complicated by a variety

Sir Aurel
Stein's work

of technical considerations and equalling in extent that faced in the case of *Serindia*, the final record of my second expedition. The experience gained in connection with the latter, and the ready co-operation of the Clarendon Press, Oxford, enabled me to submit proposals which, having since received the approval of the Government of India and His Majesty's Secretary of State, will permit the new Report to be brought out by that great *officim* in a manner 'befitting the scientific interests concerned.

" In accordance with the sanctioned arrangements, I was obliged before leaving Snnagar at the close of January to pack all antiquities hitherto kept there, partly for storage at our depository on the Museum site of New Delhi, and partly for temporary transmission to London. The latter course was necessary for the sake of the proper selection and reproduction of those specimens which are to be illustrated in the plate volume of the Report, and also in order to render expert examination and treatment possible in special cases. Owing to the great care needed in safely packing the multifarious and often very fragile contents of the collection, this task proved a very exacting one, and absorbed all my labour for nearly a whole month.

"* I subsequently proceeded to Delhi in order to examine the work, separately described here in Mr. F. H. Andrews' note, of setting up our great collection of Buddhist wall paintings, and to discuss with him on the spot the arrangements still remaining to be made for securing their final exhibition and safe-keeping.

" From February 23rd I was allowed to proceed on six months' leave previous to the period of ten months' deputation to England which has been sanctioned for the purpose of enabling me to prepare the illustrative materials for my detailed Report, and to see the three volumes quarto of its text and plates through the press at Oxford. The first half of that leave was devoted to an extensive tour through Egypt, Palestine, Syria and Asia Minor, which acquainted me with many important sites and remains of antiquity in those parts of the Near East.

" In conclusion I may note here that at the beginning of 1924 there was published as Vol. XVII of the 'Records of the Survey of India' my *Memoir on Maps of Chinese Turkestan and Kansu*. These maps, 47 in number and on the scale of 1: 500,000, were prepared at the Trigonometrical Survey Office, Dehra Dun, and comprise the whole of the surveys carried out by my topographical assistants and myself in the course of my three Central Asian expeditions. The work connected with the successive stages of their compilation, drawing and reproduction had absorbed a great deal of my time and attention during the years 1917-23. The volume now published to accompany this atlas contains a full account of the survey operations in the field and of the methods followed in the record and compilation of their results; detailed notes concerning each map sheet and a series of plates illustrating by a large and carefully selected set of photographs the varied character of the areas surveyed. In addition there is given in it an analysis of the chief physical features determining the geography of the several main regions surveyed over a vast portion.

of Central Asia extending from the Pamirs to Western China. These geographical factors have played a dominant part in the history of those regions which witnessed the transmission to China of the varied influences of Indian civilization, religion and art. Hence this publication and the maps it deals with may be considered to form an important complement to the Report which is to record the archaeological observations and discoveries made there"

Sir Aurel
Stein's work

The note by Mr. Andrews to which Sir Aurel refers above shows that very satisfactory progress was made during the cold weather season of 1923-24, on the work of backing and mounting the wall paintings recovered by Sir Aurel Stem from Buddhist shrines of Central Asia in the building provided for their accommodation at the Museum site of New Delhi. Many of the panels from Turfan treated this season proved very troublesome, owing to the extremely brittle nature of the mud plaster on which they are painted "The brittleness", says Mr Andrews, "is chiefly due to the absence of any fibrous element in the composition to bind the mud, and to the presence, in some cases, of small stones and coarse straw. Material of this nature requires extreme care in handling, and in consequence of its brittleness much of the painted surface has been lost when the walls *in situ* suffered damage from time to time. In such cases much trouble and time has to be spent in determining the correct relative positions of the surviving fragments My method of mounting the paintings on plaster of Paris reinforced with aluminium being permanent, it is of great importance that as far as possible errors in reassembling the fragments be avoided This can be assured only by prolonged and careful examination of doubtful portions guided by an intimate knowledge of the nature of the subject matter, and of the detailed treatment used by the ancient craftsmen. Such examination necessarily devolves upon me

Mr. E.
Andrews's
work

"Progress has been made in the preliminary steps towards the reconstruction of the very interesting tempera painting which decorated the domical vault of one of the smaller Buddhist shrines at Toyuk. Much of the painted surface had perished before Sir Aurel Stem commenced the difficult work of removing the surviving portions To restore these to their original position is an extremely difficult task, but one which in its final result, will, I hope, amply repay the care and time expended upon it It is not possible here to enter into the details of the work. It will suffice to point out that each section must be given its correct double curvature, and that all the sections must then be assembled on a carefully calculated domical 'centering' having a continuous smooth surface, in preparation for its reinforcement with aluminium framing. This aluminium framing has to be constructed to the corresponding curvature, and in portable sections. By making due provision for the correct joining and bolting together of these sections, it will be possible to assure that the painted vault may ultimately be seen in its proper position overhead, when set up within one of the galleries. A large amount of time and labour was devoted to this work during the period under review. But the most difficult part of the task still remains to be carried through during the season 1924-25.

**Mr. F.
Andrews's
work**

"The work of fitting all cases in the galleries was continued, and will; presumably be completed during the coming cold weather. The shifting from wall to wall of most of the mounted paintings, as the carpenters' Work progressed, entailed much labour. Thus at the end of the season it became necessary to transfer the whole of the paintings from the eastern gallery into the other two galleries, in order that the carpenters might be able to continue their work in the former during my absence in London.

" During the season I have been assisted by two students from the Lahore - and Lucknow Schools of Art who had worked with me in the previous season. I also secured the same smith as in the previous year, for the aluminium frame making. All these assistants worked well. Babu Prem Narayan Mathur, the Clerk to the Stem Collection in New Delhi, was, as always most assiduous in, the performance of his clerical duties, and in addition gave us constant and willing help in the practical work of mounting and hanging the paintings.

" At the end of March I proceeded to London having made over charge to Maulvi Zafar Hasan, Officiating Superintendent of Muhammadan and British Monuments, Northern Circle "

SECTION VI.

ARCHAEOLOGICAL CHEMIST.

**Mr. Sana
Ullah**

Mr. Sana Ullah reports that 1949 antiquities of various kinds have been • cleaned and preserved this year in the laboratory of the Archaeological Chemist. 'Cellon,' which is a solution of cellulose acetate, has been employed successfully for strengthening objects of organic nature, *e.g.*, wood, paper, ivory, etc. It has also been applied with excellent results on Mughal paintings to refix pigments that had become loose on account of the deterioration of the binding medium. Persian paintings on *papier mache* boards become soft and pulpy when exposed to moist atmosphere, owing to the deterioration of the paste and the absorption of moisture. One of these paintings was placed in a dessicator over sulphuric acid and after a couple of days, when it had regained its original hardness, three coatings of 'Cellon' were given to it; but it was found later that this treatment did not protect it sufficiently against the action of moisture. It is apparent, therefore, that thin coatings of cellulose acetate are not impervious to moisture. Experiments with other waterproofing materials are now in hand.

Some of the bronze figures received from Nalanda were covered with a uniform thick layer of cuprous oxide, with the original form and design well • preserved on it. This layer was permeated with an oxychloride of copper which had to be eliminated for the preservation of these figures. As the use of re-agents which would act on the oxides or the metal was out of the question, it was decided to decompose the oxychlorides by the aid of heat into the oxide and chloride of copper. The bronzes were placed in a closed vessel,

heated to 250°-260°C for about half an hour, and on cooling they were washed with water until the washings were free from chlorine. Finally they were impregnated with hard paraffin wax. Mr. Sana Ullah

The Archaeological Chemist paid a visit to Jaugada, in the Madras Presidency, to examine the Asokan inscription there, which had been buffering badly through weathering. This inscription, a good deal of which has already disappeared, is executed on a granite boulder which has remained exposed to the elements for many centuries. An iron shed was erected over it, a few years ago, to protect it against heavy rains, but this measure does not appear to have checked the disintegration of the surface as much as had been hoped. It is a well-known fact that drastic changes of temperature cause the disintegration of noncrystalline and granular rocks like granite and gneiss, owing to the strains set up by the unequal expansion and contraction of their constituent minerals; and the weakening of the surface which results therefrom facilitates the action of water also. It is thus necessary to protect the inscription not only from heavy rains but also against the direct heat of the tropical sun. Necessary alterations have now been made in the shed to make it cooler, by cutting off the direct rays of the sun and providing the roof with a thick thatched covering. All leaks have also been stopped by means of asphalt and Portland cement, and the inscription has been coated with paraffin paste.

The red sandstone which was so extensively employed by the Mughal Emperors for their buildings at Delhi, Agra and Fathpur Sikri, has a fine, close-grained texture, but yields easily to the action of saltpetre. As was pointed out on a previous occasion, this disintegration is due to the crystallization of soluble salts within the pores of the stone, the chemical actions which take place simultaneously being very small, in comparison. As these salts cannot have penetrated more than a few millimeters into the stone, it is easy to wash them out with warm water. Mr. Sana Ullah accordingly recommended that certain inscriptions at the famous Dargah at Fathpur Sikri which have been crumbling away, should be washed with plain warm water to eliminate the salts and, when dry, be coated with paraffin paste, in order to fill up the pores and render the further entry of salts impossible.

This year Mr. Sana Ullah analysed two more specimens of ancient glass which were discovered at Samarra by Lt.-Col. Lane, in the course of operations during the Great War. The results of the analyses are as follows :—

Specimen	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	CaO	MgO	Na ₂ O	K ₂ O	Total
Bottle green glass	67.66	5.83	2.91	ti	5.92	2.20	16.32		100.84
Amethyst glass	67.04	1.62	1.36	2.51	7.49	3.77	14.48	2.61	100.88

Mr. Sana
Ullah

A comparison of these analyses with those given in the last Annual Report (p. 166) reveals the fact that the recipes for glass-making employed in Assyria were identical with those known in India, in ancient times. The specimens sent by Col. Lane were heavy masses of crystalline glass, covered on one side with scinted earth, and were apparently parts of large receptacles in which glass used to be made. This seems to indicate that a flourishing glass factory existed there in ancient times

Closely related to Glass are the Glazes employed to embellish pottery and tiles, from the earliest times. Mr. Sana Ullah has examined the glazed tiles of the 'Kashi' style from the well-known monument known as Chini-ka-Roza, near Agra, published by Mr Edmund Smith in his *Moghul Colour Decoration of Agra*. These tiles are flat, $\frac{1}{2}$ " thick, with a friable and granular body of reddish white colour. The layer of glaze does not exceed 1 in thickness. In his report Mr Sana Ullah says. "The freedom of the glaze from crazing is remarkable and does great credit to the Kashigars who made these tiles. The body is highly siliceous and capable of withstanding very high temperatures without softening The glaze consists essentially of a soda glass to which various metallic oxides have been added to produce various colours. In fact, the art of colouring glass and glaze with metallic oxide is a very ancient one. The ultramarine blue glaze, which contains cobalt, was known to the potters of Persia and Syria, centuries before the Chinese adopted it for the decoration of their porcelain' The copper-blue glaze has been found on objects of Egyptian origin from the time of the IV Dynasty onwards²; also practically at every seat of ancient civilization in Asia and Europe. The lead-copper green glaze has been traced back to the XI Dynasty in Egypt." Smith (*loc.cit*) is inclined to give the credit for this tile work to the Chinese, but Mr Sana Ullah believes he has found conclusive chemical evidence against this. In his report he says that • "A comparison of the analyses of these glazes with those of Chinese origin of the same period, reveals the fact that they belong essentially to two different types. The former are soda glazes of low fusibility, while the latter are feldspathic ones of high fusibility, and for this reason the Chinese employed different material and methods for obtaining similar colour effects. The glazes differ in another respect also. It has been shewn by Prof. Collie that during the Sung period certain phosphates came into fashion for the preparation of glazes in China, and this practice continued in the Ming period.⁵ It is, therefore, a noteworthy fact that the glazes from Chim-ka-Roza are free from phosphates. Had the Mughal Emperor invited Chinese workmen to undertake this work, they would certainly have employed feldspathic glazes containing probably an appreciable quantity of phosphates. In view of the evidence before us therefore, we are obliged to adopt the more reasonable view that the artists who should be credited with the decoration of this monument with glazed tiles were either Persians who introduced the art into India, or their Indian pupils."

¹ Burton: Porcelain, p. 40.

² Church: The Chemistry of Paints and Painting, p. 260.

³ Trans. English Ceramic Society, Vol. XV, p. 160.

Table of Chemical Analyses of Glazes.

Specimen	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MnO	P ₂ O ₅	CaO	MgO	(K ₂)Na ₂ O	PbO	CuO	ZnO	SnO ₂		TOTAL	Analyst
1 CHDHAKA-ROZA— Yellow (mustard) glaze.	54.70	7.50	2.54	tr.		2.64	1.49	19.33	12.31					100.51	Mohammad Sana Ullah
Blue (Lapis Lazuli) glaze.	77.48	1.68	1.74	tr.	tr.	2.63	1.90	19.33				1.40	0.00	100.52	
Purple (deep violet) glaze.	80.22	1.84	1.35		tr.	2.37	1.90	11.90						100.55	
Green (emerald) glaze.	59.35	2.20	1.42	tr.	tr.	3.09	2.01	15.35	13.39	1.69		0.97		99.47	
Orange glaze .	60.60	2.02	1.01	0.02	tr.	2.82	2.01	13.56	13.29		1.23			99.62	
White glaze .	82.96	1.61	1.36	tr.	tr.	1.64	1.80	10.78						100.05	F R S (Trans Enlighten Ceramics Society, XV, p. 163.)
Green (turquoise) glaze	78.76	1.74	1.04	tr.	tr.	2.27	1.82	12.07		2.30				100.00	
Body or paste	94.83	1.64	1.00		tr.	0.62		2.10						100.19	
2 CHINESS— Sung Hard Blue glaze.	19.3	10.6	2.3		7.2	5.9		3.0		tr.?				101.3	
Sung Soft Blue glaze.	68.2	9.5	2.5		8.0	7.1		5.9		tr.?				101.2	
Sung Light Greyish Green glaze, Kuan Type.	66.0		13.0		8.3	6.8								94.1	

Mr. Sana
Ullah

SECTION VII

TREASURE TROVE.

**Northern
Circle**

Rai Bahadur
Daya Ram
Sahni
•Punjab

" The year under record has been almost barren of treasure trove in the Punjab. The only coins received for examination were 14 silver coins discovered at Dhok Silvon in the Fatehjang tahsil of the Attock District. The find, which is being acquired by the Deputy Commissioner of Attock, comprises 4 coins of Aurangzeb issued from the Akbarnagar, Surat and other mints, 8 coins of Muhammad Shah, one coin of Alamgir II, and one coin of Shah Alam of the Ahmadabad mint. Out of the 107 silver coins discovered at Domel in the Attock District and mentioned in the last year's report, 94 have been acquired and distributed to the various museums of the country.

*United
Provinces*

" In the United Provinces two finds of Treasure Trove have been reported. One of these is a red stone slab measuring 3' 8" X 1' H" which was found in the town of Ahar, tahsil Anupshahr, District Bulandshahr, and contains a well-preserved inscription of 28 lines. A summary of the contents of this inscription will be found in the Epigraphical section of this report. The other find is a short inscription in ancient Brahmi characters which was recently discovered at a temple in Ayodhya and which is also referred to in the Epigraphical section "

Frontier Circle
Mr. H.
Hargreaves

" Civil officers in the Frontier do not appear to be conversant with either the provisions of the Treasure Trove Act or with the standing orders of the Local Government concerning the disposal and reporting of finds of antiquities. A case in point occurred in the Khyber Agency When the Khyber Railway was started the attention of the Local Government was directed by me as Superintendent in the Frontier Circle, to the necessity of safeguarding the ancient monuments in the Khyber, and it was requested that the engineers and all concerned in the operations might be asked to see that contractors did not destroy ancient monuments to provide material for the new railway; and it was particularly requested that all finds of coins or other small antiquities might be reported to me. While out on tour in the District, I heard rumours that donkey loads of silver coins had been found during the making of the railway, but no official report ever reached me. The Political Agent, Khyber Agency, after the Local Government had drawn his attention to the matter, then reported that coins had been found by coolies during operations on the railway, and that the coolies had sold them to certain goldsmiths in Peshawar city. My endeavours to trace these goldsmiths failed. It appears, however, that both the Political Agent and certain of the railway engineers obtained specimens of these coins. Until civil officers of Government realize their obligations in the matter of treasure trove, it is hardly to be expected that the provisions of the Treasure Trove Act will be observed by the less sophisticated inhabitants of the Frontier."

"A find of 69 gold coins, 14 ornamental leaves of gold, and 2 gold rings was reported to Government by the Collector of Ahmednagar. The treasure was detected with a goldsmith by the Mamlatdar of Parner. Three-fourths of the treasure was declared to vest in Government under Section 20 of the Treasure Trove Act for failure of the finders to give notice of the same. The 69 coins comprising the hoard were examined by the Bombay Branch of the Royal Asiatic Society, Bombay, and 51 were found to belong to Devaraya, 10 to Harihara, 1 to Krishnadevaraya, 6 to Achyutaraya and 1 to Sadasi-varaya. The remainder of the find, viz., 14 gold leaves and two rings were examined by this Department. Eight pieces of the former were found to form part of a zone band and six of a necklace. The find being of antiquarian interest, the remaining one-fourth share of the treasure was also recommended for acquisition for the Prince of Wales Museum.

Western
Circle
Mr. G. C.
Chandra
Bombay
Presidency

"A number of copper coins of the Adilshahi Sultans of Bijapur were acquired years ago by Mr. Henry Cousens, former Superintendent of the Western Circle, through Mr. Shamsuddin Bangi of Bijapur. Of this collection 68 coins were left after distribution to various institutions on the list, as shown in the Report of the Western Circle for the year ending 31st March, 1920, and of these, 64 have now been distributed, in accordance with the orders of the Bombay Government, to 31 different Indian States which desired to possess specimens of them. The four coins still lying in this office are of Ibrahim II.

"A find of Treasure Trove from Kolur in the Bilgi Peta of the Bijapur District was made in a cave by one Sagareppa Rudrappa Patel while digging some tree pits near the Shrikumaresvara temple. As soon as he came upon the treasure he reported it to the Police, and the whole of the hoard was thereupon removed to the office of the Mamlatdar, Bagalkot. On examination it was found that the treasure comprises seven *pakapdras* (cooking vessels), seven *sthdlis* (dishes), one cauldron, three tripods, one ladle, eleven water pots with and without handles, eight single and double *kamandalus* (jug with spout), one *pushpapdra* (flower tray on stand), two censers, five *drattts* (waving lights before an image), six bells, two *arghwpatrak* (ladles used in worship), five *dlpa-vrikshas* (lamps on stand), and one hanging lamp. Besides these, there were seven other fragmentary objects consisting of bases etc., and numerous other fragments forming portions of *sthdlis* or dishes. The objects are all meant to be used in one or other religious ceremonial and are made of copper, bronze and bell metal. The most interesting of them are the following:—

- (a) a *kamandalu* with five hollow ribs connected with each other by contrivances at the top and bottom so that water poured from above is equally distributed in all the five ribs and issues through one common spout;
- (6) two double *kamandalus* joined together by a central piece intended to convey water from one to the other,
- (c) two censers, one with a perforated adjustable conical lid, and the other with a detached lid which can be fitted on to the rim and shows two rings in opposite directions for holding up the same.

TREASURE TROVE

Western Circle "As this treasure consists of almost a complete set of temple utensils it was recommended for acquisition for the Prince of "Wales Museum, Bombay."

Central Circle "A find of 16 silver coins at Mania Samil Gopalpur Patna-Satyabadi P. S. Mr. J. A. in the Puri District was reported by the Collector of Pun and examined Page by Rai Sahib Manoranjan Ghosh, Curator, Patna Museum, who recommended Bihar and its acquisition for the Patna Museum Coin Cabinet. The coins are all of Onssa silver and include four specimens of Akbar (Ahmadabad Mint), three of Jahangir (Patna and Akbarnagar Mints) and nine of Shah Jahan (Patna, Allahabad, Lucknow, Ivatak and Surat Mints)."

Eastern Circle "A brass image of the ten-armed Durga was discovered at Tmsukia in the Sibsang District during the clearance of an old well, and proceedings have been instituted under the Treasure Trove Act, for its acquisition."

Southern Circle The following account of Treasure Trove in the Southern Presidency is quoted from the Report of the Superintendent of the Government Museum, Madras

"Under orders contained in G. O. No. 3171 Law (General) Department, dated 18th December 1922, the images concerned in the Manjakkudi Treasure Trove case acquired in 1921 were returned to the villagers. The Krishna image concerned in Kattu Edayer Village Treasure Trove case which was ordered to be delivered to the villagers in G. O. No. 651 Public, dated 1st June 1912, was sent to the Collector of South Arcot, to be delivered to them as he reported that a suitable temple had been constructed to receive it."

Among the acquisitions of the Madras Museum made during the year under report were :—

*Madras
Presidency*

- (a) Copper images of seated Parvati, Manikkavasagar, a Saivite Saint, a Dipa Lakshmi, Chandikesvara, Appar and Chandrasekhara found¹ in the village of Vadakkuppoyyur, Tanjore district, and acquired under the provisions of the Treasure Trove Act.
- (b) A stone image of Sri Devi found in Snavakkaramari village, South Arcot district, and acquired under the provisions of the Treasure-Trove Act.
- (c) Three small images of Krishna crawling as a child, and one image of Krishna as a baby lying on its back found in the village of Adanakkottai, Tanjore district, and acquired under the provisions of the Treasure Trove Act.
- (d) Copper images of Subrahmanya, Sundaramurti, Chandrasekhara, Parvati, Pradoshanayaka, Sivakamasundan, Natesa, Chandikesvara, Rati, Somaskanda and a Saivite Saint found in the village of Panangattangudi, Tanjore district, and acquired under the provisions of the Treasure Trove Act.

**Rajputana and
Central India**
Jodhpur State

956 coins of copper and base silver were found at a village named Rani in the Jalore District of Jodhpur State. The Superintendent, Sardar Museum, Jodhpur, to whom the coins were sent, reports that they were current in Rajputana and Gujrat from about 750 to 1100 A.D., and are found abundantly in these regions. The Superintendent adds that on the reverse of these-

coins there are lines and dots, suggesting the Sassanian fire altar, and on the obverse a rude imitation of a Sassanian bust together with meaningless lines and dots.

**Rajputana
and Central
India**

In the Mewar State the following coins were found:—

Mewar State

21 rupees of Muzaffar Shah's period.

18 copper pice of different periods.

4 rupees and one half rupee of different periods

31 big and 20 small copper pice of different periods.

SECTION VIII

MISCELLANEOUS NOTES

THE LINGARAJA OR GREAT TEMPLE OF BHUVANESVARA

(By Rai Bahadur Ramaprasad Chatida, B.A.)

The Lingaraja at Bhuvaneshvara is the greatest and most majestic of the now existing temples of the Nagara or Indo-Aryan style in India. This temple is best known from a photograph of a general view of the compound from the north, including the northern facade of the lofty spire, which has frequently been reproduced in standard works on art and architecture. The unfavourable impression that it produces is thus stated by Carotti; "The gigantic mass, in the shape of a bulb channelled with huge ribs, is majestic in appearance 'but gives the impression of an indestructible mass of materials indiscriminately heaped together.'" This statement is not without an element of exaggeration. Even the half-plate photograph reproduced in the revised edition of Fergusson's *History of Indian and Eastern Architecture* (Vol. II, p. 100), shows that the materials are not "heaped indiscriminately," and that there is a certain rhythm in line and proportions. But the spire can only be seen in its true perspective when the temple is viewed in its completeness from the base to the finial. It has not been possible to take a photograph of such a view, but Plate XXXIX, f.c., shows the north-west corner of the great temple from its base on the pavement to nearly the middle of the spire. The temple rises abruptly from the existing stone pavement without any intervening plinth. The external side wall of the cella is broken by narrow vertical recesses that run from the base to the summit in five facets or pilasters and in the middle facet of the north, west and south walls there is a deep broad recess wherein images above life-size of Parvati (Durga), Karttikeya and Ganesa are respectively installed. In front of each of these images is a small porch of much later date with an ugly stair-case beside it that obstructs the view of the splendidly decorated facades of the sanctuary. On both sides of the middle recess of the wall are rows of horizontal mouldings that separate the two groups of panels on the pilasters on two sides. In the lower panels of the corner pilasters are engraved

**The Lingaraja
or Great
Temple of
Bhuvaneshvara
Rai Bahadur
Ramaprasad
Chatida**

**The Lingaraja
or Great
Temple of
Bhuvanesvara
Rai Bahadur
Ramaprasad
Chanda**

images of the eight Dikpalas or guardian deities of the quarters, and in the panels close to the middle recess are reliefs evidently illustrating scenes from life. As examples of these life scenes I reproduce two of the panels in Plate-XL, *a* & *b*, one to the right of the image of Parvati on the north wall and

the building of the temple of Meghesvara by Svapnesvara, a general of Aniyankabhima, the Eastern Ganga King of Orissa. Aniyankabhima ascended the throne about A.D. 1192, and the inscription (and therefore also the building of the temple of Meghesvara) may be assigned to about the end of the twelfth century A.D.¹

**The Lingaraja-
or Great
Temple of
Bhuvanesvara
Rai Bahadur
Ramaprasad
Chanda**

The old Vishnu temple at Bhuvanesvara, the magnificent Rajarani, should probably be assigned to Aniyankabhima's father, the great Anantavarman Chodaganga. In Chodaganga's grant of the year 1081 A.D. he is described as *paramamahesvara*, "the devout Saivite,"² and again in his grant of the year 1135 the same epithet is applied to him.³ But in his grant of the year 1118, in which his conquest of Utkala (Orissa) is twice referred to, Chodaganga is described as *paramavaishnavah paramabrahmanyah*,⁴ 'devout follower of Vishnu and Brahma'. It was probably during Chodaganga's temporary adoption of Vaishnavism that he built the temple of Rajarani, the traditional name of which indicates connection with a king and queen. The two Nagas on the two sides of the entrance to the porch of the Rajarani remind one of similar figures at the doorway of the porch of the Meghesvara.

The Brahmesvara was probably built some years earlier, towards the close of the eleventh century. In the *Journal of the Asiatic Society of Bengal*, Vol. VII, Pnnsep publishes a transcript, translation and reduced facsimile of a stone inscription from Bhuvanesvara which records the erection of the temple of Brahmesvara by the queen Kolavati, the mother of the king Udyotakesarirajadeva, and is dated in the eighteenth year of his reign. Though the inscribed slab is now lost, the inscription furnishes valuable evidence for the history of art in Orissa. In two of the cave temples at Khandagiri near Bhuvanesvara there are two inscriptions dated respectively in the fifth and the eighteenth year of the reign of Udyotakesari⁵, obviously identical with the Udyotakesan of the Brahmesvara inscription. Close resemblance between the script used in the inscription of the reign of Udyotakesan with that of the inscriptions of the early Ganga kings of Orissa indicates that probably Udyotakesan himself or his immediate successor was overthrown by Chodaganga.

In the lost Brahmesvara inscription Udyotakesan's descent is traced to Janamejaya who was originally ruler of Telmga and who then conquered Orissa. Between Janamejaya and Udyotakesari the following five rulers intervened:—Dirgharava, Apavara, Vichitravira, Abhimanyu and Chandihara. But as none of these predecessors of Udyotakesari bore the surname *kesan*, this Telmga dynasty cannot be identified with the so-called Kesan dynasty of the Oriya tradition.

Between the style of decoration of the Brahmesvara and the Lingaraja there is considerable resemblance. In one particular this resemblance is remarkable. On the outer walls of both the temples the lower steps of the vertical

¹ *Epigraphia Indica*, Vol. VI, pp. 199-200.

² *The Indian Antiquary*, Vol. XVI, p. 164.

³ *ibid.*, p. 174.

⁴ *ibid.*, p. 169.

⁵ *Kpajrahi Indiaa*, Vol. XIII, p. 180.

The Lingaraja
or Great
Temple of
Bhuvanēśvara
Rai Bahadur
Ramaprasad
Chanda

pilasters in front of which the panels are carved, are left blank. This restraint is conspicuous by its absence on the Bhagavati, the Ananta- the Muktesvara and the Rajarani, the outer walls of all of which are broken up into five *rathas* or pilasters like the Lingaraja and the Brahmesvara. It is therefore evident that like the Rajarani and the Meghesvara, the Brahmesvara and the Lingaraja represent a single line of artistic tradition, the latter monument having been in all probability erected by one of the ancestors of Udyotakesan, say about 1000 A.D.

KARA STONE INSCRIPTION AND ITS BEARING ON THE IDENTIFICATION OF KAUSAMBI

(By Rai Bahadur Daya Ram Sahni, M.A.)

Kara Stone
Inscription
and its
bearing on the
Identification
of Kausambi
Rai
Bahadur
Daya Ram
Sahni

"In the Annual Report for 1921-22, I discussed a Nagari inscription of the Vikrama Sam vat year 1245, in the reign of king Jayachjiandra of Kanaui, which I had discovered on the door-jamb of a ruined temple at Meohar, distant 81 miles from Kosam, District Allahabad, and recorded it as my opinion that this document supplied full and conclusive confirmation of General Cunningham's identification of Kosam with the ancient capital city of Kausambi. I am preparing a detailed memoir on the subject, but propose in this note to deal with another piece of important evidence which was made public early in the nineteenth century, but which has never yet received proper treatment. I refer to the inscription engraved on a stone which was first noticed by Capt. C. Stewart, a member of the Asiatic Society of Bengal, in the gateway of the ancient fort at Kara, distant nine miles from Sirathu Railway Station on the East Indian Railway in the District of Allahabad. It was first published¹ by Mr. H. T. Colebrooke in the year 1809. Mr. Colebrooke's reading of the last nine lines is erroneous, but he correctly made out the first eight lines which constitute the really valuable portion of the record, with the exception of a single place-name which will be referred to presently. These lines were rendered by Mr. Colebrooke as follows:—

'Sam vat 1093 on the first day of the light fortnight of *Ashadlia*. At this auspicious *Cata*. the great and eminent prince Yasahpala in the realm of *Causamba*, and village of *Payahasa*, commands.' A somewhat improved reading was published by Mr. James Pnnsep in 1836,² though his emendations were confined to the alteration of a few letters and the explanation of the latter portion of the epigraph remained as unintelligible as before. It was left for General Cunningham to use in 1871³ the information contained in this inscription in connection with his identification of Kosam with Kausambi. This identification was generally accepted by scholars until 1897 when it was called in question by the late Dr. Vincent Smith, who himself considered the kingdom

¹ *Asiatic Researches*, Vol. IX, pp. 440-41.

² *J. A. S. B.*, Vol. V, p. 781.

³ *A. & B.*, Vol. I, pp. 302 and 803.

of Kausambi to be 'roughly equivalent to Riwa,' and proposed to locate its capital in the neighbourhood of Bharhut. He thought that both on topographical and geographical grounds, he had proved the identification of the remains at Kosam with the Kausambi of the Chinese pilgrims to be impossible. 'In order to leave no supposed proof of the identity of Kosam and Kausambi unnoticed,' he proceeded to examine the contents of the stone inscription from Kara and found no difficulty in demonstrating that all that the inscription implied was 'that the village of Payahasa, wherever that may have been, was included in the kingdom of Kausambi' but certainly not Kara. This forceful argument of Dr. Smith must have considerably weakened the faith in General Cunningham's theory, but that it has not succeeded in convincing scholars of the utter uselessness of the latter is obvious from the fact that Kosam still continues to be regarded as the possible representative of Kausambi.¹ I have stated above that the inscription discovered by me at Meohar has supplied incontestable proof of the correctness of General Cunningham's identification. The following remarks will show that the Kara inscription has also a direct bearing on the question and clearly supports the General's view. The inscription consists of seventeen lines and is written in Sanskrit which is not free from mistakes. The inscription is quite complete with the exception of a few *aksharas* which seem to have disappeared in the latter portions of the last two lines. The purport of the inscription seems to be quite clear. It states that in Samvat 1093 on the first of the light fortnight of Ashadha, the Maharajadhiraja, the illustrious Yasahpala, [while staying] at the glorious Kara, commands the principal persons [residing] at the village of Payalasa in the kingdom of Kausambi, that accepting the grant [of land] in the enjoyment of the Mathura Vikta (Vikata) who resided at Pabhosa, they should continue to pay the customary duties, royalties, taxes, gold, income etc. (*'itrcdyddya*) together with the tenth part of the produce. The last two *aksharas* of line 15 and the four *aksharas* that have survived in line 16 have not yet been satisfactorily made out. The last line contains the words 'of the sons and grandsons'. It will be observed that the place name which Messrs Colebrooke and Prmspe read as Payahasa is in reality Payalasa. Dr. Smith was right in asserting that the inscription merely defines the position of this place as situated in the kingdom of Kausambi and not of Kara, as General Cunningham had supposed. This, however, does not alter the case, for just five miles north-north-west of Kara there is a place of the name of Paras (map Pias) which must be identical with the Payalasa of our inscription. the change of *I* to *r* is as common in the dialect of the United Provinces as the converse case of *r* to *I*. As examples, I may quote *star* for Sanskrit *srigala*, *sar* for Sanskrit *syala*, *kdrI Jcamari* for *halt kamball*, *chera* for *chela* (Sanskrit *cheta*) etc. In the same way Payalasa first changed to Payarasa which is now simplified to Paras or Pras. The village of Paras is just 30 miles north-north-west from Kosam. It is now obvious that this place and Mehavada (modern Meohar) which stands

Kara Stone
inscription
 and its
 bearing on the
 Identification
 of Kausambi
 Rai Bahadur
 Daya Ram
 Sahni

¹ Cambridge History of India, Vol. 1, p. 3vol.

Rai Bahadur
Daya Ram
-Sahni

8½ miles north-east of Kosam were both situated in the kingdom of Kausambi. The capital of this kingdom must therefore be looked for in this very neighbourhood, and there is certainly no other place in this vicinity which has a better claim to be regarded" as the representative of Kausambi than Kosam. Dr Smith's view that Kausambi stood at or in the immediate neighbourhood of Bharhut must now be finally abandoned.

AN EARLY DATED SILVER COIN OF KUMARAGUPTA

By Mr. K. N. Dikshit, M.A.

An early
dated Silver
coin of
Kumaragupta
Mr. K. N.
Dikshit

The coin which forms the subject of this note (Plate XLI, fig. b) is in the collection of the Prince of Wales Museum of Western India, Bombay, and was originally found somewhere in Kathiawar.

Silver, Kumaragupta, diam. .55, weight, 27 gr.

Obv: Bust of king to right, as on silver coins of the western Kshatrapas and Chandragupta II. Behind head, Brahmi legend, varsh(e) 100—

To r. UO

Rev. Garuda standing facing, with outspread wings, below curved line; above, seven-pointed stars; at the bottom CO. Inscription around, (beginning III) ¹ *Parama bhagavata-Maharjadh(i)raja Sr(i)(Kumdragupta) Mahendra-diiyasya.*

This is one of the earliest silver issues of Kumaragupta in the Western Provinces, combining, as it does, some peculiar features of the coinage of Chandragupta II with those of the earliest issues of Kumaragupta so far known. The occurrence of a date on this coin shows that Kumaragupta issued dated types from the western mints, as well as from the well-known eastern ones. The disposition of the bust of the king on the obverse, and the various symbols with Garuda on the reverse, are similar to those of the earliest silver coins of Kumaragupta (Allan, *Catalogue of coins of the Gupta dynasties*, Plate XVI, I & 2). But the presence of UO¹ on the obverse, the use of the genitive² in the reverse legend, and the occurrence of the date are features which connect this coin with Chandragupta's issues, while the epigraphy shows a position half-way between the two. As no more examples of this class are known, it may be that the coinage was discontinued shortly after this issue. Regarding the date, it seems probable that there was no decimal figure after the '100,' though it is likely there was some unit figure, which is off the flan. The period of this type of coinage may be assumed to be circa 420 A.D., as the close imitation of Chandragupta's type indicates that it was issued shortly after Kumaragupta's accession in 413-14, that it was probably not long in use, and was shortly followed by type 1(a) (Allan; Plate XVI, 1, 2).

¹ Vide Allan; *Catalogue of coins of the Gupta dynasties* Plate XI, 18.

² This case-ending never again occurs on the coins of the Guptas. It can be traced back through some rare specimens of Chandragupta II (Allan, Plate X, 21), to the times of the Western Kshatrapas, when it was universally adopted on coins.

TWO UNIDENTIFIED RELIEFS FROM GANDHARA

I Mr. H. Hargreaves)

Among the problems connected with the Gandhara school of sculpture Two is the identification of the reliefs, and I take this opportunity of inviting attention to two unidentified and hitherto unpublished sculptures of this class in the hope that publication may lead to their identification by scholars working in the various fields of Buddhist research.

Unidentified
Reliefs from
Gandhara

The first (Plate XLI, c) is a fragment of a frieze (12^{ff} X 6") now in possession of F. V. Wylie, Esquire, I.C.S., Mardan.

On the extreme left of the relief is a city gateway in which stands a female with both arms uplifted, as if in dismay or astonishment. The figure is naked to the waist and wears heavy anklets and two necklaces. The head is damaged but it appears as if the headdress had been either a modius or a crenellated crown. In the latter case this female would almost certainly be a city goddess.

To the right of the gateway is a well-clothed man presenting a spear at the chest of a horse. This latter is not standing on the ground, but like a child's toy horse is placed on a low, flat, wheeled base or platform. Behind the horse is another similar but unarmed male whose hands rest on its flanks, while in the background, on the off side of the horse, stands a third male figure. The heads of both these personages are damaged, but they are certainly laymen. On the extreme right is a spear held upright in the right hand of a now lost standing figure. The provenance of the sculpture is uncertain, but in all probability the relief came from one of the numerous mounds in the Mardan Sub-division of the Peshawar District.

The technique of the sculpture is but mediocre and the story illustrated almost certainly Buddhist, but it is impossible not to recognize the influence of the classic story of the wooden horse of Troy.

The second sculpture (Plate XLI, d) was recently presented to the Peshawar Museum by Lt.-Col. C. G. Crosthwaite, O.B.E., Deputy Commissioner, Peshawar. It is a fragment 6¹/₈", outer face 21", of a circular frieze. Between two small narrow sunk panels, in which a standing female under a tree replaces the usual pilasters, is a relief in the centre of which a haloed Bodhisattva (or royal personage ?) is seated on a woven cane stool under a tree. The right leg is uplifted, the bare right foot resting on the left knee. The empty sandal of the right foot lies on the ground. The head of the Bodhisattva is turned to his left, the left hand placed against the cheek and the whole attitude suggestive of despondency or cogitation. Facing him and to the spectator's right is a well-dressed layman with uplifted right hand in which is held an unidentified object, probably flowers but if so, of uncommon form. In his left hand are held the reins of a horse, of which only the fore half is shown in profile, as though coming through a gateway. In the upper right background are two haloed princely figures or devas.

Two
Unidentified
Reliefs from
Gandhara
Mr. H.
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Behind the Bodhisattva to the spectator's left, a husbandman is **ploughing** with a yoke of oxen, and in the background are the figures of two labourers or men of low caste, one of whom holds a large bowl and seems to be scattering something, with his right hand.

The ploughing scene in itself suggests the First Meditation of the Bodhisattva (cf Lahore Museum, Sikri Stupa No. 10, Peshawar Museum No. 1739); but the attitude of the protagonist is not that of meditation, and the figure to the right with the water-pot certainly indicates a donation.

On the extreme left is a standing monk, the end figure of a now lost scene.

The exact provenance is unknown but the sculpture is said to have come from Buner.

THE AGE OF THE SHWEDAGON PAGODA AT RANGOON

(By Mons. Charles Duroselle, MA.)

The
Age of the
Shwedagon
Pagoda
Mons. Ch.
Duroselle

My paper on *The Apocryphal Geography of Burma* published in my Provincial Archaeological Report for 1923-24, a summary of the prefatory remarks in which appeared in the Director General's Annual Report for 1922-23, pp. 181 and 182, seems to have aroused some interest in Burma. In these prefatory remarks, I spoke incidentally of the Shwedagon Pagoda at Rangoon, as one of the most famous, and certainly the best known shrine in Burma and asserted that its exact date, though not known, has always been placed either too early or too late. Various letters asking for further information on the subject having been received, the following is a short note in which I try to fix its date approximately from Pali and Burmese works.

The Shwedagon is a very graceful, cylindrical, solid pagoda raised on a very high terrace at Rangoon. Though not the most beautiful of Burma's old monuments it is certainly the most celebrated shrine in this land of pagodas, its fame has even spread among Buddhist peoples beyond the confines of this province. Its principal claim to such fame is that it is said to have been erected over the re-remains of the Buddha Gautama. The Shwedagon itself, apart from the hill and terrace on which it stands, is about 320 feet in height and, as we see it now, dates only from 1770 A.D.). It was much lower previous to that date. The trend of Burmese records, tends to shew that the original building was a comparatively small one, which was several times built over and encased by pious sovereigns. The Burmese themselves put back the date of its foundation to a few months after the Buddha had obtained omniscience under the Bo tree at Bodhi-Gaya. Professor E. Forchhammer, the first archaeologist in Burma, accepted this date¹, but his premises are wrong, and therefore his assumption falls to the ground, as has been shown by the late Professor Kern² who, however, did not offer any conjectures as to its real age. Their assumption that this pagoda was built in the 5th century B.C., is based

¹ Notes on the *Early History and Geography of British Burma*, I.—The Shwe Dagon Pagoda, p. 10.

² Versprade *Gewhriften*, Vol. III, p. 278 ff.

by the Burmese on a passage in the Vinaya Pitaka¹ which later on gave rise to a long legend, but which merely states that, as the Buddha, after his enlightenment, was seated under the Rajayatana tree, two merchant brothers, by names Tapussa and Bhalika, arrived from Ukkala (Orissa) with five hundred carts and offered him food in the form of rice-cakes and honey, and that these two merchants afterwards became the first lay disciples of the Buddha by taking refuge in the Buddha and the Dhamma (the Sangha did not yet exist). It will be remarked that this old Pah text merely says that the two merchants had come from Orissa, and makes no mention of hair-relics received from the Master then. The legend itself, with the mention of the hair and other relics and of the stupas erected over them, was evolved much later on the basis of the short passage in the Vinaya just referred to. As it belongs to both the Hinayana and the Mahayana, being familiar to sects of both these Schools, it may be safely assumed that this legend is an old one. In essentials it is the same in all its recensions, only the geographical details as to the erection of the stupas and some minor incidents differ according to the localities of the different sects, the possession of the relics being naturally claimed by several nations. This is also what has happened in regard to the Burmese version of the legend, with this difference however, that the marvellous and the supernatural are more extravagant in this case than in any other. As far as is known, the first Pali recensions of the story of Tapussa and Bhalika and the hair-relics appear in the Manoratnapurani (Commentary on the Anguttara Nikaya), and in the Paramatthadipam (the Commentary on the Theragatha), both compiled in Ceylon in the fifth century A.D. These two versions differ slightly in minor details and the Paramatthadipam is more sober than the Manoratnapuram. It is out of this latter version especially that the wonderful Burmese story has been elaborated, most probably because it mentions Hamsavati (Anglice=Hanthawaddy=Pegu), and Asitanjana, an old city in Hamsavati. If we assume, which in this case is most probable, that the Burmese derived then legend from the Manoratnapuram, (and their records are in agreement on this point), then, the Burmese legend cannot be older than the middle or the end of the fifth century A.D. If, on the other hand (since the commentaries were avowedly compiled from older Singhalese materials), the people of Burma knew the story of Tapussa-Bhalika before the compilation of the Manoratnapuram, then the Burmese version may be somewhat older than the fifth century. This is less likely, but in this connection it must be remembered that Burma had early relations with Ceylon. It is therefore the Manoratnapuram which may help us in fixing approximately the date of the foundation of the original pagoda now known as the Shwedagon. It mentions very often Hamsavati, and here and there Asitanjana, and it mentions both in connection with the hair-relic legend. The following note on these two may therefore be useful.

Hamsavati, that is, the district of Pegu and the town of the same name in Lower Burma has, as a place-name no counterpart in India; it ranks, how-

¹ The Vinaya Pitakam, edited by Oldenberg, Vol. I, Mahavagga, pp 3-4.

The
Age of the
Shwedagon
Pagoda
Mont. Cb.
Duroiselle

ever, among the oldest in Burma. It is, as just pointed out, often mentioned in the Manorathapurani, where it is said to have been the birth place, (but generally in some of their anterior existences), of a large number of personages more or less famous among the Buddhists. For instance, the famous Tapussa and Bhallika who were the very first lawmen to become the disciples of the Buddha, and who are reputed to have brought the Buddha's hair-relics enshrined in the Shwedagon, are said to have been citizens of Hamsavati in a former existence. So also Sujata, who was the first female disciple of the Buddha, also Citta, the greatest among the lay preachers Hamsavati is even reputed to have been the birth-place of the Buddha Padumuttara. If this name was already so well-known in Ceylon in the fifth century as to be repeatedly mentioned, then it must have been applied to that portion of Lower Burma much earlier.

Asitanjana, too, is among the oldest place names in Burma; it appears to have been applied to a town quite near the present Rangoon, a little to the north-west of it, and the original Shwedagon is said to have been erected just outside its gates. It is mentioned in the Manorathapurani in connection with Hamsavati, so that there can be no doubt as to its being in Burma. Abitanjana must therefore have been founded before this commentary was written. According to the Manorathapuiam, Tapussa and Bhallika who, in a previous existence, had been born in Hamsavati (Pegu) were, in the dispensation of the last Buddha reborn in Asitanjana. In the Ghatajataka story (No. 454, Vol IV, pp. 79ff) it is mentioned as being a town in Kamsabhoga, a kingdom in the north of India.

It is true that the commentator, with reference to this legend, does not specify whether Asitanjana was the one in Hamsavati or the one in Kamsabhoga. But considering his frequent mentions of Hamsavati and Asitanjana, and the relative nearness of Burma to Ceylon compared with the great distance of Ceylon from the north of India, and considering also that Hamsavati and Asitanjana in the legend are mentioned almost together, and that Asitanjana in Northern India as a place wherein a stupa was erected by the two brothers over the hair-relics, is absent from the legend of other sects in India, there can be no doubt that the commentator had in his mind the Asitanjana in Hamsavati. At the end of the story he tells us that the two merchants, having brought over the hair relics "erected a shrine over them at the gate of the town of Asitanjana," which, as has been said, was practically the Kanagoon of those days. The famousness of this small town may have been due to the belief that the hair relics of the Buddha were enshrined there, although other Singhalese documents affirm that the shrine was first built in Orissa, and that the hairs were thence brought over to Ceylon at the end of the fifth century A.D.

If we follow the hoary tradition current in Burma, and above all the statements in the Manorathapurani we may place the date of the foundation of the original Shwedagon shrine approximately in the fifth century A.D.

SECTION IX

INDIAN STATES WITH ARCHÆOLOGICAL DEPARTMENTS OF
THEIR OWN

For the following accounts of what has been accomplished during the year in the Kashmir, Gwahar and Bhopal States, I am indebted to the courtesy of the Darbars concerned. These States maintain independent Archaeological Departments of their own, but do not, unfortunately, publish annual reports of the work done by them; and seeing how intimately connected their monuments and antiquities are with those of British India, and what a close bearing the measures taken for their preservation of exploration have upon our own efforts, no apology is needed for printing here the summaries with which I have been furnished. On the other hand, it would be superfluous to recapitulate again the Annual Reports on archaeology issued by the States of Hyderabad and Mysore which also maintain their own Departments, and henceforth, therefore, I shall mention only such archaeological undertakings in these States as my own Department may have been directly concerned with.

In Kashmir, conservation work has been carried out this year at eight sites, namely at Martand, Harwan (where excavations have been in progress for some years past), Zamu-1-Abidin's mother's tomb in Snnagar, the Nishat Bagh, Shalamar, Avantisvami temple, Dhathamandir, and Ramgarh Fort in Samba Tashil.

At Martand, the work chiefly consisted in dismantling those portions of the side chapels which were out of plumb. But it was found that the stones had suffered so badly from the action of frost that nearly every block which was removed from its original position crumbled to pieces. The dismantling was therefore discontinued, and it was decided to leave the chapels as they are, after underpinning them.

The conservation at Harwan did not go beyond repairs to the walls of the buildings recently excavated and the clearance of the excavated areas.

At the tomb of Zamu-1-Abidin's mother a large mulberry tree, as well as smaller shrubs, had taken root in the dome which was found to be leaking badly. This vegetation has now been rooted out, and the upper part of the dome made water-tight.

At the Nishat Bagh the pathways of the various terraces have hitherto been connected one with another by earthen ramps which used to become slippery in wet weather. To remedy this defect, the ramps of the six lower terraces have now been replaced by flights of ashlar dressed stone steps (Plate XLII, *a*) and a part of the enclosure wall, where it was falling to pieces, has been repaired.

The work at Shalamar (Plate XLII, *b*) was of a more varied nature. The *hammam* there has now been thoroughly conserved the upper storey being

KashmirBy Mr. R. C.
Kak

provided with suitable doors and windows, and the ceiling and the lattice work repaired. The first floor has thus become quite habitable. The side-walls of the tank round the main *baradan*, all of which were out of plumb and leaking very badly, have in great measure been repaired.

The old railing which enclosed the site of the Avantisvami temple has been partly replaced by a new one of better design.

Petty repairs to the railing and chaukidar's hut at the Dathamandir were executed.

The small fortress of Ramgarh (consisting of a single brick tower and a bastioned enclosure of sun-baked bricks), which is well known as the birth-place of Maharaja Gulab Singh, has also been conserved, the chambers having been cleared of the debris which had accumulated in them, the courtyard levelled, and the jungle which had concealed it from view, cut down.

*Exploration
Martand*

Excavation work was carried on at Martand, Harwan and Kakapur.

The debris which the winds and weather of thirteen centuries had accumulated in and about the courtyard of the Martand temple has in great measure been cleared during this summer. The great difficulty of excavation here is the presence of an immense number of large-sized stones, fallen from the superstructure of the temples and the peristyle. Thousands have now been removed, but thousands still remain inside the quadrangle (Plate XLII, d¹ d).

Though from the point of view of comparative architecture and archaeology the results of the excavation have been satisfactory (for instance the basement is of an entirely unsuspected design both in plan and decoration, and the construction of two highly ornamented plinths one encasing the other, seems to indicate that the present temple was built on an earlier sacred site) the yield in minor antiquities has been very poor. With the exception of a large number of plain earthen jars, a few fragments of sculpture, potsherds, and a few coins, nothing of importance had been found in or around the courtyard. It seems that the priests in charge were fore-warned of the destruction which awaited then temple, and carefully removed every portable article before the storm burst upon them.

The investigation, however, is not yet complete, and it is possible that next year's operations will yield some more interesting antiquities.

Harwan

The previous year's excavations at Harwan were completed and some raoije structures of the diaper-pebble style unearthed. As a separate memoir on the Harwan monuments is in preparation, it is not necessary to mention here anything more than was stated in my last year's note.

Kakapur

Kakapur is the supposed site of Utpalapura, a town founded by Utpala, the minister of Chippata-Jayapida who reigned in the early part of the 9th century A.D. Utpala is said to have built a temple of Vishnu which he named Utpalasvami.

It was in quest of this temple that excavations were started here. Though there exist half a dozen mounds at Kakapur all bearing names plainly indicating their sacred origin, only one of them yielded satisfactory results. The double chambered gateway, built of massive lime-stone blocks, of a medium-

sized medieval temple, which may have been Utpala's, was brought to light at the depth of over 12' below the present ground level. A number of sculptures, earthen vessels, etc., were also discovered. The excavation will be resumed on a larger scale next year if arrangements for the transfer of the land to this Department can be made early.

The Sriagar Museum Handbook has been published. A short memoir on *Publications* the "Stone Age in Kashmir" by Mr G E L. Carter, I.C.S., and a monograph by myself on the "Antiquities of Marey Wadwan" were also sent to press. My "Guide to Kashmir Monuments" still awaits the Durbar's sanction for publication. Two memoirs on the "Antiquities of Basohh" and the "Harwan Excavations" are in the course of preparation, and I have also been engaged in the preparation of a scientific catalogue of the Raja Sir Hansingh's library of Sanskrit Manuscripts.

At the Srinagar Museum, a large number of antiquities from the Harwan, Martand and Panjnara excavations, and three inscribed stone slabs, one each from Rajauri, Koth and Hathmala, were presented by the Archaeological Department of the State. Three copper coins were presented by the Superintendent, Archaeological Survey, Poona. One silver coin of Amir Abdur Rahman of Kabul was presented by Mons. L. Tenebre, Principal of the French College, Kabul. Fourteen other copper coins (four excavated in Batapura and ten purchased) were also added to this section. Two illustrated Sanskrit Manuscripts, containing mainly devotional songs, were purchased. A specially designed show-case was constructed for the Harwan tiles. A portrait of Maharaja Ranbir Singh by an artist belonging to the so-called Kangra school, and two Seshanaga pictures were purchased. The papier mache and lacquered articles were provided with specially designed brass stands and placed in special show-cases.

During the year 1923-24 conservation in Gwahor was earned out chiefly at Bagh (District Amjhera), Ranod (District Narwar), and at Badoh and U d a y - pur (District Bhilsa). At Bagh the work was continued of freeing the rock cut caves from the mass of debris with which they are choked. The joint verandah of caves Nos. 4 and 5, extending over a total length of about 226' feet, was cleared, excluding a small mound which was retained to serve as a scaffolding for copying the frescoes (PI XLI, a) on the upper portion of the back wall of this verandah. The copying work having now been completed, the mound will be removed as soon as the clearance work is resumed next season. The inside of cave No. 5, which measures approximately 96' by 44', and which was covered all over with debris to an average depth of about 4 feet has been completely cleared. Three of the four aisles of the large hall of cave No. 4 have also been freed from debris, and the huge mass thus removed has been arranged so as to form a spacious approach along the slope of the hall in front of the caves. The greater portion of caves Nos. 3 and 4 still remains to be cleared,, but it is hoped that the work will be completed next season. Repairs to the decaying pillars and walls and the construction of masonry supports where necessary, will be taken up next.

The Khokhai Hindu monastery at Ranod (Plate XLIII, a) has been under repairs for more than two year, past and the conservation of the main building was almost completed last year. In addition to the few items that remained to be executed here, the corridors, the courtyard and the precincts of the monument were attended to in the year under report. In the main building the damaged edge of the stone floor of the *veiandah* was renewed, the cracks in the roof slabs were repaired with country *masala* and rendered water-tight, and the pavement of the courtyard, made up of heavy stone slabs which had sunk in several places (probably in consequence of huge stones from the upper storey having fallen on it with a crash), were repaired by raising the slabs and resetting them, lime *kankar* being rammed in the gaps caused by missing slabs. A lintel in the northern corridor, which had cracked, was supported on a stone post, and another in the western corridor which was dislocated was pushed back into its right position. The decayed wall masonry at the north-east corner of the building was cut out and renewed, and three heavy ceiling slabs in the north corner which had fallen down were lifted up and reset.

A small dilapidated mosque near the monastery was also freed from jungle and tidied up. The accretion of earth and rubbish which concealed the base of the monument on the exterior were dug up and removed. The heaps of debris and rubbish which disfigured the precincts of the building were taken away, and the ground roughly levelled up. A Hindi summary of the contents of the large Sanskrit inscription on the monument was put up near the original, for the information of visitors.

At Badoh the repairs to the Gadarmal temple (Plate XLIII, b) commenced last year were concluded during the year under review. the following measures being carried out. The front face of the high platform on which the chief temple with its attendant shrine stands was restored with original carved stones which had fallen down but were lying buried in the earth near their original position. The restored portion shows the mouldings and sculpture niches with which the front face of the platform was adorned. As a large number of stones in the other faces of the platform were missing, these faces were roughly repaired with promiscuous blocks of stone picked up from the debris so as to form retaining walls to support the edges of the platform. The stepped approach to the platform was exposed by digging away the earth which concealed it, and was restored with old stone. The top of the platform was repaved, so far as was possible with old paving slabs found in the debris, and the remainder was metalled. The existing portions of the two front attendant shrines had sagged badly. These were dismantled and properly rebuilt. The big carved blocks of stone which had been picked up from the debris were arranged into a sort of compound wall around the platform at a distance of 60 feet from its sides. The entrance to the original compound was cleared and tidied up, and the pillars of the porch over this entrance were reset in plumb. Some of the better preserved sculptures unearthed from the debris were arranged in order on both sides of the approach road between the outer entrance and the stairs of the platform.

In addition to this, three other monuments at Badoh, namely the pillared Gwalior hall known as Solakhambi, the Jaina temples and the group of Vaishnava By Mr. M. B. Garde temples also received attention.

The Solakhambi as its name implies is an open hall with a flat roof supported on sixteen pillars arranged in four rows on a high plinth on the northern bank of a lake. The hall was evidently meant as a pleasure resort for enjoying fresh air and the view of the lotus-covered lake. Judging from the shape of its pillars, the building may be as old as the 9th century A.D. or even a little earlier. The repairs to this monument chiefly consisted in the clearance of jungle, the proper resetting of some of the pillars which had been leaning out of plumb, and of the brackets, beams, roof slabs, etc., which they carried, the underpinning of the undermined bases of a few pillars, the filling up of a deep pit inside, repairs to the flow with hard rammed *murum*, the construction of steps giving access to the floor, and lastly the throwing up of banks of earth to conceal and strengthen the exposed foundations of the plinth.

The Jama temples (Plate XLIII, c & d) form a group of some twenty different shrines placed so as to enclose an oblong courtyard. The individual shrines are not all contemporary but appear to have been constructed at different times between the 9th and the 12th centuries. Some of these shrines are flat-rooted, others have domes, while the rest are crowned with *sikharas*. The monument was overgrown with a very dense jungle, so much so that it was almost concealed from view. This jungle has now been cleared completely, although the roots of some of the bigger trees will require attention for some time to come before they are thoroughly eradicated. The interior of the courtyard and the shrines has been freed from heaps of debris and the ground inside excavated so as to expose the original floor pavements. Stone or masonry supports have been set up where necessary, and petty repairs including underpinning have been done to the rubble masonry of walls and parapets.

The Vaishnava temples at Badoh are in an advanced state of ruin. Originally there may have been more than a dozen temples in this group, but at present only three of them are standing and these, too, in such a tottering condition that hardly anything can be done now to rescue them. The rest have been reduced to mere heaps of debris. The whole site was enveloped in thick jungle. This has been cleared so as to render the ruins accessible to visitors, and important sculptures lying scattered about have been picked up and arranged so as to form a small open air museum, round one of the temples.

Perhaps the most important monument taken up for conservation this year is the great Siva temple known as Niiakanthesvara, or Udayesvam. at Udayapur in Bhilsa District. The date of the temple is definitely known from the numerous stone records which it has the good fortune to possess. It was constructed between V. S. 1116 and 1137 (=A.D. 1059 and 1080) by Udayaditya, the well-known Paramara king. It consists of a cella with a lofty and elegant spire,

a hall, and entrance porches on its three sides. It is situated in a spacious rectangular compound with attendant shrines at the corners and the mid points of its sides, and has a peculiar flat-roofed structure in front of the chief entrance to the temple known as Vedi, which was possibly used as a room for the reading or reciting of the Vedas. The temple is built of large blocks of red sandstone, which serve to enhance its effect. The temple itself is still structurally sound, although one and all of the numerous figure sculptures with which the exterior facing was decorated have been mutilated. This temple has been described by Fergusson (*History of Architecture*, Vol. II., page 147) who rightly admires the great beauty and elegance of the design of its tower. This is certainly the finest and best preserved example of a mediæval Hindu temple in Gwahor State, and possibly in the whole of Central India.

In the same compound is a mosque built by Aurangzeb with material taken from a Hindu temple, which there are good reasons to believe was a companion of the Udayesvara temple.

Although the temple is in a comparatively fair state of preservation, nevertheless its body and surroundings need a good deal of clearance and repair. For instance, the village people have encroached upon the original compound of the temple by building a number of kachcha houses which obstruct a view of the monument and which it is necessary to remove. The proposal to acquire these houses is now under consideration and it is hoped that the acquisition will be an accomplished fact in a few months.

The following items of conservation were carried out here this year. The temple and its precincts were freed from small jungle and vegetation. A big pipal tree growing on the Vedi and a *bel* tree on the steps of the eastern porch of the temple were cut down and completely eradicated. In doing so a portion of the masonry had to be dismantled but this was afterwards rebuilt. The kachcha rubble work put up in later times at the principal entrance to the temple was dismantled, and the steps were repaired in carefully dressed blocks of stone so as to match the original work. A few leakages in the pyramidal roof of the hall were repaired, and certain rubble accretions to the Vedi were cleared away. The whole compound in general, and the mosque behind the temple in particular, were freed from heaps of rubbish and earth. The pavement in the compound having sunk in a few places, the damaged patches were made good. A dilapidated rubble structure over the main entrance to the compound was also dismantled and removed, and a terrace roof was put up over the entrance. The terrace roof of the mosque leaked in several places. A fresh 6" coat of brick concrete in good lime was therefore put over it so as to render it waterproof. The main entrance was provided with an iron gate. The old doors of the main temple and its porches had badly decayed. They were replaced with decent teak-wood shutters in Indian pattern to be in keeping with the rest of the building.

The copying of the valuable but fast fading frescoes in the Buddhist Caves at Bugh had been started and the major portion of it carried to completion

in the year 1920. Then the work was suspended since capable artists could not be found to finish it. Fortunately this year Mr. W. E. G. Solomon, Principal of Sir J. J. School of Art, Bombay, who takes special interest in ancient Indian Painting, was good enough to lend the services of Messrs Bhonsle and Apte, two of his advanced students, to do the Bagh work. These, assisted by Mr. Bhand, a promising art student of Gwahor, were able to make water-colour copies of the remaining figure paintings and outlines of representative specimens of the floral and geometrical decorations on the interior of cave No. 4. Same size copies, both in outline and in water-colour, of all the important frescoes that have survived at Bagh have thus been completed. Moreover, a plan to publish them in book form, through the India Society of London, is under contemplation and it is hoped that this plan will materialise in the near future, thus supplying a long-felt want.

No excavations were undertaken this year. It had been originally proposed to carry out trial digging at Pawaya, the site of Padmavati, but as the legal procedure preliminary to the acquisition of the desired plots of land could not be completed before the winter season had well nigh expired, the proposed excavations had to be postponed until the next field season.

A stone inscription of V. S. 1151 and forty-five sculptures representing gods and goddesses of the Hindu Pantheon and ranging in age from the 9th to the 12th century AD, together with a number of stone heads recovered from the debris of the Gadarmal temple at Badoh, have been added to the Gwahor Archaeological Museum this year. The most remarkable additions, however, are the five coloured copies and nine copies in outline of the frescoes at Bagh described above.

Ten inscriptions were discovered in the course of the year. The earliest dated in V. S. 1073, and the latest in V. S. 1788. Nine of these are written in Devanagari characters and one partly in Devanagari and partly in Persian. The language of five of them is Sanskrit, of four Hindi, and of one partly Hindi and partly Persian. Four of the later inscriptions are Sati records and one registers the construction of a well. One inscription records the installation of a Jama image. Two are mere pilgrims' records. But one of the newly discovered inscriptions is of some historical value. It is dated in V. S. 1151 and records the construction of a water tank in that year during the reign of Naravarmadeva, a Paramara king who is already known from the Nagpur Prasasti and other Paramara records. Our inscription shows that, Naravarmadeva was ruling in V. S. 1151, a date which is ten years earlier than the earliest date of that king known hitherto. The stone was discovered near the bank of the tank the construction of which it records, and which is situated about a mile to the South of Udaypur (District Bilhisa).

In conclusion, it remains to add that Mr. B. Ghosal, Superintendent of Archaeology, Bhopal State, carried out all requisite annual repairs to the well-known group of Buddhist monuments and to the Museum and roads at Sanchi and tended both the site and the buildings with the same sedulous care as in previous years.

Gwahor

By Mr. M. B. Garde

Exploration

Gwahor
Archaeological
Museum

Epigraphy

Bhopal State

Mr. B. Ghosal

SECTION X

DEPARTMENTAL ROUTINE NOTES

ANCIENT MONUMENTS PRESERVATION ACT AND LISTING OF MONUMENTS

**United
Provinces**

Mr. Sahni reports in regard to the Hindu and Buddhist Monuments of the United Provinces that only one monument was declared protected during the year under review. "This," he writes, "is a large mound situated between the villages of Mahuari and Bhagdeur, about a mile and a half to the west of the village of Pandepur and about 7 miles from the Bindhachal Railway Station, in the Mirzapur District. The mound represents the site of a large temple of the 11th or 12th century A.D. The superstructure of the building has completely fallen, but the terrace on which it stood still lies buried in the debris. Much of the material has been taken away by the villagers. The notification of the site as a protected monument aims at preventing further spoliation."

Punjab

Among the Muhammadan monuments in the Punjab, Mr. Hargreaves reports that only one addition has been made to the list of protected monuments, i.e., the Mughal bridge at Dakhm, in the Nakodar Tahsil, Jullundhur District. He calls special attention, however, to the frequency with which the monuments in this province, especially in Lahore, are disfigured by the writing or engraving of visitors' names on walls and columns. The *chhatris* which crown the minars at Jahangir's tomb at Shahdara are among the worst sufferers, the marble columns being covered with names cut into the stone, names, too, which seem to suggest that the offenders are people of education. The supervising staff at this monument is unfortunately too small to prevent such disfigurement, and the only case where it has been possible to trace the individuals and proceed against them under section 16 of the Ancient Monuments Preservation Act, has been so long pending in the court of the Tahsildar of Shahdara without reaching finality that prosecutions do not promise to have the deterrent effect which, might be desired.

Western Circle

In the Western Circle six notifications of protection have been confirmed during the year, and agreements have been entered into with the private owners or trustees of two buildings in Ahmedabad, namely,—the Jami Masjid and Rani Sipri's Mosque and Tomb. POUT monuments, one each in the four districts of Karachi, Belgaum, Thar Parkar and Ahmedabad, were removed from the list of protected monuments. Among these is what is known as Sidi Basir's minar and tomb outside the Sarangpur gate at Ahmedabad. This old mosque was destroyed during the contest between the Marathas and Muhammadans, and nothing remains of it now except the central archway with two elaborately carved minarets and the adjoining tomb. The fragments are in good preservation and the Archaeological Department has carried out annual repairs ever since the monument was first protected. In 1922, however, certain local Muhammadans applied to the Collector of Ahmedabad for permission to erect a new

masjid of small dimension, on the site of the old mosque, and to enclose the whole area with a new compound Avail. As this request was granted against the wishes of this Department, which felt that [these](#) new erections would inevitably detract from the appearance of the monument, the latter was removed from the departmental list.

A typed list of the monuments protected up to date in the Bombay Presidency and Sind has been compiled by the Superintendent in the Western Circle; but the list cannot be finally approved by the Government of India until detailed reports on all of the monuments can be submitted by the Poona Office. The area covered is a very large one, the list is long, and as some of the monuments have not yet been inspected by the present officers of the Department in Western India, it may take some time for these official reports to be received.

The only damage to a protected monument reported in Western India is the case of the Padkhan mosque at Brjapur. A certain him tree at the side of this mosque had been sold to a timber merchant of the place, who cut it down so carelessly that it fell upon the monument and caused damage to a portion of the minaret. The Collector ordered the man to repair the damage, which he did, on an estimate framed by the Executive Engineer, at a total cost of Rs 156.

The only additions to the list in Bihar and Orissa were certain ancient monuments at Nalanda, the notification of which was confirmed on the 21st June, 1923.

The small well immediately Inside the Jatpura gate, Chanda, was notified in July, 1923, but this notification was not confirmed before the close of the year. On the other hand, four monuments in the Central Provinces were removed from the list, namely—The Idgah at Desh in Betul District, the remains of a certain temple at Bhandak in the Chanda District, the Ramnagar Fort at Ramnagar in the Bilaspur District, and the Bagh Dewal at Arang in Raipur District. In the case of the last-named it was found that this monument had been inadvertently protected also under the synonymous name of Bageshwar temple, so that one of the two notices had to be cancelled.

The listing of Ancient Monuments in the Bihar and Orissa Province protected under Act VII of 1904, which was in progress from previous years, was brought to completion during the year under review, when the text relative to the Patna Division was finally submitted to the Local Government for approval in October, 1923. Under instructions from the Director-General of Archaeology, communicated after consultation with the Bihar and Orissa Government, the arrangement followed in compiling the text has been altered with a view to rendering the lists more attractive to the general public, to whom they will be made available. This rearrangement, undertaken when the lists had been almost completed, necessarily involved much extra labour and delayed the completion of the work. Of the five divisional lists, embracing all the protected monuments in the Province, those for the Patna and Tirhut Divisions are still with the Local Government, whose approval of them is awaited. The other

Bihar and Orissa

lists, of the Orissa, Chota Nagpur and Bhagalpur Divisions, remain in the office of the Archaeological Superintendent pending final instructions relative to their printing and publication.

Antiquarian maps of each of the 5 divisions of the Bihar and Orissa Province have also been completed and have been approved by the Local Government. The maps now lie with the Superintendent, Bihar and Orissa, Drawing Office, Gulzarbagh, and instructions regarding their reproduction are awaited from the Local Government. Alphabetical lists of all the ancient sites indicated on these maps have been prepared, as well as a fairly comprehensive bibliography. These it is intended to publish along with the maps.

Bengal

The protected temple known as the Rajabari Math on the banks of the river Padma in Dacca District collapsed into the river owing to erosion on the 8th September, 1923. This temple was built by the Raja Rajballabh Rai, a contemporary of Lord Giver and the last Nawab of Bengal, Siraj-ud-daulah.

Only one monument, the Math at Kodla in the Khulna District of Bengal, was protected during the year, while the protection extended to the Dewan-bazar Masjid in the compound of the Dacca College at Dacca and the temple of Dasabhuja at Muhammadpuri in the Jessore District had to be withdrawn.

Assam

In Assam, the protection of the tomb of Ghiyasuddin at Hajo in the Kamrup District, and the temple of Sri Chaitanya at Dattarail Thakurbari in the Sylhet District was cancelled. The shrine of Durga and Vishnu at Deopani in the Sibsagar District was declared protected.

Madras

A revised list, of Protected Monuments in the Madras Presidency has been prepared and will be issued in due course.

Burma

In Burma, considerable difficulties have been experienced in bringing monuments under the protection of the Ancient Monuments Preservation Act, owing to a persistent misunderstanding of the intentions of the Act on the part of the public, who do not seem to realize that the notification of a monument aims merely at preserving it from injury, and does not involve any interference with the owner's rights. An endeavour is being made, however, to apply the Act wherever possible, to the monuments borne on the Departmental list for repairs, and three notifications were issued during 1928-24, which have not yet been confirmed. In all three cases, however, the monuments so notified were merely inscription sheds, so that actually there is little change to report so far as the actual monuments of the province are concerned. Indeed, one monument which had been protected, namely, the Manaungyadana pagoda at Mandalay, was removed from the list of protected monuments at the express request of the trustees

PUBLICATIONS

The following publications were issued by the Department during 1923-24 ;—

1. Archaeological Survey of India, Annual Report for 1920-21.
2. Supplementary Catalogue of Coins in the Indian Museum, Calcutta, Non-Muhammadan Series, Vol. I,
3. Epigraphia Indo-Moslemica, 1910-20.

4. Annual Report on Epigraphy for 1921-22.
5. Epigraphia Indica, Vol. XV11, Parts I, II, III, IV, V and VI.
6. Conservation Manual, by Sir John Marshall.
7. List of Photo-Negatives in the office of the Superintendent, Hindu and Buddhist Monuments, Lahore.
8. Memoir No. 14, Antiquities of Bhunber and Rajaun, by R. C. Kak.

The Assistant Superintendent for Epigraphy, Southern Circle, Madras, brought out his Annual Report on South Indian Epigraphy for the year ending 31st March, 1923.

Part 1 of Mr. Longhurst's Memoir on Pallava Architecture is now in the Press and will be published shortly and Part II is under preparation. A new list of Photo-Negatives in the Southern Circle has also been prepared and will be issued in due course, as well as the revised List of Protected Monuments mentioned above.

During the year M. Duroiselle issued the Annual Progress Report for Burma, for the year ending 31st March, 1923, while the following works for all of which M. Duroiselle is responsible, are now in the Press —

1. Epigraphia Birmanica, Vol. III, Part 11, containing the Kalyani Inscriptions in Taking, by C O Blagden.
2. A table of contents, list of plates and abbreviations in the Epigraphia Birmanica, Vol. 1, Parts 1 and II.
3. Index to the Epigraphia Birmanica, Vol. 1, Parts 1 and 11.
4. Index to the Epigraphia Birmanica, Vol U, Part II.
5. List of coins in the Phayre Provincial Museum, Rangoon.
6. Guide-book to the Palace at Mandalay.

Nos. 5 and 6 were prepared for the Burma Government, the cost being met out of the Provincial Funds.

PHOTOGRAPHS

In the office of the Director-General of Archaeology in India 400 new photographic negatives and 2,713 prints were prepared in the course of the year. Of the latter, 356 prints were required for sale to the public, 1,957 for distribution and 400 for the Director-General's collection, which was further augmented by nearly a thousand additional prints received from Provincial offices. Among the new negatives the most interesting were a series of 174 photographs of the famous group of temples and detached sculptures at Khajuraho in Chhatarpur State, 180 of pre-Mughal buildings in the neighbourhood of Delhi, 12 of the Arhai-din-ka Jhonpra Mosque at Ajmer, and 18 of the monuments of the Kings of Malwa at Dhar and Mandu.

In the office of the Superintendent, Muhammadan and British Monuments, Northern Circle the total number of photographs taken during the year was 138. Out of these, 39 were prepared in connection with the conservation works in the Agra district; 43 were taken at the ancient monuments at Delhi. Bahraich. Lucknow and Budaun, while the remaining 56 were reproductions of the plans and drawings of the old Pathan buildings at Delhi.

**Northern
Circle***Lahore*

One hundred and eighty-two new negatives were prepared in the office of the Superintendent, Hindu and Buddhist Monuments, Northern Circle. They included fourteen photographs of the temple and sculptures at Lakha Mandal which had never been photographed before, nine photographs of some very interesting paintings of the Kangra school in the possession of the Mahant of Dharmasala near Bharwam, District Hosbiarpur, twenty-two photographs of Kharoshthi inscriptions which have been supplied to the Government Epigraphist for India for the use of Dr. Sten Konow, and twenty-seven photographs of the excavations and minor antiquities found at Harappa. Besides these, two hundred and twenty-three prints of negatives stored in the Lahore office were supplied on payment to the public.

frontier Circle

In the Frontier Circle forty-three negatives were prepared, 15 of which were in connection with epigraphical work to illustrate certain inscriptions in the Frontier Circle, of which estampages were supplied to the Government Epigraphist. Thirty-one photo prints were sold to private persons.

Western Circle

In all, two hundred and five negatives were prepared in the Western Circle. Of these, one hundred and sixty-two belong to the Bombay Presidency and the remainder to Sindh, where a number of views of the excavations at Mohenjo-daro have been taken.

Central Circle

A bnei account summarizing the extent of the collection of photographs in the office of the Central Circle appears in the Archaeological Department's Report for the year 1921-22. During 1923-24 this collection was augmented by photographs of the conservation works in progress at Burhanpur and Asirgarh—monuments of the Faruqi period—in Khandesh; of the 18th century brick fort under repair at Balapur, in the Akola District; and of the Achalesvara Gate of the old Gond Fort at Chanda, which is being reconstructed after its collapse during the monsoon two years ago. These monuments are all in the Central Provinces. In Bihar and Orissa, photographs were taken of the ruined 18th century gateway of the Barabati Fort at Cuttack, preliminary to putting it into repair, of several of the famous mediaeval shrines at Bhuvaneshvara; of the sculptured elephant above Asoka's Hock Edict at Dhauli, and of certain of the 2nd century B.C. Jain caves at Khandagin and Udaigin.

Eastern Circle

One hundred and twenty-eight photographs were taken in the Eastern Circle, among which the most important are those of the impression of the Tezpur rock inscription of Ilarjjaravarman, of the Gupta year 510, which was taken on the rock, and of a number of beautiful images found in North and East Bengal.

**Southern
Circle**

As the inspections carried out by Mr. Longhurst occurred at places where the monuments had already been photographed during former tours, only 8 new photo-negatives were required. He received 21 applications from the public for photographs taken in his Circle and supplied 192 photo prints.

Burma Circle

The photographs which were prepared during the year in Burma consist finds discovered there, brief references to which are made in M. Duroisclle's report on pp. 82-84 *ante*. They include also different views of the Tilominloo

and Sulamani temples at Pagan, repairs to which are now being brought to **Burma Circle** a close. The above with a few others number ninety-six in all.

In the Archaeological Section of the Indian Museum, 199 photographic negatives have been prepared, including 121 of antiquities in the Mayurbhanj **Archaeological Section of the Indian Museum.**

DRAWINGS

The Superintendent at Agra reports that the services of two of the four **Northern Circle** temporary draftsmen employed on the survey of the Delhi monuments, were dispensed with from the beginning of the year. The two remaining men with **Agra** the help of the Head Draftsmen in the Agra Office and in the office of the Director-General of Archaeology prepared measured drawings of ten buildings of the Pathan period. They also repeated four drawings of Humayun's tomb, and finished, with measurements and headings, some 18 of the Kotla of Firoz Shah. The Head draftsman of the Agra office and the Director-General's draftsman also started the very useful work of preparing a survey plan of the old city of Delhi including Lal Kot, Jahanpanah, Tughlaqabad and Sin. This is a big undertaking and this year they were only able to survey Lai Kot and a part of the city wall of old Delhi, the remaining cities being left for measurement in the ensuing year. A large number of working drawings was also prepared, besides tracings of all those received from the Public Works Department.

The two draftsmen attached to the office of the Superintendent, Hindu **Lahore** and Buddhist Monuments, **Northern Circle**, prepared fifteen new drawings. They include ten drawings of the temples at Dwarahat, four of the excavations carried out in the mounds at Harappa, and coloured copies of two painted vases found at Harappa and of an ornamental terracotta flesh-rubber unearthed at Bilsar.

The draftsman in the Peshawar office has made four plans in connection **Frontier Circle** with the conservation work carried on at Jamalgarhi, two being in ink. He has also copied five drawings pertaining to the mihrab of the Jami Masjid at Srinagar, an account of which is given in this report.

During the year seven drawings which were in progress last year, were **Western Circle** completed in the Western Circle, and three new drawings, viz., two of the Satara Palace, and one of the excavations at Mohenjo-daro, Site No. IV, were taken in hand, in addition to several plans required in connection with the conservation of monuments. Thirty-six estampages of inscriptions, chiefly in the caves at Kanheri and Karla, were also taken. These include estampages of 12 new votive pillar inscriptions from Karla found in the Chaitya hall at the latter place.

Mr. Page reports that survey drawings were under preparation of certain **Central Circle** of the excavated sites at Nalanda, where the 3 uppermost levels of Monastery No. I were recorded in separate plans, and a longitudinal section was made through the structure for the purpose of indicating thereon the fragmentary remains of the 9 separate strata of occupation which it contains.

Central Circle Similar sectional records were made in detail of the external and internal walls and other features disclosed by sinking pits against them right to the bottommost foundations. Such records are of primary importance in any endeavour to co-relate the several strata of occupation revealed in various parts of the site; and when this survey is complete it is hoped, if time can be found for the purpose, to prepare a series of scenographic drawings illustrating a reconstruction of the ancient remains as they appeared at the time of their building.

A plan was also made of the excavation in progress at sites Nos. 4 and 5 at Nalanda. Other drawings made include a survey plan of the site of a mediaeval temple group at Khiching in the Mayurbhanj State (Orissa), in connexion with a proposal to conserve these remains and lay out the area about them.

Eastern Circle Three drawings were undertaken and finished in the Calcutta office during the year. The first of these is a plan and two sections of the temple called the Rajaban Math which fell into the river on the 8th September, 1923. The remaining two are maps showing the position of places of antiquarian importance in Bengal.

Burma Circle Twenty-three drawings have been prepared in Burma. Of these, thirteen were tracings of some of the important fresco-paintings in the temples at Mmnanthu, Pagan, one of which was drawn to a scale of one half of its original size. The remaining ten consist of plans, sections and elevations of certain monuments at Pagan and of the Bawbawgyi pagoda at Hmawza showing its terraces after the excavations conducted in the course of the year. A list of these is given in the Annual Report of the Superintendent for Burma, 1923-24.

PERSONNEL

From April 14th to October 21st, 1923, I was on leave and thereafter on deputation for two months for the purpose of visiting Greece and the Near East and acquainting myself at first hand with the archaeological work in progress there. The time at my disposal being so short, my journeys had necessarily to be very hurried, and I was compelled eventually to omit Greece altogether from my programme. Nevertheless, I managed to cover much ground in Palestine, Syria and Egypt, to see many of the principal sites of antiquity and to take stock of what was being done for the conservation of their standing monuments or for the exploration of their buried remains. Equally valuable was the opportunity which this journey afforded of getting into personal touch with many fellow-workers whom I had not had the good fortune to meet before and of discussing with them the hundred and one administrative and technical problems which face the archaeologist no less in the Near East than they do in India. To over-estimate the advantages which I derived from this journey, brief as it was, would be difficult. Archaeology is not a science to be pursued in a watertight compartment nor within the limits of any one country, least of all if that country be India. From first to last, the cultural history

of India has been intimately bound up with that of other lands and every new discovery serves to emphasise this interdependence more and more. To appreciate the significance of Indian antiquities without reference to those of other countries to the East and West is as impossible as it would be, let US say, to appreciate the hieratic art of China without some knowledge of the art from which it took its source in India. But apart altogether from the many side-lights which the antiquities of the Nearer East throw on those of India, particularly during the late Hellenistic and Early Moslem periods, the methods and aims that are being pursued by our fellow Archaeologists in other countries are also of no small concern to us in India and it was for this reason that I especially welcomed the facilities afforded me of examining various works of conservation at Cairo, Jerusalem and other places and of witnessing the highly instructive explorations which were being carried out near the great Pyramid at Sakkara at the tomb of Tutankhamen and at Jerusalem.

During my absence Dr. Spooner, Deputy Director-General of Archaeology in India, officiated for me, and the following acting arrangements were made in consequence • Mr. J. F. Blakiston, Superintendent, Archaeological Survey, Muhammadan and British Monuments, Northern Circle, Agra, was appointed to officiate as Deputy Director-General of Archaeology in India ; Maulvi Zafar Hasan, B.A., Assistant Superintendent for Rajputana and Central India, officiated as Superintendent, Muhammadan and British Monuments, from 14th May to 21st December, 1923. During the interval between the departure of Mr J F. Blakiston and the arrival of Maulvi Zafar Hasan, Pandit Bal Govind Dikshit, the Head Clerk, held charge of the current duties of the office Mr. B L. Dhama, formerly an Architectural scholar in the Department, who was in charge of the conservation works at Khajuraho, Chhatarpur State, was appointed to officiate for Maulvi Zafar Hasan

On my return to India, Dr Spooner proceeded on leave for six months from 15th January, 1924, and the same acting arrangements as before continued.

Owing to financial stringency the Sanskrit scholarship for training in Archaeology held by Mr. Madho Sarup Vats, M A , and that for training in Archaeological Chemistry held by Mr. Ram Singh Ahuja were discontinued. The Architectural scholarship held by Mr. Maung Hla Thwin was extended again for another year, the incumbent working under the Consulting Architect to the Government of Bombay. Mr. Maung Kyin Pu, B.A., continued to hold the Burma scholarship.

Mr. H. Hargreaves continued in charge of the Frontier Circle till the 5th March, 1924, when he went on 8 months' leave to England handing over charge to his Personal Assistant, K. B. Mian Wasiuddin, who was appointed to officiate in his place. **Frontier Circle**

Mr. R. D. Banerji, Superintendent, Archaeological Survey, Western Circle was granted leave on medical certificate for a total period of one year and 16 days with effect from 25th May, 1923, and Mr. G. C. Chandra, Assistant Superintendent, Archaeological Survey, Western Circle, was appointed to officiate for him, while Pandit Madho Sarup Vats, former Sanskrit Scholar in the office **Western Circle**

of the Director-General of Archaeology, was appointed to officiate for the latter with effect from 3rd July, 1923.

Central Circle. Mr. J. A. Page, A. R. I. B. A., continued to hold the Superintendship of the Central Circle throughout the year 1923-24. Maulvi Muhammad Hamid Kuraishi, B.A., Assistant Superintendent in that Circle, was on leave on average pay for one month with effect from the 26th October, 1923, and again for 17 days with effect from the 4th March, 1924.

Epigraphical
Branch

The Assistant Superintendent for Epigraphy, M. R. Ry. K. V. Subrahmanya Ayyar, Avl, B.A, M.R.A.S., was on privilege leave for 3 months, from the 6th March, 1924 to 5th June, 1924 (both days inclusive), and M. R. Ry. C. R. Knshnamachari, Avl., B.A., Publication Assistant of the office of the Assistant Archaeological Superintendent for Epigraphy, Southern Circle, Madras, officiated for him, taking charge on the forenoon of the 10th March, 1924.

Mr. Paranavitane, an Epigraphical scholar deputed by the Ceylon Government for training in the office of the Government Epigraphist (*vide* Government of India, Department of Education, Health and Lands, endorsement No. 125, dated the 12th April, 1923) reported himself at Ootacamund on the afternoon of the 15th June, 1923. He has been reading Tamil inscriptions of different periods, and has been trained in taking impressions of inscriptions from the originals and has acquired considerable experience in transcribing them *in situ*. Simultaneously, with the above, he has been given training in reading and checking proofs of *South Indian Inscriptions* (Texts). He has also drawn up a paper for the *Epigraphia Indica* on an important Tamil inscription from Polonnaruwa with commendable success. The Government Epigraphist reports that throughout his stay here Mr. Faranavitane has evinced distinct aptitude for the work and has brought to bear on his task both zeal and devotion.

JOHN MARSHALL.

APPENDIX A

Summary of Expenditure on Establishment, Allowances, etc., excluding Conservation, 1923-24

	Rs.
(a) Director-General of Archaeology	2,08,310
(6) Superintendent, Muhammadan and British Monuments including Delhi Museum and Fort Garden Staff	61,349
(c) Superintendent, Hindu and Buddhist Monuments	47,072
(d) „ Frontier Circle	28,867
(e) Western Circle	51,928
(f) Central Circle	44,425
(9) Eastern Circle	21,402
(h) Southern Circle	43,142
(2) Burma Circle	40,787
(j) Government Epigraphist for India	52,880
(k) Assistant Superintendent for Epigraphy, Southern Circle	28,988
(l) Archaeological Chemist in India	18,170
(m) Central Asian Antiquities Museum, Delhi	38,070
(n) Superintendent, Archaeological Section, Indian Museum ,	27,548
	7,19,550
	-14,980*
	-4,000*

* Reappropriated for Conservation Works

APPENDIX A—*contd.*

EXPENDITURE

Director General of Archmology

Heads.	Allotments	Expenditure.
	Rs.	Rs. A. p.
	70,520	48,252 1 0
	43,406	45,810 8 0
	6,000	2,464 11 0
	5,000	5,500 0 0
3. Publications—		
	7,800	7,829 13 6
	1,300	737 11 0
Other Archaeological Publications 	3,000	3,058 12 0
	19,140	Nil (Transferred to Reserve.)
	3,320	2,597 12 8
	3,000	3,136 8 8
6. Office Contingencies and Petty Supplies 	15,114	10,575 14 8
7. Allowances—		
	Nil	2,363 14 0
	11,600	10,257 13 0
" " " establishment 	12,800	13,938 6 0
Grain Compensation Allowance •	310	Nil
	6,000	10,152 12 0
TOTAL	2,08,310	1,66,676 9 6

APPENDIX A—*contd.*

EXPENDITURE

Northen Circle—(Muhammadan and British Monuments)

Heads.	Allotments	Rs.	A.	p.
1. Establishment—				
(a) Pay of officers—				
Superintendent		9,152	5	0
(6) Pay of Establishment—				
Conservation Assistants, Munshi, Clerks, Accountant, Photographers, Draftsmen and Attendants.		13,671	13	0
(c) Pay of Superintendent, Historical Buildings, Delhi Fort and his staff.		7,294	0	0
2. Museums and Dak Bungalows—				
(a) Delhi Museum—				
(I) Establishment	3,4 G4	3,419	11	0
(n) Contingencies	2,130	2,117	4	0
(b) Taj Museum, Agra	250	171	8	3
(c) Dak Bungalow at Sikandra, Agra	250	203	11	0
3. Photography—				
Photographs and photo-materiak				
4. Library—				
Purchase o f books				
5. Contingencies—				
Petty supplies and services	50	17	1	0
Livenes and warm clothing	110	103	4	6
Bent, rates and taxes	660	93	11	2
Service postage and telegram charges	1,000	500	0	0
Conveyance of tents, stores and record	600	300	9	6
Carried over		38,219	4	2,

APPENDIX A—*contd.*

Heads	Allotment*.	Expenditure.
	Rs.	RS. A. P.
Brought forward	44,079	38,219 4 2
5. Contingencies— <i>contd.</i>		
	1,500	2,850 5 0
Separation of Archaeological area, Agra Fort .	10,000	9,996 0 0
6. Allowances—		
Travelling allowance to officers	2,800	2,407 13 0
„ „ establishment	2,840	2,090 13 6
Compensation for dearness of provision.	130	
TOTAL	61,349	55,564 3 8

EXPENDITURE.

Northern Circle—(Hindu and Buddhist Monuments).

Heads	Allotments.	Expenditure.
	Rs.	Rs. A. p.
1. Establishment—		
(a) Pay of officers—		
	18,830	10,825 14 0
(6) Pay of Establishment—		
Conservation Assistants, Pandits and Munshis, Clerks, Photographers, Draftsmen and Peons.	13,008	12,195 15 0
2. Excavation—		
b) Samadh i n the Fort a t Lahore	1 3,000	3,006 3 10
(c) Bilsar	J	683 14 6
Carried over	34,838	26,711 15 4

APPENDIX A—*contd*

Heads	Allotments	Expenditure
	Rs	Rs A p.
Brought forward	34,838	26,711 15 4
3. Museums—	2 000	2,764 5 3
4. Photography—		
Photographs and photo-materials	400	339 10 6
5. Library—		
Purchase of books, etc	300	295 2 6
G. Contingencies—		
Liveries and warm clothing	100	169 0 0
Rents, rates and taxes	2,190	2,250 6 9
Service postage stamps and telegram charges	300	271 14 0
Conveyance of tents, stores, etc.	800	752 12 0
Menial establishment charges	314	412 0 0
Purchase and repair of office furniture	250	215 4 1
Petty supplies and services	190	48 0 0
Office expenses and miscellaneous	300	740 4 —
7. Allowances-		
Travelling allowance to—		
(1) Superintendent	2,400	2,979 15 0
(2) Establishment	2,440	2,859 5 0
House rent and other allowances	150	
Compensation for dearness of provision	100	
TOTAL	47,072	40,815 14 7

APPENDIX A—*contd.*

EXPENDITURE

Frontier Circle

1. Establishment	Rs.	Rs	A.	p.
(a) Pay of officers—				
	13,700	13,253	3	T
(b) Pay of Establishmenlr-				
Olerks, Draftsman, Photographer, Modeller and Peons.	9,017	8,190	14	8
2. Photography—				
Photographs and photo-materials	300	399	4	0
Petty supplies	100			
5. Library-				
Purchase of books	150	215	6	0
4. Contingencies—				
Purchase of stationery			9	14 0
Postal charges	200	230	0	0
Conveyance of tents, stores and records	600	205	5	0-
		164	12	0
	50	27	10	O
Menial charges	70	72	0	0
Office expenses and miscellaneous 1	600	649	2	7
5. Allowances— j				
Travelling allowance to—				
(i) Superintendent	2,400	2,397	0	0
(ii) Establishment	1,600	2,584	0	0
(Iii) Compensation for dearness of provisions	80			
TOTAL	28,867	28,398	7	10

APPENDIX A—*contd**Western Circle*

1. Establishment—	Rs.	Rs.	A.	P..
(a) Pay of officers—				
Superintendent		15,503	5	0
Assistant Superintendent				
Leave salary		2,777	7	0
(6) Pay of establishment—				
Clerks, Stenographers, Draftsmen, Photographers and Peons, etc		11,759	14	0
2. Excavation—				
Mohenjo-daro		2,000	0	0
3. Photography-				
Photographs and photo-materials				
4. Library- -				
Purchase of books and newspaper				
5. Contingencies—				
Liveries and warm clothing	130	133	0	0*
Service postage and telegram charges	1,200	817	6	0
Conveyance of tents, stores and records	2 000	1,879	1	0
Office expenses and miscellaneous	400	597	12	0
Purchase of furniture .	100	46	8	0
Purchase and repair of tents		271	8	9*
Petty supply and services		209	4	0
	44,468	37,420	5	9

* EXCESS expenditure met by re-appropriation.

APPENDIX A—*contd.*

Heads	Allotments	Expenditure.
	Rs.	Rs. A. p.
6. Allowances—		
Brought forward	44,468	37,420 5 9
Travelling allowances to—		
	I 4,000	6,369 8 0*
	2,400	2,377 0 0
House rent allowance to Assistant Superintendent .	700	600 0 0
Temporary and provisional allowance to establishment .	360	202 2 0
TOTAL	51,928	46,968 15 9

* Exces expenditure met by re-appropriation.

EXPENDITURE

Central Circle

Heads	Allotments	Expenditure
	Rs.	Rs. A. p.
J Establishments -		
(a) Fay of officers-		
Superintendent .	I 18,770	12,567 11 0
Assistant Superintendent .		4,837 14 0
Leave salary (to Assitatanl Superintendent) .	J	420 13 0
(b) pay of establishment—		
Excavation Assistant, Accountant, Clerks, Photo-grapher, Draftsmen, Peons, etc	10,925	9,372 4 0
Carried over	29,695	; 27,118 11 0

APPENDIX A—*contd.*

Heads	Allotments	Expenditure		
	Rs	Rs.	A	p.
Brought forward	29,095	27,198	11	0
2. Excavation	4,000	fa) 4,098	13	3
3. Photography	800	843	3	9
4. Library	400	33C	13	0
5. Contingencies—				
Telephone charges	150	205	0	0
Liveries and warm clothing	100	182	3	0
Rents, rates and taxes	600	647	5	0
Service postage and telegram charges	-150	350	0	0
Conveyance of tents, stores and records	1,200	977	14	9
Office expenses and miscellaneous	600	570	2	0
Menial charges	90	148	8	0
Purchase of furniture	400	44	4	0
Petty supplies and services	250	150	0	0
G. Allowances—				
Travelling allowance to—				
(i) Superintendent and Assistant Superintendent	3,040 (b)	3,023	13	0
(ii) Establishment	1,600 (c)	2,849	14	0
House rent and other allowances	1,000 (d)	Nil		
Compensation for dearness of provisions	50	20	1	0
Total	44,425	41,652	9	9

(a) Out of this sum of RS 3,851-13-3 were spent at Nalanda, and the residue on maintenance at Kumrahar and Bulandibagh all in the Patna District.

(b) Out of this sum of RS 350 were re-appropriated for Travelling allowance to establishment, and thereafter the sum of RS. 360 was re-appropriated from House rent and other allowance; thus bringing the prajit again to Rs. 8,040.

(c) An additional sum of RS. 1,260, i.e., RS. 300 from Travelling allowance to officers and Rs. 900 from Conservation and Maintenance at Nalanda, was subsequently re-appropriated to cover expenditure under this head.

(d) Out of this sum of Rs. 360 was re-appropriated for Travelling allowance to officers, and the residue of Rs 650 then remaining was surrendered.

APPENDIX A—*contd.*

EXPENDITURE

Eastern Circle

Heads	Allotments	1	Expenditure
	Rs.	Rs	A. V.
1 Establishment—			
(a) Pay of Officers—			
Superintendent	8,550	7,031	11 0
(b) Pay of Establishment—			
Clerks. Draftsman, Photographer, Duftri and Peons	5,112	4,809	4 0
2. Photography—			
Photographs and photo-materials .	600	893	11 0
3. Library—			
Purchase of books, etc.	400	552	3 0
4. Contingencies -			
Telephone charges	250	125	0 0
Livenes and warm clothing	60	80	0 0
Service postage and telegram charges .	350	250	0 0
Conveyance of tents, stores and records	750	439	0 0
Office expenses and miscellaneous	690	1,583	7 5
Purchase of furniture , ...	600	596	14 0
Rents, rates etc		430	0 0
Petty supplies and services	300	9	0 0
5. Allowances-			
Travelling allowance to -			
(i) Superintendent	1,600	2,136	7 0
(ii) Establishment	640	782	10 0
' House rent allowance to Superintendent	1,500	1,505	0 0
GRAND TOTAL	21,402	21,224	3 5

APPENDIX A—*contd.*

EXPENDITURE

Southern Circle

Heads	Allotments	Expenditure
	Rs	Rs A p.
1 (a) Pay of Officers		
Salary of the Superintendent .	13 900	13,923 0
Leave Salary of the Superintendent	15,000	635 13 0
(b) Pay of establishment	4,736	3,708 6 0
2. Photography	1,500	1,060 1 0
3. Purchase of antiquities	100	
4. Library	250	16 15 0
5. Contingencies-		
Liveries and warm clothing .	250	213 4 0
Rents, rates and taxes	960	960 0 0
Service postage and telegrams	200	125 0 0
	400	478 13 0*
Office expenses and miscellaneous	1,500	565 13 0
Menial charges	96	93 0 0
Purchase of furniture	250	75 13 0
6. Allowances—		
Travelling allowance to—		
(l) Superintendent .	2,800	3,131 4 0*
(u) Establishment .	1,200	809 ? 0
TOTAL	43,142	25,802 9 0

* Additional expenditure met from savings by re-appropriation

Burma Circle

Heads	Allotments	Expenditure.
1 Establishment -	Rs	Rs A v
(a) Pay of Officers -		
Superintendent	17,770	17,743 0 0
Leave salary	3,000	19 0 0
(6) Pay of Establishment—		
Archaeological (Scholarship	2,100	2,100 0 0
Archaeological Assistant, Architectural Surveyor, Clorks, Pandit, Draftsmen, Artist, Photographer	11,197	11,222 13 0
Leave salary	400	32 14 0
2 Purchase of photographs and photographic material	800	485 2 0
3. Publications	1,000	1,023 12 0
1. Office Contingencies—		
Contract contingencies	2,800	2,712 15 0
Rents, rates and taxes	960	960 0 0
	600	100 0 0
5 Allowances-		
	1,600	1,446 5 0
Contingent allowance to Honorary Archaeological Officer for Arakan and other allowances.	000	937 7 0
Travelling allowance to officer	2,400	1,617 0 0
, , " " establishment	1,600	2,366 10 0
TOTAL	46,787	42,767 10 0

APPENDIX A—*contd.*

EXPENDITURE

Government Epigraphist

Heads	Allotments,	Expenditure
	Rs.	Rs. A F.
1. Establishment—		
fa) Par of officers—		
Government Epigraphist		12,756 10 8
Superintendent for Epigraphy	28,980	7,406 10 8
Aswstant Superintendent for Epigraphy	J	5,245 7 4*
Leave salary	2,850	
(b) Pay of establishment—		
Clerks	4,850	3,900 0 0
Attenders and servants	1,140	067 10 0
Leave salary	500	
Temporary establishment	240	
2. Library—		
Purchase of books,, etc	550	545 8 5
3. Publications—	I	
.Reproduction o f plates		1,030 3 10
Honorarium for contributions	5,250	3,625 z 1
4. Contingencies-		
Liveries and warm clothing	456	324 2 6
Service postage and telegram charges	300	200 0 0
Conveyance of tents, stores and records	1,200	240 8 6
Office expenses and miscellaneous	600	740 11 11
	1,000	997 9 0
	2,400	2,400 0 0
Carried over	50,316 1	40,398 4 11

* Includes a sum of Rs. 431-10-8 being the pay of the Official Assistant Superintendent for Epigraphy, t Excess was met by re-appropriation.

APPENDIX 'A—*contd.*

Heads	Allotments	Expenditure.
	Rs.	RS A P.
Brought forward	50,316	40,398 4 11
4. Contingencies— contd		
Menial charges	180	161 0 0
Petty supplies and services	300	75 0 0
5 Alkmarr-OH-		
Travelling allowance to—		
Superintendent for Epigraphy	1,200	1,373 15 0
Assistant Superintendent for Epigraphy		1,242 12 0
(6) Establishment	800	467 7 0
Compensation for dearness of provision	90	598 4 0
GRAND TOTAL	52,880	44,317 0 11

EXPENDITURE

Assistant Superintendent for Epigraphy, Southern Circle

Heads	Allotments	Expenditure.
	Rs.	Rs. A P.
1 (a) Pay of officers—		
Salary of the Assistant Superintendent	6,660	5,754 13 0
(b) Salaries of Establishment-		
Pay of permanent establishment	12,398	12,808 13 0
2. Contingencies	6,330	5,549 7 0
3. Petty supplies and photo-materials	1,000	876 13 0
4. Allowances—		
Assistant Superintendent's travelling allowance	1,200	169 1 0
Establishment ditto	1,400	1,381 13 0
GRAND TOTAL	28,988	26,540 12 0

APPENDIX A—*contd.*

EXPENDITURE

Archaeological Chemist

1. Establishment—

(a) Pay of Officers—

Arohrological Chemist .	8,382	4	0
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(b) Pay of Establishment—

Clerk, Laboratory Assistant and mental establishment.	2,291	1	0
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2. Library-

Purchase of books, etc.	200	220	0	6
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3. Contingencies	2,550	1,909	2	G
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i. Allowances-

Travelling Allowance to—

(1) Archaeological Chemist	960	781	C	0
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(11) Establishment	210	168	7	0
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5. Supplies and Servicer—

Purchase of Chemicals and Apparatus	1,000
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GRAND TOTAL

14,811 3 I

APPENDIX A—*contd.*

EXPENDITURE

Central Asian Exploration

1. (a) Pay of Officers—	Rs
Pay of Sir Aurel Stem .	18,210
Pay and passage of Mr F. H. Andrews .	7,500
(b) Pay of Establishment .	3,720
2. Allowances, etc —	
Travelling allowance to officers .	2,400
" " " establishment .	240
Honorarium to Miss Burgess .	1,800
3 . Contingencies	4,770
4 . Wall-cases	

TOTAL

EXPENDITURE

Indian Museum

Heads	Allotments	Expenditure.
(1) Pay of Officers—	Rs.	lis A. P.
	7,060	6,600 0 0
	12,238	12,186 11 0
(2) Allowances—		
	1,510	1,505 0 0
Travelling Allowance for Officer	1,600	1,040 0 0
" " " for Establishment	640	688 1 0
(3) Purchase and acquisition of antiquities	1,500	1,500 0 0
	3,000	4,19% 14 2
(5) Library		
Purchase of books and book-cases		2,500 0 0
TOTAL	27,548	30,219 10 2

APPENDIX A—*contd.*

EXPENDITURE

Summary of expenditure incurred on Conservation Works,

		Expenditure		
		Rs	A.	P.
United Provinces—				
Muhammadan and British Monuments	1.33 000	1,47,087,	0	0*
Hindu and Buddhist. Monuments	15000	22,434	10	3
Punjab—				
Muhammadan and British Monuments		80,008	.	91
Hindu and Buddhist Monuments		40,181		3
Delhi		106,061	30	
North-West Frontier Province	16,521	16,392	7	6
Bombay	81,000	83,001	0	0
Bihar and Orissa	17,698	15,068	0	0
Central Provinces and Berar	27 000	21,211	0	0
Bengal	24 000	22,454	15	0
Assam	7 000	7,600	14	6
Madras	7000	32,318	6	9
Coorg	600	580	4	4
Burma	75 000	70,182	0	0
Ajmer	6,000	4,958	0	0
Bestsrve	25,81 1	19 442	0	0
	0 52.200	5,88,74.3	6	4
	-1 4,980			
	1 4000			
GRAND TOTAL	6,71,180			

* Includes RS 2,153 provided by the Provincial Government.

Excess expenditure met by re appropriation or from the Reserve.

J Re-appropriated from Establishment, etc.

Excess expenditure was adjusted by the Accountant General, Bombay, in his exchange account for the year 1923-24

Includes RS 21,532 provided by the Provincial Government

f Last 0 items on page 229.

APPENDIX A—contd.

Expenditure on the conservation of Muhammadas and British Monuments, Northern Circle

Dist not.	Locality	Name of work and description	Amount tioned estimate	Allotment for the 1923-24 as modi- roappropriation	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5	(i)	7
		UNITED PROVINCES	Rs	Rs.	RS A P	
		<i>Special repairs (Non-recurring charges) carried out by the Public works Department</i>				
Agra .	Sikandarah	Sinking tube well at Kanch Mahal	37,194	4,495	3,999 0 0	In progress.
Do	Do.	Reconstructing a part of the enclosure wall of Akbar's Tomb	4,051	2,573	2,573 0 0	Completed.
Sultanpur	Isauh	Mosque	371		177 0 0	Do
Lucknow	Lucknow	Kazmain	7,627	3,400	1,183 0 0	In progress.
Do.	Do	Lal Barahdari	498	498	498 0 0	Completed.
Kheri .	Aurangabad	Constructing a 5' diameter well in the	2,047	44	44 0 0	In progress.
Benares	Benares .	Renewing testing wire of lightning conductor in the Aurangzab's	—	264	175 0 0	Completed.
		TOTAL			8,549 0 0	
		Agencj chargers -a 19 per cent			1,643 0 0	
		TOTAL		11,274	10,292 0 0	
		<i>Special repairs (Non-recurring charges) carried out by the Archaeological Department</i>				
J aunpur	Jaunpur	l'lovuling a brass hanging lamp for the Atala Masjid at Jaunpur	100	87	86 0 0	Completed.
Agra	Sikandrah	Conservation of Akbar's Tomb	6,506	4,807	4,806 0 0	Do.
Do	Do	Renovation of old doors, windows and chowkhata of Dak Bungalow	2,090	2,090	2,060 0 0	Do
Do	Do	Removing certain roadways and mak- ing good part of western causway	5,010	5,174	5,174 0 0	Do
Do .	Tajganj .	Repairing the aqueduct in Khan-i- Alani Bagh	1,175	999	998 0 0	Do
Do	Do	Providing two more sand stone Beats for the platform inside the main gate of the Taj	244	132	132 0 0	Do
Do	Do .	Providing copper sheeting on north doors of the shrine Tajniahal, Agra,	88	88	88 0 0	Do.
		Carried over		13,377	13,344 0 0	

APPENDIX A—contd.

District.	locality	Name of work and description	Amount tinned	Allot moot for the 1023 24 as modi lud by reapro. puation	Amount spent during the Near 1023 24	REMARKS.
1	2	3	4			7
		Brought forward	Rs	RS	Us A V	
		UNITED PROVINCES—contd		1,1,377	1,1,111 0 0	
		<i>Special repairs (Non recurring charges carried out by the Archaeological Department—(contd)</i>				
Agra .	Tajganij	Restoring the gate of Katra Resham	278	279	270 0 0	Completed
Do. .	Do	Rebuilding south-west CORNER chhatra in Taj Mahal	14,524	14,256.	14,250 0 0	Do.
Do.	Agra Fort	Certain works in Moti Maspd Mach chhi Bhawan and Jahangiri Mahal	12,907	5,798	5,774 0 0.	In progress
Do. .	Fathpur Sikri	Providing a paved pathway to Rang:	3,994	um	2,953 0 0	In progress
Do. .	Agra	Certain additions to the office build ing of Superintendent, Muham, Muham and British Monuments Northern Circle Agra	12,325	5,717	5,717 0	Do
Mecrut .	Sardhana	Special Repairs to the Roman Catho- lic CHURCH at Sardhana	9 867	7,500	7,500 0 (1	Do
Agra .	Fathpur Sikri	Providing new ibishan, wood door- in the Building, Durwaza	347	147	337 0 0	Completed
Do. .	Agra	Providing a bridle path to Itban Khan Sadiq Khun and Salabat Khan stomh	1,086	373	373 0 (1	Do
		TOTAL		50,607	50,533 0 0	
		GRAND TOTAL, SPECIAL REPAIRS .		01,881	00,825 0 0	
		<i>Annual Repairs (recurring charges) carried out by the Public works Department</i>				
Agra, .	Fathpur Sikri	Archteolopual buildings	520	520	526 0 0	
Do. .	Agra	Roman Catholic Cemetery	30	30	36 0 0	
Do. .	Do.	Itimad-ud-Daulah's Tomb	130	130	130 0 0	
Do. .	Do	Ram B a g h	28	28	28 0 0	
Do. .	Do	Chini-ka-Rauza	12	12	12 0 0	
		Carried over		7:2	7:32 0 0	

APPENDIX A—*contd.*

District Localty	of work and description	1923-24 hed by	Amount spent during the year 1923-24
UNITED PROVTNOES— <i>contd.</i>			
<i>Annual Repairs (recumng charges) carried out by the Public Works Department—contd.</i>			
	Victoria Memorial .		12 0
	Firoz Khan's Tomb		309 0
	Port Buildings	1.4M	1,484 0
	Taj Buildings	1,226	
	Maintenance of electrical installation at Taj	1,900	
	Ak bar's Tomb		386 0 0
	Mairiam'H Tomb		40 0 0 I
	Ka-iah Mahal		10 0 0
Itmadpur	Burhia-ka-Tal		36 0 0
Meerat .	Tomb of Shahpir		130 0 0
Do	Tomb of Abu Muhammad Khan		114 0
Sardhana	CVmeter		246 0
Tappul .	Gateway of the fort		10 0 0 I
Majhora .	Tomb of Sayvid Saif Khan and his mother, tomb of Diwan Sayvid Mohammad Khan, tomb of Sawid Husam also called Sayvid Chhajju Khan, tomb of Havvid Umar Nur Khan and of tatonal well		140 0 0
Najibabad	In will. Najibu-d-Daulali's Tomb		
Allahabad	Tomb of Sultan Khuso, tomb of Kliusro's mother, tomb of Khuso's sister, tomb of Bibi Tamolan onolomiro wall and gateway of Khuso Bagh		
	Zonana palace in the Fort		300 0 0
	Iflikhar KhanVTomb		500 0 0
Bonares			00 0 0
Bhityu ,			13 0 0

APPENDIX A—contd.

District		Name of work and description	Amount of estimated estimate	Allotment for the 1923-24 as much as much by reappropriation	Amount spent during the year 1923-24	Remarks.
1	2	3	4		(i)	7
		Brought forward	lis	8,540	Rs A. P. 7,987 0 0	
		UNITED PROVINCES—contd				
		Annual Repairs recurring charges) carried out by the Public Works Department—contd				
Jaunpur	Jaunpur	Jami Masjid				
Do	Do	Atala Manjid .				
Do.	Do	Lai Darwaza Masjid				
Do.	Do.	Fort				
Do.	Do.	Jhiliin Masjid				
Do	Do	Sharqi Kings' Tomb near Janu	I 1,200	1,200	1,198 0 0	
Do.	Do.	Hamam or Turkish Bath				
Do.	Do.	Fnoz Shah's Maqbara				
Do.	Do	Stone Bridge over Gumta				
Do.	Do	Rauza of Sher Zaman Khan				
Do.	Do	Kings' Tomb at Macharhatta				
Do	Do	Stone lion .	1 J			
Azamgarh	Mebnagar	Daulat's Tomb	75	75	75 0 0	
Jalaun .	Kalpi	Chaurasi Oumbad . . .	114	450	415 0 0	
Cawnpore	Cawnpore	Savada Kotln Monument	45	45	42 0 0	
Farrukhabad .	Mau Hashida-bad	Tomb of Nawab ItaahidLhan .	15	15	14 0 0	
Do.	Karkar	Well	15	15	15. 0 0	
Do.	Ckaudhanapur	Tomb	15	15.	3 0 0	
Fyzabad	Fyzabad	Gulab Ban	500	500	408 0 0	
Dr.	Akbarpur	Mosque in the Fort	25	25	25 0 0	
Sultanpur	Isaiih	Mosque	60	60	59 0 0	
Lucknow	Lucknow.	Alambagh House	750	750	738 0 0	
Do.	Do .	L a l Barahdari . . .	550	560	550 0 0	
Do	Do .	Chhatar Manzil Palace .	3,750	3,750	3,747 0 0	
Do.	Do	Platform in front of Chbatar Maiml Palao	10.	50	49 0 0	
		Carried over			15,415 0 0	

Funds provided by the Local Government

APPENDIX A—*contd.*

Name of work and descriptio	Amount of sanc- tioned estimate	I 1923-24 I renprop- nation
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Rs A P
15,415 0 01

UNITED Provinces—*contd*

*Annual Repairs (recurring charges)
carried out by the Public Works
Department—contd*

Farhat Bakhsh Station Library

Neil Gate

Sikandar Bagh Buildings

Kaiserbagh Gates .

Nasiruddin Hyder's Karbala

Darashan Buas	1,603	0	0	1
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Janab Ahva's tomb	281	0		
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Gulistan Irani	60	0		
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Residency buildings	1,499	0		
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Bibiepur House	295	0		
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Do	Dilkusha Palaco	288	0	0	1
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Kheri	Annual Repairs to the monuments	1D8	0	0	
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TOTAL	22,608	0	0	
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I Agency Charges @ 19 per cent	4,296	0	0	
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*Annual Repairs (recurring charges) I
carried out by the Archaeological I
Department*

I Agra Fort	2,895	2,896	2,973	0	0
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Taj Buildings	2,780	2,780	2,683	0	0
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I Gateways in Tajganj			60	0	0
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I Akbar's Tomb			2,485	0	0
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APPENDIX A—contd.

District.	Locality	Name of work and description	Amount estimate	Allotment for the 1923-24 as mod hid by reappre..	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5	6	7
		Brought forward	Rs	7,930	Rs A P 8,199 0 0	
		UNITED PROVINCES—contd				
		<i>Annual Repairs (recnrring charges) carried out by the Archaeological Department—unild.</i>				
Agra .	Sikandrah	Mairamish Tomb	660	660	261 0 0	
Do .	Do	katuh Mahal	60	00	75 0 0	
Do .	Agra	Itimadu-d-Daulah	,70	r,70	578 0 0	
Do .	Do	Chim ka Rauzi	130	138	86 0 0	
Do .	Do	Ram Bagh	622	622	473 0 0	
Do .	Do	Itban Khan's Tomb				
Da .	Jjo	Do Mosque				
Do .	Do	Delhi Gate				
Do .	Do	Pul Changa Modi and Kans Gate				
Da .	Do	Sadiq Khan's Tomb	594	cm	575 0 0	
Do .	Do	Salabat Khan'h Tomb				
Do .	Do	Jodh Bai's C h a t t r i				
Do .	Do					
Do .	Do	Roman Cathole Cemotery				
Do .	Do	Tomb of Firoz Khan		- 9	83 0 V	
Do .	Do	Victoria Memorial .		- 12		
Do .	Do	Office of Superintendent, Muham- madan and British Monuments	350	350	479 0 0	
Do .	Fathpur Sikri .	Auhteological Buildings	4,974	4,971	4,539 0 0	
Do .	Agra, Muttra Road	Guru-ka Tal	50	50	32 0 0	
Do .	Do	Small Chhatri .	10	10		
Do .	Kachpura	Humavun'sMwque	50	50	103 0 0	
Do	Itmadpur	Burhia ka-Tal	04	64	213 0 0	
		TOTAL		1' 060	10,060 <3> 0	
		GRAND TOTAL, Annual REPAIRS .		39,263	42,960 0 0	

APPENDIX A—contd.

District	Locality.	Name of work and description	Amount tioned estimate.	Allotment for the year 1923-24 as modi- fied by reappro- pation.	Amount spent during the year 1023-24.	REMARKS.
1	i	3	4	C	6	7
Agra . Do .	Agra Do	UNITED PROVINCES—contd <i>Maintenance of gar-leu* (Recurring charges)</i> Taj, Khan-t-Alam, Agra fort, Itimadu d Daulnh, Chini-ka-Rauza, Rambagh and Roman Catholic Cemetery	1	Rs. 40,818	Rs. A P. 29,000 2 0	Rs 969-7-1 lapsed owing to unexpected receipts in the last weeks of the financial year.
Do .	Sikandrab.	Akbar's Tomb				
Luoknow	Lucknow.	The Residency, Nadan Mahal and Ibrahim C'hishti's Tomb			7,688 6 11	
Allahabad .	Allahabad	Khusro Bagh		2,464	0,604 1 0	
Cawnpore	Cawnpore	Wheeler's entrenchment ,		1,000	1 000 0 0	
		TOTAL		44,217	43,297 8 11	
		Total Special Repairs earned out by the Public Works Department		11,274	10,202 0 0	
		Total Special Repairs earned out by the Archspolngit-al Department		50,607	50,033 0 0	
		Total Annual Repairs carried out by the Public works Department		23,203	26,904 0 0	
		Total Annual Repairs- earned out by the Arehaeological Department		16,060	16,056 0 0	
		Total Gardens		44,267	43,298 0 0	
		GRAND TOTAL for the UNITED PROVINCES		1,45,411	1,47,083 0 0	Completed
		Delhi PROVINCE <i>Special Repairs (Non-reenrrw charges)</i>				
Delhi .	Delhi .	Replacing stone finial" in the Mutiny Memorial pillar	1,830	1,702	1,762 0 0	
Do	Purana Qila	Making Special connection for irrigation of water supply to Purana Qila	4,400	377	377 0 0	
Do	Safdar Jang .	Connecting gardens at Safdar Jang's tomb with the permanent irrigation water supply scheme in the new capital area	3,060	33	33 0 0	
		Carried over		2,172	2,172 0 0	

APPENDIX A—contd.

District.	Locality.	Name of work and description	Amount of sanctioned estimate	Allotment for the bedt reappropriation	Amount spent	REMARKS.
1	2	3	4	5	6	7
		Brought forward	KM	2,172	Rs A P. 2,172 0 0	
		DELHI PROVINCES—contd				
		<i>Social Repair* (Non-recurring repair)—contd</i>				
Delhi	Khirkee	Certain work* to IK done at Khirkee Mosque	7,800	2,307	2,260 0 0	Completed.
Do.	Tughlaqabad	Carrying out repairs to a bastion at Tughlaq's tomb	4,270	2,330	2,337 0 0	Do.
Do.	Do	Conservation of road front wall of Tughlaq's tomb	26,228	320	320 0 0	Do)
Do.	Delhi	Special repairs to ceiling of Hang	2,670	583	583 0 0	Do
Do.	Mehrauli	Proposed cast iron sheet shed for the pumping station at Qutb Minar	485,	78	78 0 0	Do
Da	Hauz Khos	Constructing an approach road from the Delhi Qutb road (mile 9) to Hauz Khan	11,510	087	687 0 0	Do
Da	Humayun's tomb	Permuent irrigation water supply to Humayun's tomb	13,700	13,752	13,752 0 0	Do
Da	Babarpur	Special repairs to Khun-i-Maniml	1,358	1,339	1,311 0 0	1,0
Da	Do	conservation works at Khairu-	10,270	— 206	— 206 0 0	Do
Da	Delhi	Connecting the Delhi Fort with permanent irrigation water supply	9,500	6,000	5,900 0 0	In progress
		Total Special repairs		29,128	29,222 0 0	
		Agency charges -a 10 per cent			2,922 0 0	
		GRAND TOTAL SPECIAL REPAIRS		29,128	32,144 0 0	
		<i>Annual repairs (Recurring charges) carried out by the Public Works Department</i>				
Delhi	Buildings north of Delhi Gate.	1 Miniature batteries				
		2 Tomb of Razuv Begam				
		3 Asoka Pillar				
		4 Zinatul Masajid				
		Carried over				

APPENDIX A—*contd.*

Name of work and description	Amount of sanctioned estimate	1923-24 as modified by reappropriation.	during the year 1923-24.
Brought forward			
DELHI PROVINCE— <i>contd.</i>			
<i>Annual repairs (Hecurring charges) earned out by the Public Works Department —contd</i>			
I Buildings north of Delhi Gate— <i>contd.</i>	6. Masjid Kalan		
	0 Baoli and underground passage at Ridge		
	7. Mutiny Memorial		
	8 Snehri Masjid		
	9) Ohauburji Mosque		
	10 Cemetery near Roshanara garden		
	11 Shahbnrj and Hayat Baksh garden		
	12 Diwani-Khas .		
	13 Mumta Mahal		
	14 Tank in Delhi Fort		
	15. Bhadon buildings		
	16 Sawan		
	17. Zafar Mahal		
	18 MotiMasjid		
	10 Hammam		
	20 Saman Burj		
	1 Quth Minar, Mehrauh		
	2 .Tahaz Mahal, Mehrauh		
	3 Bastion at Sin		
	4 Purana Qila		
	5 Khairu-1-Manazil		
	6 Kotla Firoz Shah		
	7 Lai Darwa7a		
Buildings outside Delhi Gate and Ameri Gate.	9. Safdar Jang's tomb .		

APPENDIX A—*contd.*

District.	Locality.	Name of work and description	Amount Of sanctioned estimate	1 Allotment 1023 24 asmode find by reappropriation	Amount spent during the year 1923-24	REMARKS
1	2	3	4	5.	6	7
Delhi .	Buildings outside Delhi Gate and Ajmen Gate	Brought forward DELHI PROVINCE—<i>contd</i> <i>invual repairs- (Recurring charges) carried out by the Public works Department - (contd</i> 10. Begampuri Masjid 11 Hutu Khas group including tomb of Iros hah 12.. Tughlaqabad 13 Moth-ki-Maspd 14 Maloha Bistdan buildings 15 Bijai Mandal 10 Mubarakpur group . 17. Satpullah, Khirkee . 18 BahlolLodhi'etomb 19. Siri old City . 20 Ghiasuddim Tughlaq's tomb 21 BastiBaoh 22 Shikargah Kushak . 23 Tomb between Hauz Khas and Qutb road 24 Shikarcab, Mohpalpur 25 Sultan Ghari's tomb, Mehpalpur 20 SaraiShahji . . 27 Rajon-ki-Bain . 28 Qala Rai Pithora, Mehranh. 29 Kalu Sarai Mosque . 30 Tomb of Yusuf Qattal, Khirkee 31 Lal Gumbal 32 Humayunpur monuments . 33. Muhammadpur monuments 34 Mumrka monuments 35 Zamarnidpur monuments . . Carried over .	Rs	KB	Rs A p	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description	Amount of sanctioned estimate	Allotment for the year 1923-24 as modified by reappro-	Amount spent during the year 1923-24.	Remarks.
1	2	3	4	5	C	7
Delhi	Buildings outside Delhi Gate and Ajmeri Gate— <i>contd.</i>	Brought forward DELHI PROVINCE—<i>contd.</i> <i>Annual repairs (Recurring charges) carried out by the Public Works Department—contd.</i> 36 Unnamed tomb at Chiragh, Delhi 37 Mosque near south-west corner of Bagh Nazir 38 Muhammad Quli Khan's tomb at Qutb 30 Adham Khan's tomb at Mehrauli rauh 41 Muhammadi Masjid at Shahpur 42 Tomb and mosque of Jamah Kumah at Qutb 43 Khirkee Masjid 44 Isa Khan's tomb 45 Khairpur Lodhi's tomb 45 Sabz Buri 47 Nizumuddin's tomb with 3 domes near Railway station 48 Khan Khanan's tomb 50 Arab Sarar 51 Afsarwala mosque and tomb 62 Atga Khan's tomb at Nizamuddin 53 Juna Shah's mosque at Nizamuddin 54 Monuments between Purana Qila and Humayun's tomb 55 Tomb of Gluastiddin outside Ajmeri Gate 56 Nila Gumbad to the east of Humavun's tomb. 57 Tomb and Each at Niramnddin Carried over	Rs	Re.	Rs. A p.	

APPENDIX A—contd.

District.	Locality.	Name of work and description	Amount of sanctioned estimate	Allotment for the 1923-24 reappro-	Amount spent during the year 1923-24	Remarks.
1	2	3	4	5	6	7
		Brought forward	Rs	RS	Rs. A. P.	
		DELHI PROVINCE—contd				
		<i>Annual repairs (Recurring charges) carried out by the Public Works Department—contd.</i>				
Delhi	Buildings outside Delhi Gate and Ajmeri Gate—contd	58 Chaunsath Khamba				
		59 Tomb of Amir Khuro to Nizam-uddin				
		60 Barahpullah				
		61 Tomb of Darvakhan				
		63. Abdu-n-Nabi's mosque near Mahabat Khan's Havels	20,590	11,193	11,167 0 0	
Da.	Delhi	Old Magazine gateway	110	75	75 0 0	
Do.	Do.	Barahdari in Roshanara Garden	1,010	222	222 0 0	
		Building for housing AntiquitiOB col-looted by Sir Aurnl Stom	2,110	834	834 0 0	
Do	Do	Maintoiiauco of sanitary and water installation to the above	30	30	30 0 0	
		TOTAL		12,354	12,328 0 0	
		AuMicy charts (a) 10 per c out			1,233 0 0	
		TOTAL		12,364	13,561 0 0	
		<i>Annual repairs (Recurring charges) carried out by the Archaeological Department</i>				
Do.	Do	Temporarl draftsmen employed on the Muruv of ancient monuments in the Delhi Province—				
		Pay of two draftsmon		1,320	1,320 0 0	
		Travelling allowanoe		500	533 4 0	
		Contingencies		25(1	215 IB 0	
		TOTAL		2,07(1	2,069 3 0	
		GRAND TOTAL, ANNUAL REPAIRS		14,424	15,030 3 0	

APPENDIX A—*contd.*

District	Locality	Name, of Gardens	Amount of sanctioned	Allotment for the 1923-24,	Amount spent during the year 1923-24 as modified by reappropriation	REMARKS.
1	2	3	4	5	6	7
Delhi	Delhi	<i>Maintenance of Gardens Recurring charges)</i> Kotia Firo Shah	RB	Ry	Rs A r	
Do.	Do	Purana Qila				
Do.	Do	Ilmny vuir tomb		30,747	30,200 0 0	
Do.	Do	Safdar .anpV fonib	1 "			
Do.	Do	Ilauz Khan				
Do.	Do	<i>Quih</i> Dafiltci d \witat supj\l n. Delhi Fort (UudMH)		6,02c	0,625 0 0	
		Annni, r-j.uuis to the Pumping Station for Du Ho Port Gardens		10b	196 0 0	
		Kunniui and ttmiliton iTKd of pump-		5,224	5,190 0 0	
		Runnnij, peniwn of 3 pumpi um il foi uillation purpooi H		—81	—81 0	
		TOTAL		47,711	47,136 0 0	
		Appnoy charpen (a 10 pci cent			4,714 0 0	
				47,711	51,850 0 0	
		<i>(N/P/H /'at/ Gardens</i> (n) Paul 1A th> Doputv CommiH-momi. Ddllu-				
		1 Continpmcieii nf the Superintendent, <u>lbstone.ii</u> Build-in pi		1,000	2,009 0 0	
		2 Pa\ of lloitiTOltura! estab-		3,1 fib	3,005 0 0	
		3 Continpcw ICH on above		1,000	492 0 0	
		<i>(f> Paid Lv tin. Kilpiintendimt. Muharimudun and Uritish Monument B, Northern Circle—</i> 1 Himus to Captain T J Campbell, Sunt rmtondunt. Historical Buildings, Delhi Kurt		500	500 0 0	
		2 Bonus to imbordinate staff employed m the Delhi Foit		400	374 0 0	
		TOTAL		6,05(i	6,440 0 0	
		GRAND TOTAL		53,707	58,290 0 0	
		Total Rpe-ial repairs		29,428	32,144 0 0	
		Total Annual icnairs earned out hv the Publn Works Departmont		12,364	13,561 0 0	
		Total Annual repairs rarnod out by the Arehesological Department		2,070	2,069 3 0	
		To'al Gardens		53,767	58,290 0 0	
		GRAND TOTAL FOR ran DELHI PROVINCE		97,619	1,06,064 » 0	

APPENDIX A—contd.

Convivutioit of Hindu and Buadfusi Al<mtiminh Northern Circle

Dwtnot.	Locahty.	Nairn of work and description	Amount of mini-toned	Allotment 1923. 21 AS modi bud l.) print ion	Amount spent year 1923-24	REMARKS.
1	2	3	11	ft	0	7
Shahpur	Arab	THE PUNJAB Special repairs (non recurring charges) carried out by the Public works Department Special repairs to Temples in the Kurt	1 Rs 2,623	Rs 800	RS. A. P 383 0 0	Completed.
Uurgaob	Tughlaqabad	Suraibund	10,570	1,409	1,574 0 0	In progress.
Jvangraj	Baijnath	Temples	453	4 V1	180 0 0	Do.
Uawaljnudi		Providing water supply		10,275	12,214 0 1)	
.Do	Do	Constructing a well		1,800	8 517 12 (. .	
		TOTAL			22,809 3 3	
		Add departmental charges a 19 per cent			4,345 2 0	
					27,214 5 3	
Rawalpindi	Taxila	Special repairs (non recurring charges) carried out by the Art hological Department Maintennio of Police Glial i)	1,617	1,017	1,017 0 0	In progress.
.Lahore	Lahore	l'uichbane of Notice boards		344	200 0 0	
		Tai.ii special repair oxocuted dopuit- mimtalh			1,907 9 0	
		GRAND TOTAL SPECIAL. REPAIRS			20,121 14 3	
Rawalpindi	Bhalkar . . i	Annual repairs (recurring charges) carried out by the Public Works Department Annual repairs to—	1		10 0 0 1	Completed.
Do	Mankiala.	Tjo	30	30	13 0 0	Do
Jhelum	Robtas .	Raia Mansintrh's Havoh	•		29 0 0	Do
		Carried over		30	57 0 0	

APPENDIX A—contd.

District.	Locality.	Name of work and description	Amount tionod estimate.	Allotment for the year 1923-24 filed by roaprop- naption	Amount spent during the year 1923-24	RHMA BKS.
1	2	3	4	5	6	7
		Brought forward	Rs.	Rs	Rs A P	
		Tur PUNJAB—contd		30	57 0 0	
		Annvl repairs (recurring charges) carried out by the Public Works Departmen I—nontd				
		Annual ropans to—				
Jhelum .	Katas	S Harieine V Haveli	150	150	146 0 0	(Completed
Do .	Do	Ratgharn temple	510	510	40 0 0	Do
Do .	Malot	Temple			275 0 0	Do
Sialkot .	Sialkot	Tibba Jalian			140 0 0	Do
					26 0 0	Do
Do.	Vijhi .	Do	310	310	43 0 0	Do
Do	Amb	Temple in the Foit			190 0 0	Do
Karnal .	Thanar .	Raja Karri Ka Mound	30	30	24 0 0	Do
Ambala	Ambala .	Historical buildings	20	20		
Ludhiana	Sunot	Ancient ruins	20	20		
Kangra	Kpngrii .	Temples in the Foit	347	347	206 0 0	Completed
Do	Nut pur .	Do	19	lit	19 0 0	Do
Do	Bajaura .	Bashoshwar Mahadeo temple	22	22	3 0 0	Do
Do	Mahakal .	Temple	175	175		
Do	Asapun .	Do	200	200		
Do	Kanhiaara and Puthiar	Rook inscriptions	10	10	10 0 0	Completed
Rawalpindi	Taxila .	Conservation charges at Taxila (D G A)		90.58	9,638 0 0	
		TOTAL		11,487	10,835 0 0	
		Add departmental charges (fr 19 per			227 7 0	
		Total annual repairs			11,062 7 0	
		Total special repairs			29,121 14 3	
		Total annual repairs			11,062 7 0	
		GRAND TOTAL			40,184 5 3	

APPENDIX A—wnkl.

Name of work and description.		Amount of sanc- tioned J estimate	nod by reappro	I Amount spent during the voar 1923-24
UNITED PROVINCES				
<i>Special repairs (non-recurring charges) carried out by the Public Works Department</i>				
Restoration of a Hindu Pillar.				
Conservation of —				
Antiquities				In progress
Minor antiquities				0 0 0 Do
Special inspection to approach road to Kott				1 Completed
Hamirpur	Mithobu,	Conservation of antiquities	5,613	In progress
Allahabad	Garhwa			Do
[Instruction of Surface drainage the AichsBoloital Museum				
				11,015 6 0
				2,263 14 0
<i>Special repairs (non-recurring charges) carried out by the Archaeological Department</i>				
Acquisition of land for further Ar- chaeological exploration.				2,648 3 0
Do.		Conservation of ancient Buddhist remains	2,21	3 3
Do.		Certain improvements to Archeologi- cal Museum.	367	4 0
Jhansi		Conservation of minor antiquities (paid by a chaukidar)	24	4 0
				5,258 4 3

| GRAND TOTAL, SPECIAL REPAIRS

APPENDIX A—contd.

IMstnot.	Locality	Name of work and description	Amount of sanctioned estimate	Allotment for the year 1923-24 as modified by reappro-	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5	6	7
		DNITKP PEO-VOJOBS—contd Annual repairs (recumng charges) carried out by the Pwbhc Works Department Annual repairs to—	Rs.	Rs	Rs A. P	
Jnansi .	Talbehat		100	100	98 0 0	Completed
Hampur	Mahoba .	Kaliilja tonjpit .	37	37	36 12 0	Do.
Do	Sakura .	Jain temple'	4	4	4 0 0	Do
Do	Do .	Four chandella temple and small	22	22	20 0 0	Do.
			3	3		Do.
Benares	Narnath .	Archaeological Museum	918	918	910 0 0	Do
Allahabad	Garhwa	Fort	100	100	95 0 0	Do
Mireapur	ChUMT .	Chun a I Fort Gateway .	50	50	50 0 0	Do
JXhra Dun	Kalsi	Asoka stone	37	37	37 0 0	Do
Agra	Agra	Jafwant Singh Ki Chhatn	150	150	149 0 0	Do
Uonda .	Saheth-Mah th	Buddhist remain	550	650	543 3 0	Do.
Oorakbpur	Kasia . .	Buddhiurt remains	172	172	137 0 0	Do
M ultra .	Brindahan	Oobind Deo temple	360	350	128 0 0	Do.
Do .	Do	Iladha Ballabh temple	120	120	19 0 0	' Do.
Do .	Do	Jugal Kishore temple .	120	120	28 0 0	Do.
-Hardoi .	Nandi	l'hulmati temple	5	5	500	Do.
		TOTAL			2,265 15 0	
		Add departmental charges @ 10 per cent			430 9 0	
		Total annual repairs			2,696 8 0	
		Total special repairs			19,438 2 3	
		Total annual repairs			2,696 8 0	
		GRAND TOTAL .			22,134 10 3	

APPENDIX A—contd.

Expenditure on Conservation of Monuments Frontier Code,

District	Locality	Name of work and description	Amount or estimated cost	1 Allotment for the 1923-24 as modified by the Finance Committee	Amount spent during the 1923-24 financial year	REMARKS
1	2	3	4	5	6	7
Peshawar	Tahsil Mardan	THE FAKHMIH PROVINCE Special repairs (non recurring charges) carried out by the J. & S. Department	KB	Rs	Rs A P	
Dera Ismail Khan	Kalir Kot	Improving the approach (to Xashmn Sims	1,310	1 110	1,028 0 0	
Peshawar	Tahsil Martian	Preparation of an estimate for the renovation of temple, at Rafu kot (B. lot)		78..	321 4 0	
Hazara .	Near Taxila	Special repairs (71011 recurring charges) Department		10,000 (1	10,800 4 0	
Peshawar		Conservation of Jantalgai		470	360 1 0	
		Acquisition of Jamial Bae, A, 15 and B		400	351 5. 0	
		Cost of notes boards, TOTAL			12,850 14 6	
		Additional expenditure incurred on the works done by the			330 0 0	
		GRAND TOTAL, SPECIAL REPAIRS			13,180 14 C	
Peshawar	Tahsil Mardan	Annual repairs (recurring charges) carried out by the Public works Department	472	472	367 0 0	
Do	PeUiawar	Maintenance charges at Takht 1 Bain	433	433	318 0 0 1	
		Annual repairs to Archaeological Office, Peshawar				
Peshawar	Tahsil Mardan	Annual repairs (recurring charges) carried out by the Archaeological Department		350	180 0 0	
Do.	Do.	Maintenance charges at Jamialgarhi			37 8 0	
Do.	Do.	Annual repairs to— Takht-i-Bahi . . .		100	40 4 0	
Do.	Do.	Xhabba7garhi		50		
		Carried over			842 12 0	

APPENDIX A—c&md.

Distnot	Local it v	Name of work and description	Amount of sanctioned estimate	Allotment for the year 1923-24 as modified by reappropriation	Amount spent during the year 1928-24	REMARKS.
1	2	8	4	5	6	7
		Brought forward	Rs.	Rs.	RS. A r	
					942 12 0	
		THE FRONTIKB PROVINCE—corUd				
		Annual repats (recurring chargat) carried out by the Archceological Department—oontd				
Hazara .	Near Taxila	Maintenance charges at Jandial and Lai Chak		180	180 0 0	
Do.	Do	Annual repairs to Jandial and Lai Chak		100	57 15 0	
Do.	Do	Maintenance charges at Jauhan		732	624 9 0	
Do.	Do.	Annual wpairs to Jauhan		260	305 1 0	
Do.	Do	Maintenance charges t Pipplan		180	180 0 0	
Do.	Do	Annual repairs to Pipplan		00	0 0 0	
Do.	Do.	Maintenance charges at Nikra .		432	467 0 0	
Do	Do.	Annual repairs to Nikra		200	277 4 0	
		TOTAL			3,043 8 0	
		Add departmental charges on the works carried out by the Public Works Department @ 24 per			168 0 0	
		GRAND TOTAL, ANNUAL REPAIRS .			3,211 H 0	
		Carried out by Pubho Works Depart-				
		Total special repairs			1,071) 4 0 1	
		Total annual repairs			853 0 0	
		Carried out by Archaeological Department.—				
		Total special repairs			11,501 10 6	
		Total annual repairs			2,358 9 0	
		GRAND TOTAL			16,392 7 0	

APPENDIX A—contd.

Expenditure on Conservation of Muhammadan and British Monuments in the Punjab,

District.	Looahity	Name of work and description	Amount of work done	Amount for the 1823-24	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5.	6	7
		THE PUNJAB	Rs	Rs	Rs A P	
'Rawalpindi	Golra	Special repairs (non-revruug charge) turned out by the 'ublu Work.* Department	81	-	81 0 0	
Hiasar	Hissar	Certain improvement* to— Lat-ki MaHjid	1,739 1,820	1,000	1,619 0 0	Completed
Do.	Do	Jehaz-ki-Kothi	123 1,160	800	136 0 0	Do.
Do.	Do	Lat ki Maajid	81 1,820		75 0 0	Do.
Do.	Do	Jehaz-ki-Kothi	1,027 1,100	1,000	921 0 0	Do.
Lahore and Sheikhpura.	Lahore Fort and Shahdara	Purchasing uniform for chowkidars at historical buildings at Lahore and Shahdara	275	275	208 0 0	Do.
Sheikhpura	Sheikhpura	Making a Braall boat for Haran Minar	250	260	250 0 0	Do.
Lahore	Lahore	Certain improvements to Rhudu's tomb	4,051	3,092	2,803 0 0	Do.
Do.	Do.	Improvements to Oulabi gate	2,041 2,141	1,600	1,318 0 0	Do.
Do.	Do.	Constructing a new boundary wall and gate at All Mardau Khan's	1,481	1,480	1,477 0 0	Do.
Do.	Shalamar	Providing a new entrance gate at Shalamar gardens with special hasp	117	117	65 0 0	Do.
		TOTAL			8,952 0 0	
		Add departmental charges at 19 per cent on the works done by the Punjab Works Department			1,701 0 0	
		GRAND TOTAL, SPECIAL REPAIRS			10,653 0 0	
* Minor works			† Special works			

APPENDIX A—*contd.*

District	Loaahy	Name of work and description.	1911	Allotment for the year 1923-24 as modified by reappro	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5	6	7
		'J'IE PUNJAB— <i>contd.</i> <i>Annual repairs recurring charges)</i>	Rs	RS	Rs A V	
Jhelum .		Gate at Rohtas Fort	368	360	354 0 0	Completed.
AttocL		British and Muhammadan Monu- ment in the Distnot of—	546	540	314 0 0	Do.
Gujrat	Gujrat	Ditto ditto			79 0 0	Do.
Do. .	Khannn .	Arrang/tb Bao'i	314	210	99 0 0	Do
Hasar . .	Hissnr	ITutoiiLal buildings at—	565	560	536 0 0	Do
Rohtak	Sonepat	Ivhawaja Khuai'b tomb .	133	130	94 0 0	Do
Do	Rohtak		120	120	111 0 0	Do
Gurgaon	Gurgaon	Do	160	160	171 0 0	Do
J'ampat .						
Kamal	Thaniwar	i-Hiatoncal buildings at —	758	620	509 0 0	
Ambala	Ambala .	Kos Millars	5	P		
Ludhiana	Ludhiana	Do	13	13	13 0 0	Completed.
	Daklitu .					
Jullundur .	Nurmahal	Vllistoneal buildings at—	258	250	201 0 0	
	Nakodar					
Lahore .	Lahore Fort	Ditto	4,354	4,351	4,288 0 0	Cdpleted.
Sheikhupura .	Shahdara	Ditto	19,545	19,495	18,543 0 0	Do.
Gujranwala .	Wa/irabad	Graves at Ramliagai	27	25	20 0 0	Do.
Sheikhupura .	Sheikhupura .	Uaran Minar	827	827	830 0 0	Do.
			100			
Lahore .	Lahore .	Gulabi Gate	2,141	100	100 0 0	Do.
Do. .	Do. .	Ah Mardan Khan's tomb	7,038	7,038	6,990 0 0	Do.
Do .	8halamar	Historical buildings at—	6,147	6,100	6,177 0 0	Do
Do .	Do.	Oil Engine	252	250	250 0 0	Do
Gurdaspur	Kalanaur	Takht-i-Akban	211	211	217 0 0	Do
Do	Batala .	Sh&maher Khan's tomb				
Amnitsar	Amritsar	Kos Millars	42	40	42 0 0	Do
		Carried over			39,944 0 0	

APPENDIX A—*contd.*

Name of work and description		Amount spent during the year 1923-24			Completed.	
		Rs	A	P		
Brought forward		3(1044	0	0		
THE PUNJAB— <i>contd.</i>						
<i>Annual repairs (recurring charges)—continued</i>						
Ghazi Khan's tomb		103	0	0	Completed.	
I Tain Khan's—						
Tomb					Do	
Mosque					Do	
I Lord Elgin's tomb					Do	
		7,030	0	0		
GRAND TOTAL, ANNUAL REPAIRS						
<i>Maintenance of Gardens (reel charges)</i>						
Lahore	I Shalamar	I Shalamar gardens	8,260	8,039	2 9	Funds provided by the Provincial Government.
Do.	Lahore	Hazun Bagh	1,300	1,001	0	
Sheikhupura	Shahdara	Shahdaia Historical gardens	12,000	12,441	11 0	
I Works carried out by Public Works Department.—						
Total special repairs		10,653	0	0		
Total annual repairs		47,823	0	0		
Total gardens		21,532	3	U		
GRAND TOTAL						

APPENDIX A—contd.

Expenditure on Conservation of Monuments in the Bombay Presidency including Sind.

District (P. W. D.)	Locality	Name of work and description	1. Amount of sanc- tioned estimate	Allotment for the year 1923-24 as mod- ified by re-appor- tionation	Amount spent during the year 1923-24	REMARKS.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs. A. P.	
Presidency	Gharapun	WORKS CARRIED OUT THE KOTFUII- TENDENT, AEOHJKULOQIOAI, RIXHVKI Special Repairs (Non-recurring charge*) Elephanla Caves Total exjKiiditup me urred up to dale in Rs 20.280	33,8:n (7 esti- matei)	2,000	2,000 0 0	In progress.
Do.	Do	Klephanta dives Totnl compensation iol the (lanHffw to tho helfd. paid to D C Mliatrc	l(i(+	166	16(i 0 0	Completed
Do	Do.	Piorx at Elephant		1,000	1,000 0 0	In progress.
Thma .	BanNoin .	Portuguese monument Total ei-vpcmirm Incunevl up to date IM KK i:i,483	24,021	2,300	2,300 0 0	Do
Kaira and Panoh Mahals.	Sarnal	(alton/am Malmde a Temple Total Expenditure me ure d up to date in RH 10,9D3	12,084	1,500	1,500 0 0	Do
Government House.	Poena . . .	Improvements to the Fort -ealln ol Khanwar Wada Total expenditure* incurred up to date ui Rs 14,504.	29,748	3,764	3,704 0 0	Do.
Poonu . Do.	Karlñ Do.	Caves Hwtcmal Neitiro Boards	80	2,300 80	2,300 0 0 80 0 0	Do. Completed.
Ahmednagar .	Ahmodnagar .	Farla Bagli Palace	2,233	2,200	2,200 0 0	Do.
Do	Do.	Carrying out eertam important ltonw of weirk m connection with the xoavations made m the Fort	3,110	1,500	1,600 0 0	In progress
		Enamelled iron ne-tice boards for the monuments m the Western Circle, j	1,820	1,000	1,000 0 0	Do
		Total Special Repairs. .			17,810 0 0	
Thana	Basaoín .	Annual Repairs (recurring charges) Current repairs to and maintenance oahgen for the Portuguese remainii in the Fort	400	400	„ 400 0 0	Completed.
Government Home.	Poona	Current repairs to and maintenance ehttiges for Shonwar Wada.	1,739	1,739	1,739 0 0	Do.
		Total Annual repairs			2,139 0 0	
		Total Special and Annual repairs			19,949 0 0	

APPENDIX B—*contd.*

List of exhibits acquired for the Delhi Museum during the year 1923-24.

Presented by the Marquis Curzon.

1. Qurb Minai, near Delhi, drawn by Darnell (No. XXIV).
2. A few at Delia near the Mausoleum of Humayun, drawn by Darnell (No. XIX).
3. *Baoli* near the old city of Delhi drawn by Darnell (No. XVIII)
4. Mausoleum of Amir Khusro at the ancient city of Delhi, drawn by Darnell (No. VI).

Presented by Mirza Siamuddin Sahib of Loharu State.

5. Sanad issued with the seal impression of Shamsu-d-Daulah Dost Khan Mubarez Jang.

Purchased by the Chief Commissioner, Delhi.

6. View of the West Gate of Firoz Shah's Kotlali, Delhi Drawn by Darnell, engraved by William Orme, acquired by Fellows and published in 1802.
7. View of Qutb Minai, Delhi Drawn and painted by Colonel Ward, engraved by Orme and published in 1805

Purchased by the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra.

8. Portrait of the king of Bukhara as a prisoner in Timur's Darbar.

On loan from the Director-General of Archaeology in India.

9. Astrolabe
10. Nisbi (a royal mandate) issued by the prince Muhammad Kam Baksh dated the 30th year of the reign of Aurangzeb, conferring 100 *bighas* of land upon one lady Saliha.
11. *Farman* of the Emperor Shahjahan dated the 2nd year of his reign conferring 25 *bighas* of land upon one Shaikh Hatim.
12. *Khulasa-i-Akhbar-i-Atraf*—Consisting of 141 issues from 3rd January to the 30th of June 1829.
13. Portrait of Ranu-sh-shan, son of Shah Alam Bahadur Shah.
14. Portrait of Khwaja Hasan Basri
15. Jade frame of a mirror.
16. Jade handle of a sword ornamented with silver inlay work.
17. Jade handled dagger.
18. Three chambered jade box

APPENDIX B—*contd.**List of coins acquired for the Delhi Museum during the year 1923-24.*

Ruler's name	Dynasty.	Gold.	1	Copper	TOTAL.
			Silver		
1	2	3	4	5	6
<i>Presented by Government, United Province*</i>					
Akbar	Mughal			1	1
Jahangir	Do			1	1
Jahangir-Nurjahan	Do		1		1
Shahjahan	Do		2		2
Aurangzeb	Do		18		18
Shah Alam Bahadur Shah I	Do		13		13
Jahandar Shah	Do		2		2
	Do.		3		3
	Do		8		8
Ahmad Shah Bahadur	Do		8		8
	Do		1		1
	TOTAL		56	2	68
<i>Presented by the Punjab Ooverment</i>					
Aurangzeb	Mughal		8		8
Shah Alam Bahadur Shah I .	Do		2		2
Farrukhsiyar	Do		2		2
	Do		1		1
Muhammad Shah	Do		10		10
Ahmad Shah	Do		2		2
Ahmad Shah Durrani	Afghan		1		1
●	TOTAL		26		26
<i>Presented by the Director of Industries, Central Provinces.</i>					
	Mughal		7		7
	Do		7		7
	Do		18		18
Aurangzeb	Do		37		37
Shah Alam Bahadur Shah .	Do		1		1
MuhammaaShah	Do		6		6
	TOTAL		76		76

APPENDIX B—*contd.*

Dynasty

Copper

*Presented by the Bombay Branch of the Royal
Asiatic Society, Bombay*

Shahjahan	Mughal
Aurangzeb	
Muhammad Shah	
Shah Alam II	
Shah Alam II (Struck by some Native States)!	Do.
Shah Alam II (Struck by East India Company)	Do

*Presented by the Chief Commissioner, Delhi
Province, Delhi.*

Sher Shah	
Islam Shah	

Archæology in India

*Ghiyâuddin Balban	Slave .
Qutbuddin Mubank Shah Khalji	Khalji
Muhammad bin Tughlaq	Tughlaq
Islam Shah Sur	Sur
Akbar	Mughal
Jahangir	Do.
Shahjahan	
Aurangzeb	
Shah Alam Bahadur Shah I	
Farrukhsiyar	
Rahu-d-Darajat	
Ranu-d-Daula Shahjahan II	
Muhammad Shah	
Ahmad Shah Bahadur	Do.
Alamgir II	Do

Carried over

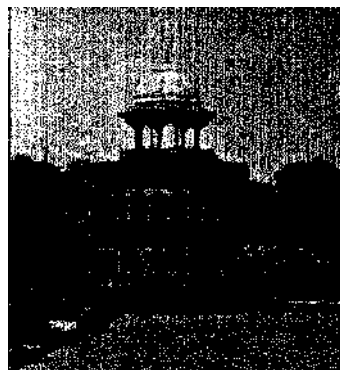
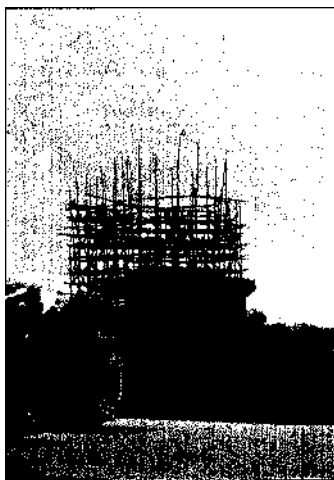
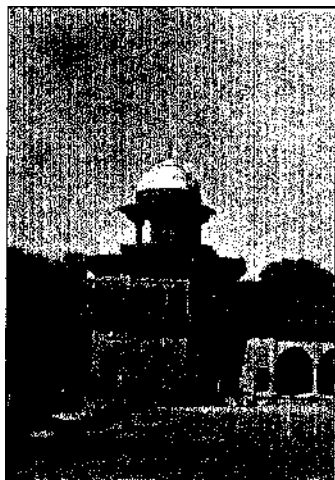
APPENDIX B—*contd.*

Ruler's name	Dynasty	Gold.	Silver	Copper	TOTAL.
•	a	A	4	I	6
<i>On loan from the Director-General of Archaeology in India—contd</i>	Brought forward	15	114	6	135
	Mughal		1		1
	Do	2	94	8	104
	Do.		0		6
Muhammad Akbar I I	Afghan		2		2
Nadir Shah Durrani	Do		8		8
Ahmad Shah Durrani	Do		3		»
Mahmud Shah Durrani	Do		1		1
Humayan Shah Durrani	Do		2		2
Qamar Shah Durrani	Sikh		8		8
Sikh coins	King of Malwa		2		2
Ghiyas Shah Khalji			1		1
Ghiyasuddin Bahadur Shah ,	King of Bengal		1		1
Muzalhn Shah III	Kuig of Gujrat		1		1
Muhammad	Sultan of Kashmir	1			1
Ibrahim	Do	1			1
Sikamlai	Do		1		1
Zamul Abidui	Do		2	11	13
Raidar Shah	Do		1		1
Hasan Shah	Do		2	6	7
Muhammad Shah	Do		5.	4	9
Fateh Shah	Do		»	3	6
Muhammad Humayun	Do		2		2
Mahmud Shah	Do		1		1
Ibrahim Shah	Do		4	2	0
Muhammad Ah Zahir-ud-din	Do		2		2
Nasiruddin Muhammad Yusuf Shah	Do		2		2
Akbar	Do		3		8
All	Do		1		1
Unidentified	Do			9	0
Islam Shah	Do			1	1
Iamail	Do			)	
Huoain Shah	Do				1
	TOTAL	19	273	01	348

APPENDIX C

Additions to Departmental Libraries

Name of Office	Books purchased	Books presented	TOTAL	REMARKS
1	2	3	4	5
Director-General	342	83	425	A further 116 volumes and 74 journals, etc., were received as exchangers, bringing the grand total up to 014
Northern Circle (Agra)	12	42	54	
Northern Circle (Lahore)	58	98	156	
Frontier Circle	4	20	24	
Western Circle	11	48	59	
Central Circle	24	17	41	
'Eastern Circle .	24	39	63	
Southern Circle	3	7	10	
Burma Circle	47	117	164	The Siamese Government presented 53 books
Government Epigraphist	08	151	219	
Assistant Superintendent for Epigraphy, Southern Circle	71	25*	96	* Included 10 publications received in exchange
Archaeological Chemist	18	4	22	
Archaeological Section, Indian Museum	86	140	236	A special grant of Rs 2,500 was made by the Director-General of Archaeology in India for the development of this library





40 WELL, SAID THE IVER BUNDELLOW, SINCE THEN, WHEN, BEYOND CONSIDERATION

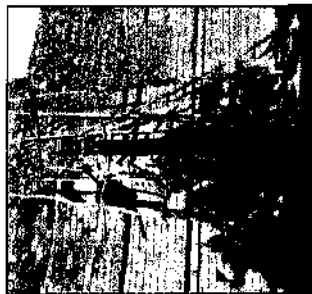
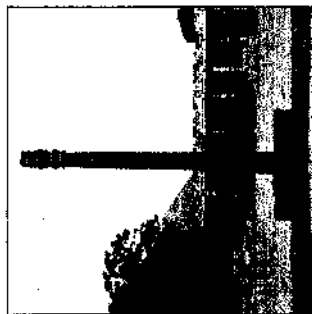




23 KINGS MARK, AT EXHIBIT SITE, SHORELINE, DUNAS, CHILE.



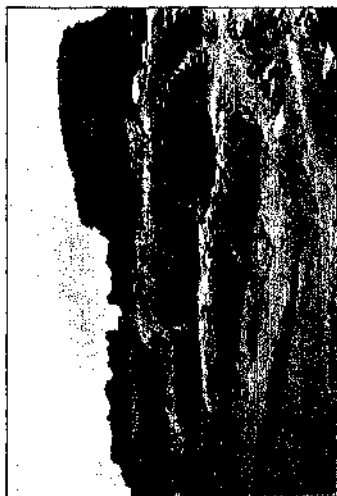
24 KINGS MARK, AT EXHIBIT SITE, SHORELINE, DUNAS, CHILE.



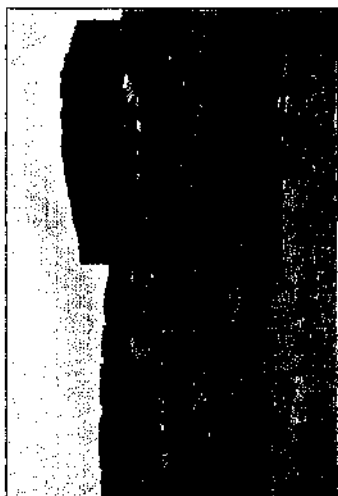


ALANIERI AT THE VI ROMAN, AFTER DE PRODIGE.





1. JOURNAL OF THE AMERICAN SOCIETY OF PHOTOGRAPHY, Vol. 7, No. 1, 1901, P. 100, FIG. 100.



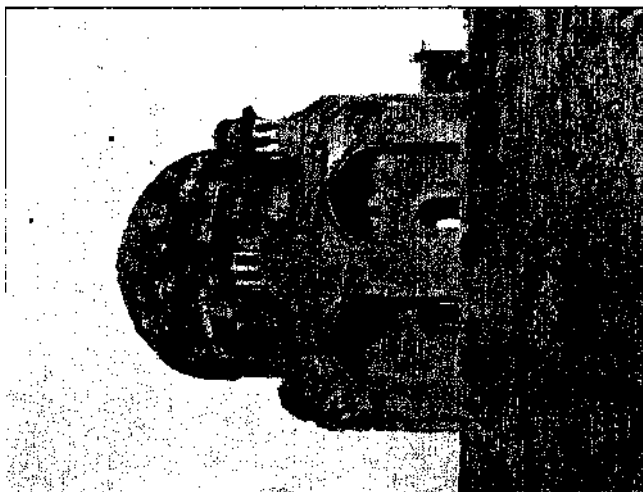
2. JOURNAL OF THE AMERICAN SOCIETY OF PHOTOGRAPHY, Vol. 7, No. 1, 1901, P. 100, FIG. 100.



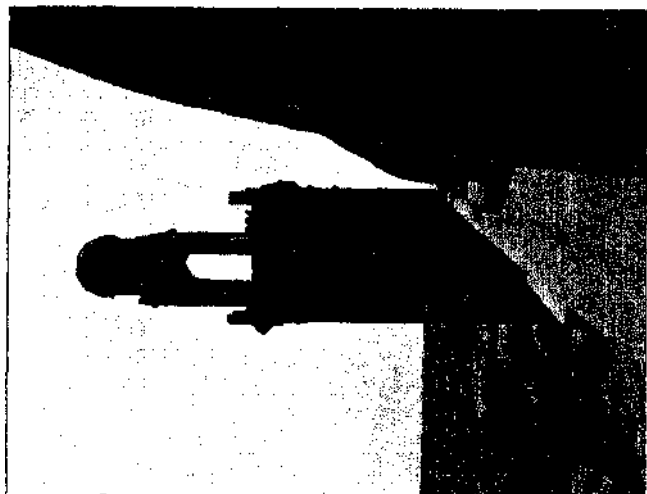
3. JOURNAL OF THE AMERICAN SOCIETY OF PHOTOGRAPHY, Vol. 7, No. 1, 1901, P. 100, FIG. 100.



4. JOURNAL OF THE AMERICAN SOCIETY OF PHOTOGRAPHY, Vol. 7, No. 1, 1901, P. 100, FIG. 100.



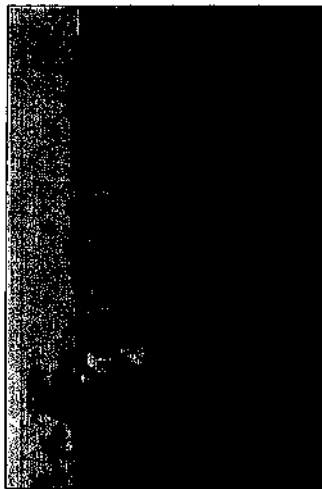
60. ALL MADRAS KISHOR TEMPLE AT LATHUR



61. JAMBHRI, NEW MARKET, PUDUKKOTAI TEMPLE FROM JAMBHRI-NEEDHUR ROAD
CONSERVATION WALL



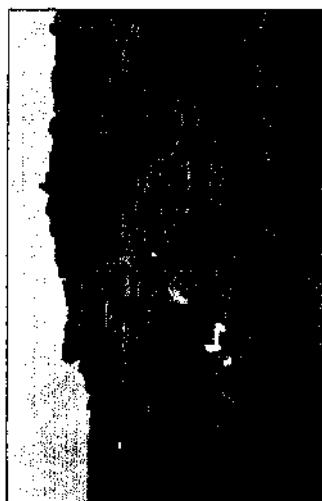
107. NOTE SHARIMAN PALACE, ABHAYANAGAR DISTRICT, SHOWING TERRACE AFTER REMOVAL OF ROOFING MATERIALS.



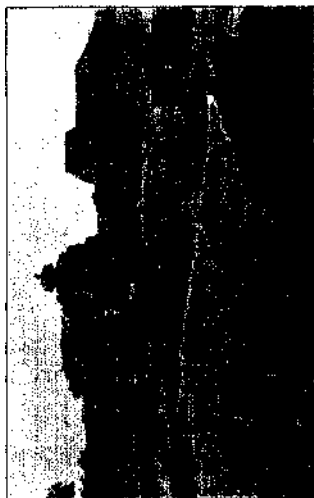
108. VANDANA, ABHAYANAGAR DISTRICT, MONASTERY OF TANK WITH BUT SMALL TEMPLE.



109. SHIP AND RAZA, ABHAYANAGAR DISTRICT, AND APPROXIMATE HEADS TO TOWERS TO THE NORTH INSIDE THE COMPOUND.



110. TRAVING, DISTRICT DISTRICT, OBSERVE VIEW FROM CAVE NO. 5 IN SOUTH DISTRICT, SHOWING THE ANCIENT DOL AND TEMPLES IN OLD TO NORTH.



50 PANCHAJANYA TEMPLE, PANCHAJANYA AND MULLIKARJUNA TEMPLES -
VIEW FROM NORTH EAST



51 PANCHAJANYA TEMPLE, PANCHAJANYA AND MULLIKARJUNA TEMPLES -
VIEW FROM SOUTH WEST



52 PANCHAJANYA TEMPLE, PANCHAJANYA AND MULLIKARJUNA TEMPLES -
VIEW FROM TOP OF TEMPLE



53 PANCHAJANYA TEMPLE, PANCHAJANYA AND MULLIKARJUNA TEMPLES -
VIEW FROM TOP OF TEMPLE



3. NALANDA: MONASTERY NO. 3. WEST VERANDAH (NOTE
TAVENANT). SHOWING 1800 F. JAMBS OF KAIN EXTERIOR.



7. NALANDA: SITE NO. 5. UNDER EXCAVATION.



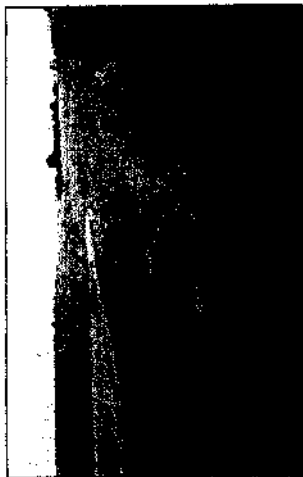
11. NALANDA: MONASTERY NO. 1A. NORTH-EAST CORNER OF
EXTERIOR COURT, SHOWING TWO TAVENANT LEVELS AND
RECONSTRUCTED FACADE OF VERANDAH.



12. NALANDA: MONASTERY NO. 4. EAST EXTERNAL WALL,
SHOWING THREE DEGRADATIONS OF SUBSEQUENT PERIODS AND LATER
FACING ABOUT CENTRAL SURROUNDING WALLS.



11. SALSOLA MONUMENT NO. 1A, UPPER PORTION OF EXTERIOR WALL, VIEWED FROM SOUTH EAST.



12. SALSOLA MONUMENT NO. 1A, UPPER PORTION OF EXTERIOR WALL, VIEWED FROM SOUTH EAST.



13. SALSOLA MONUMENT NO. 1A, UPPER PORTION OF EXTERIOR WALL, VIEWED FROM SOUTH EAST.



14. SALSOLA MONUMENT NO. 1A, UPPER PORTION OF EXTERIOR WALL, VIEWED FROM SOUTH EAST.



THE GRAND PORT. A VIEW FROM THE EAST, SHOWING THE ARCHWAY AND THE PATH LEADING TO THE TEMPLE.



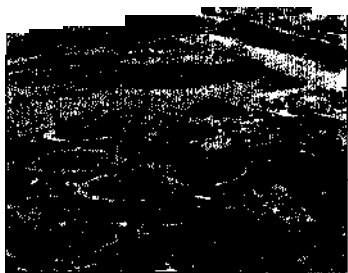
THE GRAND PORT. A VIEW FROM THE WEST, SHOWING THE ARCHWAY AND THE PATH LEADING TO THE TEMPLE.



THE GRAND PORT. A VIEW FROM THE WEST, SHOWING THE ARCHWAY AND THE PATH LEADING TO THE TEMPLE.

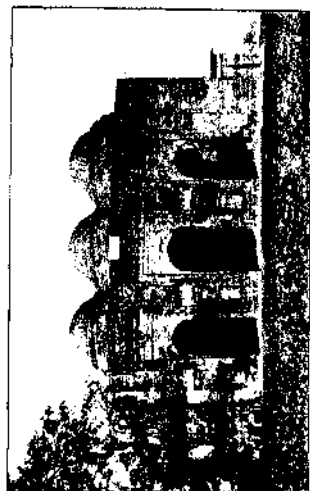


THE GRAND PORT. A VIEW FROM THE EAST, SHOWING THE ARCHWAY AND THE PATH LEADING TO THE TEMPLE.





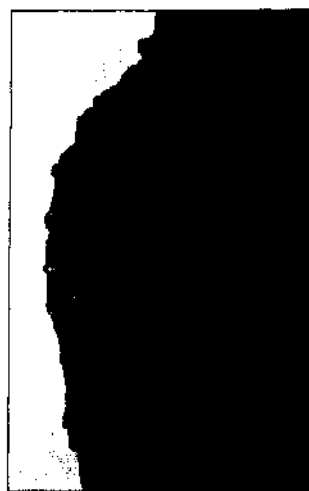
GENERAL VIEW OF THE MONUMENT AT KILAUKE, BEING CONSERVATION



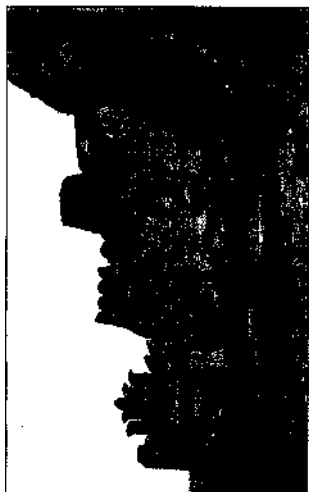
GENERAL VIEW OF THE MONUMENT AT KILAUKE, BEING CONSERVATION



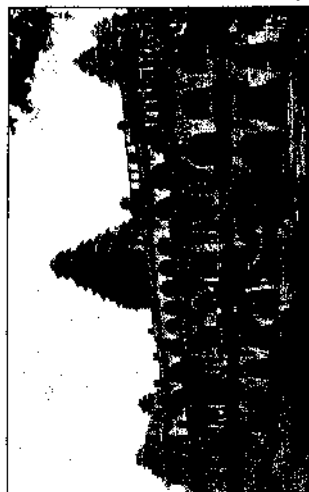
DETAILS OF THE MONUMENT AT KILAUKE, BEING CONSERVATION
AT KILAUKE, BEING CONSERVATION



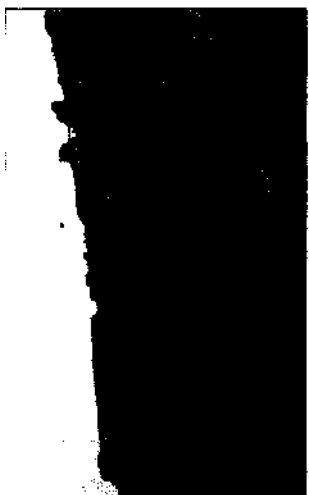
DETAILS OF THE MONUMENT AT KILAUKE, BEING CONSERVATION



66. LOWER PART, LINTEL 467, TEOTIHUACAN



67. THE BASE, PYRAMID, TEOTIHUACAN, THE TEMPLE OF THE SUN



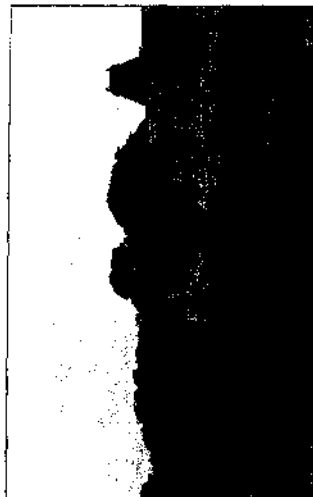
68. UPPER PART, LINTEL 467, TEOTIHUACAN



69. THE BASE, PYRAMID, TEOTIHUACAN, THE TEMPLE OF THE MOON

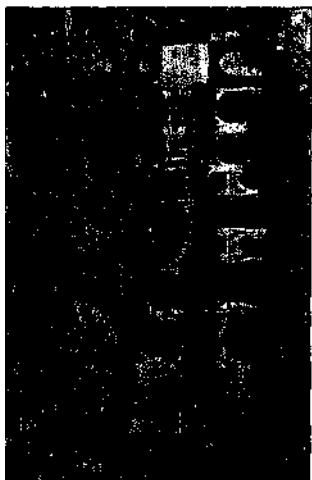


1. THE RUINS OF FORT MIFFLIN, PHILADELPHIA



2. FORT MIFFLIN, PHILADELPHIA

THE RUINS OF FORT MIFFLIN, PHILADELPHIA



3. THE RUINS OF FORT MIFFLIN, PHILADELPHIA



4. FORT MIFFLIN, PHILADELPHIA

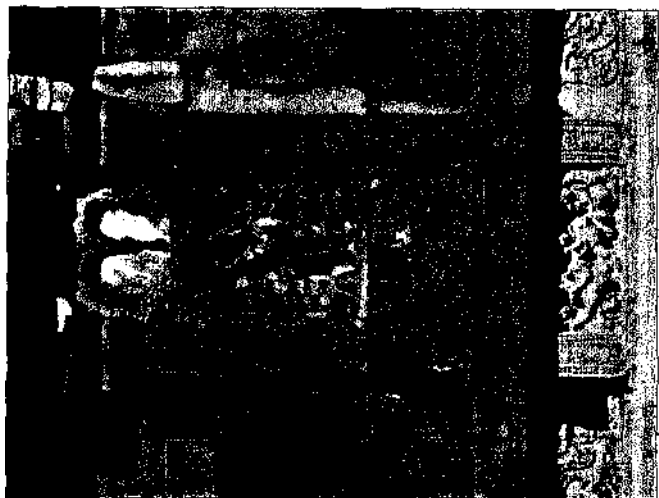
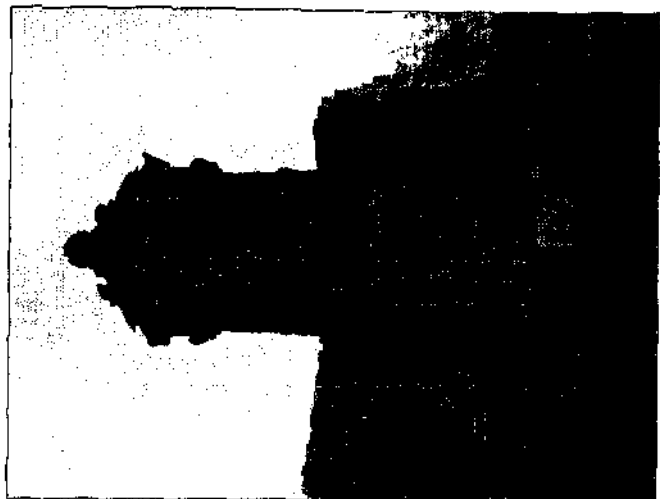
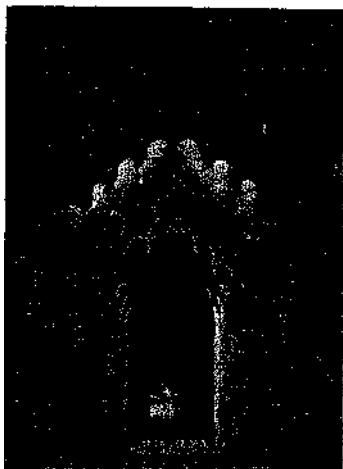


PLATE XVI. The object shown in the photograph is a fossil of a marine animal.



86. THE GATEWAY OF THE EAST FENCE, LOOKING FROM
THE MOUNTAIN TOWARD A TOWER.



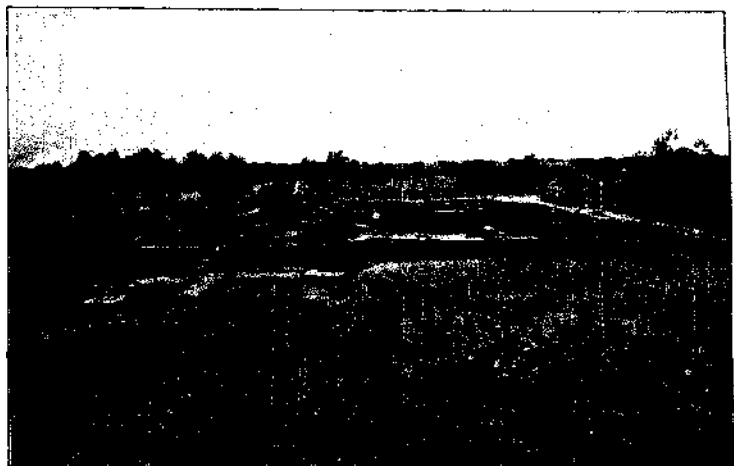
87. A WINDOW ON THE EAST SIDE OF THE TOWER, FROM
TOWARD A TOWER.



88. MOUNTAIN TOWARD A TOWER, FROM THE NORTH.



89. MOUNTAIN TOWARD A TOWER, FROM THE SOUTH, AND THE
COUNTRY DRAINS AT THE MOUNTAIN TOWARD A TOWER,
FROM THE SOUTH.



63 MOHEOAO PARK: GENERAL VIEW OF MOUND NO. 4, SHOWING EXCAVATION AREA FROM WEST.



64 MOHEOAO PARK: GENERAL VIEW OF MOUND NO. 4, SHOWING EXCAVATION FROM NORTH EAST.



1 (Obv.)



1a (Rev.)



2 (Obv.)



2a (Rev.)



3



4



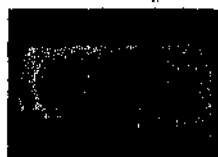
5



6



6a (Rev.)



7

SEALS FROM MOUNT K. MOUNTAIN TARD



8



9



10



11



12



13



14



15

16

17

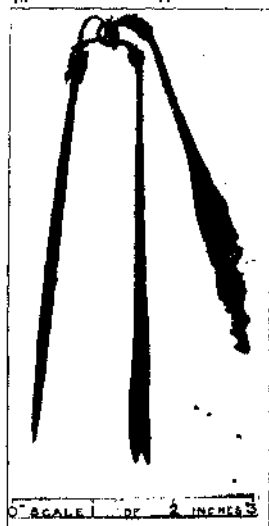


18

19

20

21



22

SEALS AND OTHER OBJECTS FROM HUNTER



EXCAVATIONS AT HARAPP.

PLATE XX. HARAPP. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.





3, 4, 5, 6. POTTERY VESSELS FROM HOSNUT.



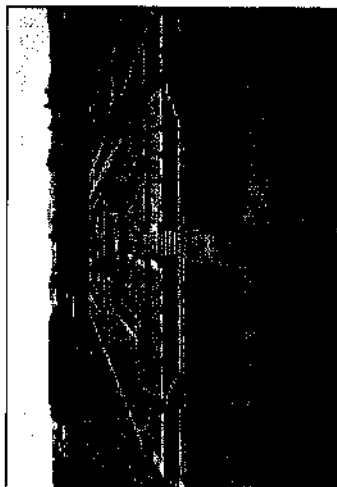
7. THERMOPIA PROCEPS FROM HOSNUT.



8. THERMOPIA PROCEPS FROM HOSNUT.



9. THERMOPIA PROCEPS FROM HOSNUT.



1. EAST GATE, SUMMER PALACE, BEHIND THE GREAT CLIFF OF PEARL - HARBOR EXHIBITION.



2. EAST GATE, SUMMER PALACE, BEHIND THE GREAT CLIFF OF PEARL - HARBOR EXHIBITION.



3. EAST GATE, SUMMER PALACE, BEHIND THE GREAT CLIFF OF PEARL - HARBOR EXHIBITION.



4. EAST GATE, SUMMER PALACE, BEHIND THE GREAT CLIFF OF PEARL - HARBOR EXHIBITION.



1. COIN OF PRINCE UNGUEN, ALLEGEDLY FOUND AT THE MOUNTAINS.



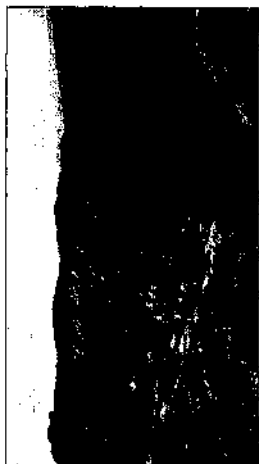
2. THERIAKIA MEDAL FROM THE MOUNTAINS.



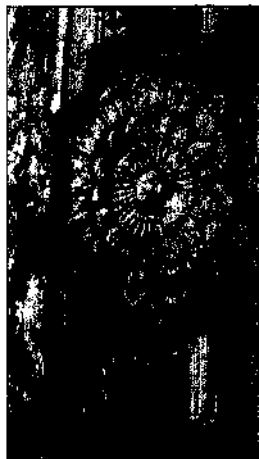
3. THERIAKIA MEDAL, ALLEGEDLY FOUND AT THE MOUNTAINS.



4. SURFACE OF THE THERIAKIA MEDAL.



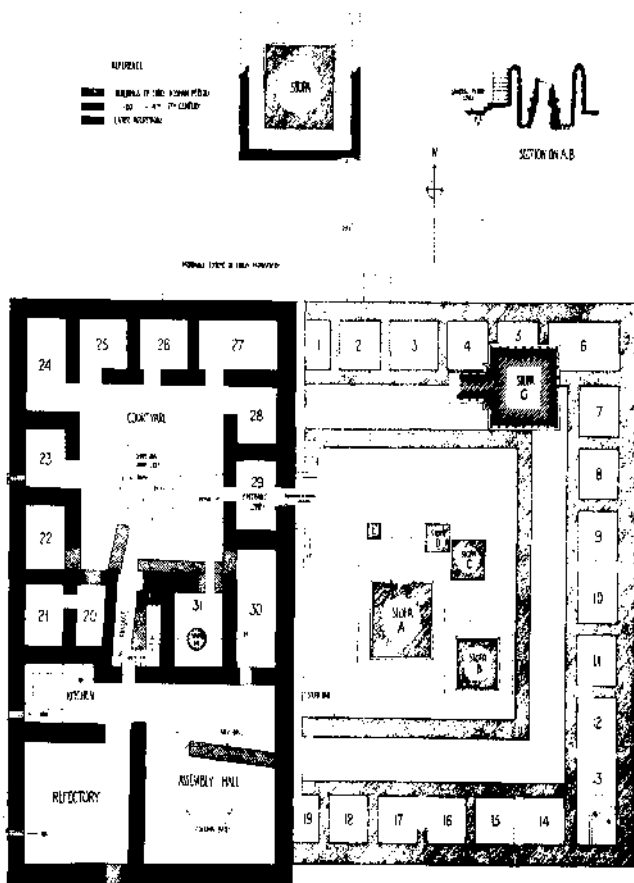
5. SMALL, ALLEGEDLY THERIAKIA MEDAL, FOUND AT THE MOUNTAINS.



6. DETAIL OF THE SURFACE OF THE THERIAKIA MEDAL, FOUND AT THE MOUNTAINS.

EXCAVATIONS AT PIPPALA

PLAN OF MONASTERIES





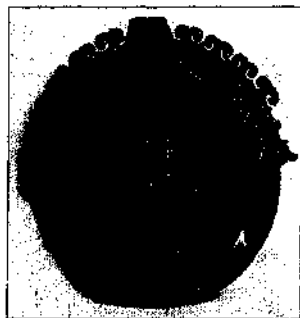
1. BRONZE RECLINING ANIMAL, BELONGING TO AN ANCIENT EGYPTIAN.
LENGTH 8 1/2". WEIGHT 20 G.



2. BRONZE RECLINING ANIMAL, BELONGING TO AN ANCIENT EGYPTIAN.
LENGTH 8 1/2". WEIGHT 20 G.



3. THE RECLINING ANIMAL OF THE ANCIENT EGYPTIAN.



4. CIRCULAR BRONZE OBJECT WITH RECLINING ANIMAL DESIGN.
DIAM. 12". WEIGHT 60 G.



5. SMALL BRONZE OBJECT, WITH RECLINING ANIMAL DESIGN.
DIAM. 12". WEIGHT 60 G.



6. CIRCULAR BRONZE OBJECT WITH RECLINING ANIMAL DESIGN.
DIAM. 12". WEIGHT 60 G.



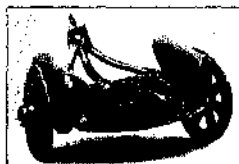
1. COPPER PLATE (TYPE 32).
MUSK, 65847



2. BRONZE BOWL (TYPE 4).
MUSK, 65854



3. BRONZE BOWL (TYPE 4).
MUSK, 65854



4. TEA SET OF COPPER (TYPE 3).
SUKHAI, 27367



5. COPPER BOWL (TYPE 3).
COPPER WITH SMALL TEA SET (TYPE 3).
SUKHAI, 27367



6. BRONZE PLATE WITH LONG HANDLE (TYPE 1).
SUKHAI, 27367



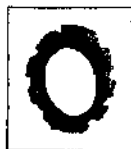
7. BRONZE BOWL (TYPE 4).
MUSK, 65854



8. COPPER BOWL WITH 'POLYPOD' HANDLE (TYPE 1).
SUKHAI, 27367



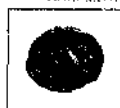
9. BRONZE BOWL (TYPE 4).
SUKHAI, 27367



10. Circular object with scalloped edge, possibly a coin or a small mirror. (See Plate XXVI, Fig. 10.)



11. Small, dark, elongated object, possibly a pin or a small figurine. (See Plate XXVI, Fig. 11.)



12. Small, dark, circular object, possibly a coin or a small mirror. (See Plate XXVI, Fig. 12.)



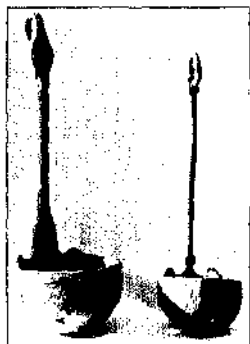
13. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 13.)



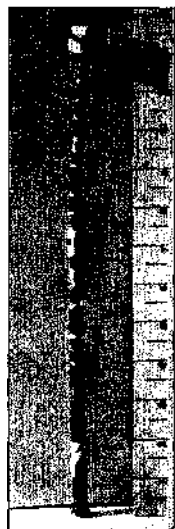
14. Small, dark, circular object, possibly a coin or a small mirror. (See Plate XXVI, Fig. 14.)



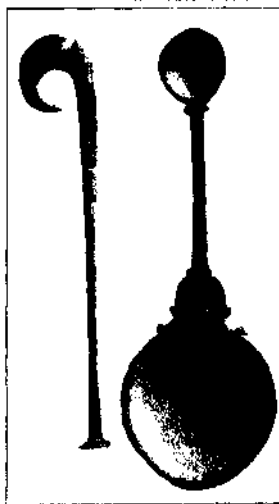
15. Small, dark, irregular object, possibly a piece of pottery or a small figurine. (See Plate XXVI, Fig. 15.)



16. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 16.)

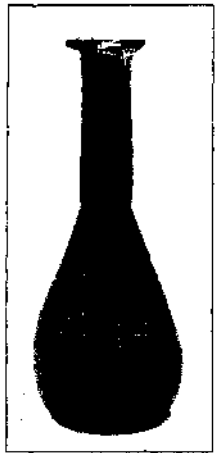


17. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 17.)



18. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 18.)

19. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 19.)

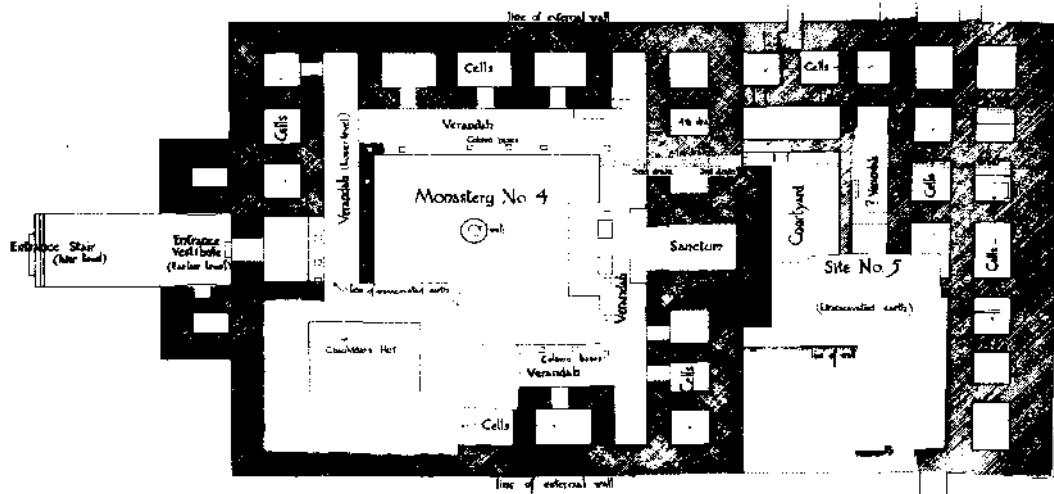


20. Large, dark, irregular object, possibly a piece of pottery or a large figurine. (See Plate XXVI, Fig. 20.)

EXCAVATIONS AT NALANDA

1923-24

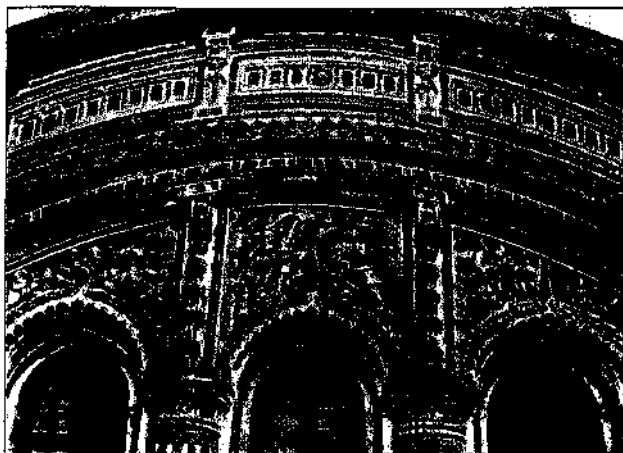
PLATE XXVIII.



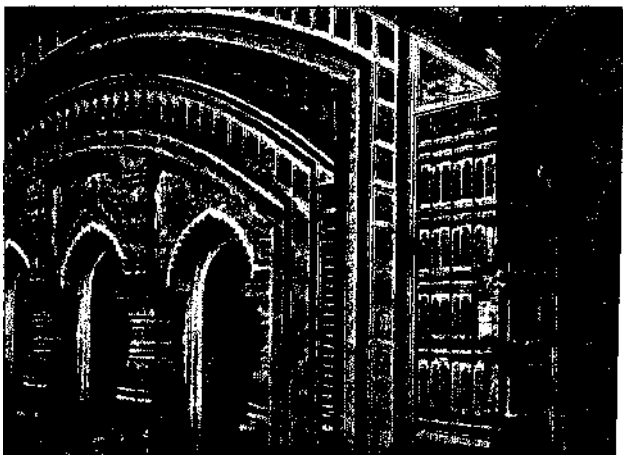
Scale of Feet
0 10 20 30 40

Monastery No. 1 line of external wall.

[Signature]
Superintendent,
Archaeological Survey, Central Circle,
Patna.
MAY 15 1925



56. DETAILS OF CURVED PORTICO IN NORTHERN PORTICO OF THE CHANDANILLA GROUP AT PARANASAR.



57. DETAILS IN CURVED PORTICO IN THE WESTERN TEMPLE OF THE CHANDANILLA GROUP AT PARANASAR.



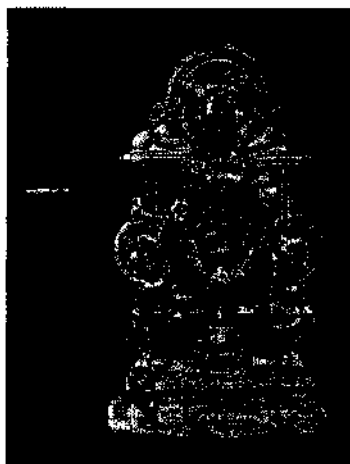
90. INSCRIBED VISUVA IMAGE FROM DEVAGIRI.



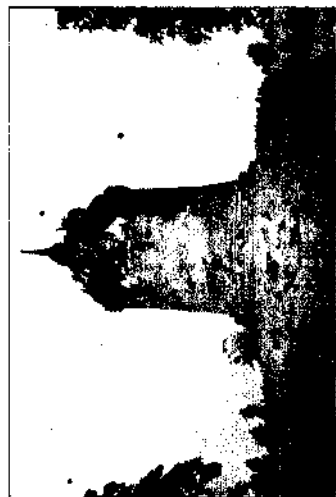
91. IMAGE OF TAEKONQOMI IN MURDER TESTER AT T'AIKORONG.



92. IMAGE OF KHYAKPANG ZONGKARA AT NARIAPOL.



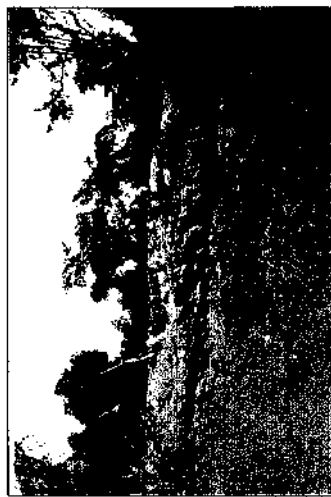
93. INSCRIBED TONKA (MUSE) OF AUBIN FROM KUMARU, NOW AT BARROU MUSEUM.



of Episcopal Church, Boston



of Episcopal Church, Boston





42. Tablet of Hittite from Hittite, Mytilene.

43. A small, rectangular stone tablet, Mytilene.



44. The central symbol.



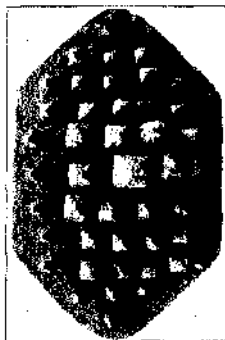
45. The central symbol.



46. The central symbol.



47. The central symbol.



48. An iron plate with a central symbol, at the top of the central symbol, at the top of the central symbol.



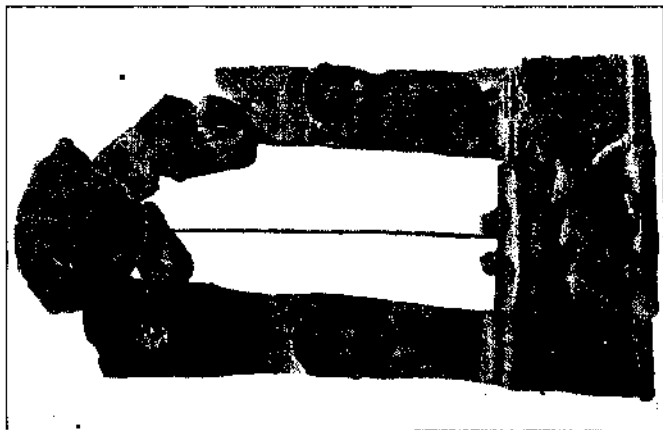
49. An iron plate with a central symbol, at the top of the central symbol, at the top of the central symbol.



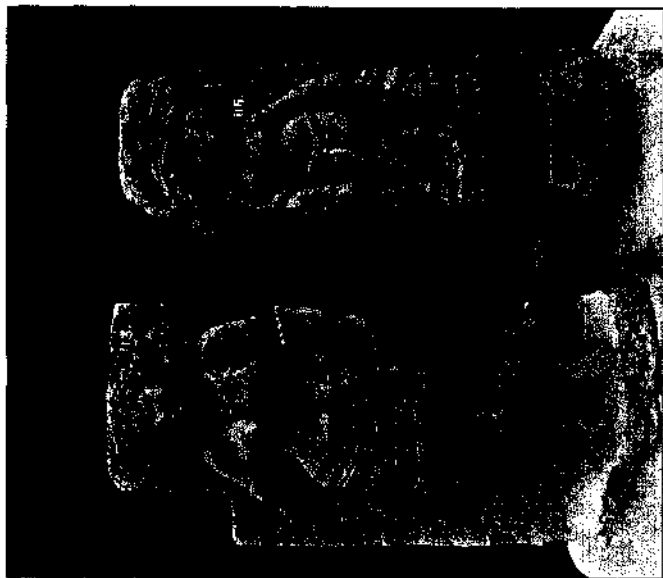
60. RUINS IN TRIVELAKK COMPOUND AT KICHING AFTER CLEARANCE OF DEBRIS, FROM S.W.



61. FOUNDATIONS OF TORII IN TEMPLE OF SIVA UNDER THE KALASNESS DECK, FROM THE WEST.



Fragment of an image of Siva from the Ravana Pratistha.



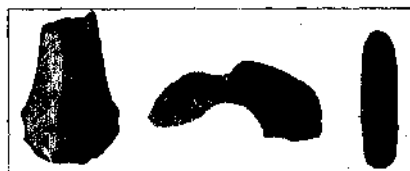
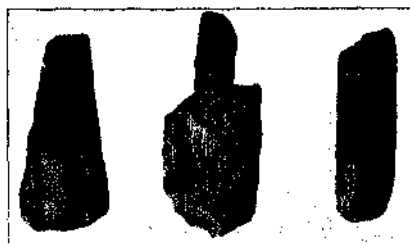
Fragment of an image of Siva from the Ravana Pratistha.



1
2
Obsidian from Bagdad.



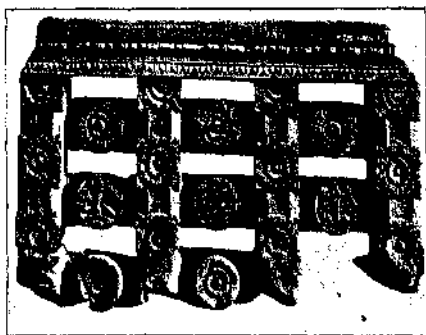
3
4
Obsidian from Dohuk District, Upper Iraq.



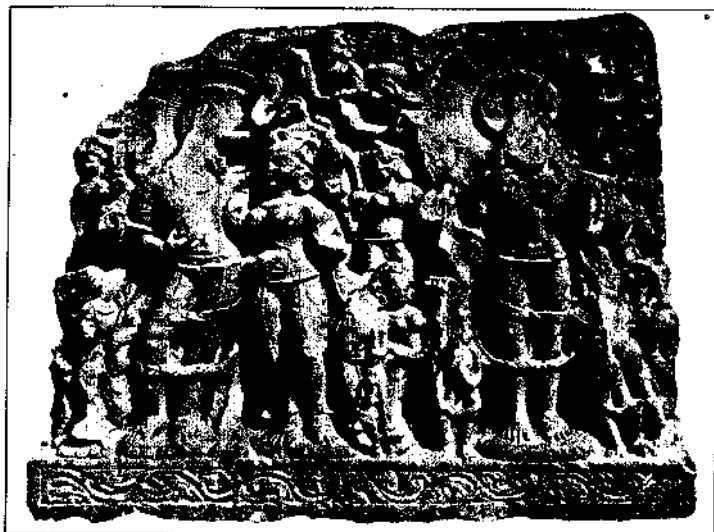
5
6
Obsidian from Maragha, NW Persia.



7
Obsidian from Maragha.



8
Obsidian mosaic tile from Maragha.



6. VISNU AND BHAKTA GATE FROM METHEG.



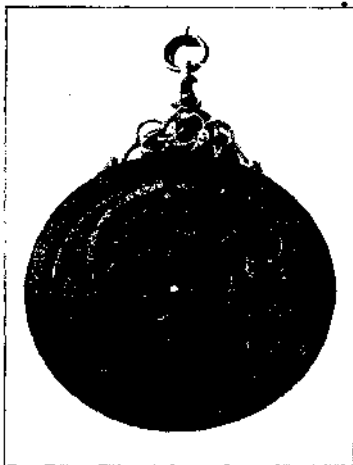
7. ISORUPIN IMAGE OF BHUPALA FROM THIRAI.



8. BHAKTA IMAGE IN METHEG FROM THIRAI.



66. IMAGE OF SHIVA FROM SIKKIM



67. AMBULAKA FROM SIKKIM



68. IMAGE OF VISHNU FROM DIPSANG, TIBET



69. BRASS IMAGE OF VAMACATARA FROM NEPAL

