

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following papers:—

From F. N. THOROWGOOD, Esq., to the Chief Secretary to Government dated Madras, 18th August 1886.

I have the honor to submit herewith two plans and three photographs referring to some ancient graves which have been discovered recently near Pallavaram in the course of quarrying stone for the Madras Harbour works. I also submit a short account of the discoveries so far as I am able to do so.

2. The plan marked No. 1 is traced from the Revenue Survey maps of the district and shows a general view of the country where the remains have been found, and the portion colored red is shown to an enlarged scale on plan No. 2. On this last plan the positions of many (but not all) graves are shown in detail, as well as the direction (as regards the points of the compass) in which they lie.

3. The general surface of the ground is uneven and slightly sloping, covered with vegetation of different sorts and with rocks and boulders cropping up all over the place.

4. In the course of excavation last month (July 1886) some coolies came upon a large round chatty buried about one foot below the surface, and a few minutes afterwards some smaller chatties were opened out. This discovery so alarmed the cooly who laid the chatty bare that, incredible though it may appear, he ran away from work and literally died from fright the same evening. I visited the spot in the course of my usual routine a few days afterwards and carefully examined the ground till I found apparently another chatty in a small watercourse filled with boulders. On excavating round it the chatty was found to be a long chest made of burnt clay standing on ten hollow pottery legs, one of the legs of which I have roughly sketched in figure 1. A slab of stone covered the chest, but this appeared to me to have been the result of accident and not to be laid on the chest by human hands. A pattern or moulding ran round the top edge of the sarcophagus (if such it be) and a slight pattern is shown in the sketch, figure 1. After removing some thick pieces of pottery from the top I very carefully removed all the earth which completely filled the chest, but found nothing whatever inside.

5. Photographs A, B, and C represent the general shape of this and of the other graves discovered, but the first one discovered I broke up in cleaning it out.

6. Since then I have found twenty-one similar cases, varying from six feet in length standing on twelve legs, to two feet four inches in length standing on six legs. It will be observed from the plan that they all lie nearly in a east and west direction.

7. The one represented by photograph A is one of the largest, and is marked at A on plan No. 2. The letters B and C on the plan denote where photographs B and C were taken respectively. The arrow on the photographs gives a bird's eye suggestion of the north point.

8. Photograph C shows one of the small graves or chests, but I have, since the photograph was taken, found a still smaller one lying within five feet of a larger one as in the photograph.

9. At the grave marked D on the plan, within one foot six inches of the chest was found a wide-mouthed vessel of thin black pottery, not similar to the pots now used by natives.

10. The grave E, which is a very fine specimen, I very carefully cleaned out, and found in it chatties and vessels as shown in the accompanying very rough sketches, figures 2, 3, 4, 5, and 6.

11. These articles were all quite full of earth and were distributed over the length of the chest. Not a vestige of a coin, ring, implement or bone was found in any case that I have examined. In case E I found two annular pieces of pottery of thin black material similar to figure 5, but larger in diameter.

12. Distributed about amongst these curious cases are numerous large spherical chatties from twenty to twenty-four inches diameter, some quite close to the surface, others two or three feet, all filled full and tightly with earth.

13. The patterns on the sides of the cases vary and are in some instances absent altogether.

14. It will be understood that I submit this account and these rough sketches, &c., &c., simply with the view to describing briefly what has been found, so that, if the discoveries are held to be of antiquarian interest, some more competent person may take the matter up more thoroughly. In the meantime the relics are being preserved.

15. The photographs were taken by Mr. A. Lee Pogson, Assistant Superintendent, Madras Harbour Works, and, I think, do him great credit.

From the Director-General, Archaeological Survey of India, dated 12th February 1887, No. 141.

From E. THURSTON, Esq., Superintendent, Government Central Museum, to the Chief Secretary to Government, dated Madras, 13th April 1887, No. 361.

I have the honor to forward herewith the reports by Dr. Bidie and myself on the antiquarian discoveries at Pallavaram, in accordance with Public G.O., No. 118, dated 25th January 1887, together with drawings, plans, photographs and correspondence on the subject.

ENCLOSURES.

From G. BIDIE, Esq., M.B., C.I.E., Surgeon-General with the Government of Madras, to the Chief Secretary to Government (through the Superintendent, Government Central Museum), dated Fort St. George, 6th April 1887, No. 224.

With reference to paragraph 2 of G.O., No. 118, of 25th January 1887, I have the honor to report to the Right Honorable the Governor in Council, that in company with Mr. Thorowgood I lately visited the prehistoric graves near Pallavaram. Such burial-places are known to the natives in some districts as *Pandu-kuris* or *Pandu-kulis*, and in other districts as *Pandava-gudlu*, *Pandaval-kovil*, &c.

2. In the place where the earthen vessels described by Mr. Thorowgood were found, the stone circles which usually surround sepulchral tumuli have disappeared, and the earth of the mounds has also been washed away, so that the pottery cists are quite on the surface. This exposure and the porous nature of the soil have led to the entire disappearance of all human remains, not a fragment of a bone having as yet been found.

3. Ancient burial-places are common in Southern India, but differ much in their construction. In some instances they are simply kistvaens, in others—and more commonly,—dolmens or cairns as on the Nilgiris, and lastly, we have the coffin-like vessels, such as those under notice, made of coarse pottery. The dolmens also differ in type, being in some cases roomy stone-built chambers with a cap-stone, the whole being usually buried in the earth; while in other localities they stand free, the dolmen being

surrounded with several circles of stone slabs with rounded tops, like the head-stones in a modern graveyard. Excellent specimens of the latter type exist at Tralabanda, Bapanatham near Palmanér and in the Kolar district, but this style is not common. The dolmens vary in size, some of those buried in tumuli having a floor area of $8\frac{1}{2} + 5\frac{1}{2}$ feet and being as much as $6\frac{1}{2}$ feet in depth. In some cases a rectangular stone slab like a couch or bed, and supported at the corners by bits of stone, like legs, has been found resting on the floor of the dolmen. In fact, the construction of these sepulchral chambers shows some resemblance to the dwellings of the living, and we shall find that the similarity was still further maintained by the deposit along with the dead body of household utensils, arms, ornaments and tools, such as were used by the person when alive. It seems also pretty clear that the tumulus with its dolmen in the interior or outside on the crown of the elevation, and its enclosing concentric circles of stones, was the prototype of the Buddhist tope or dagoba with its rails, mound and relic casket. At present there is no people in Southern India who practise dolmen burial, and the time at which these monuments were constructed is so remote that no existing race has any reminiscences of their origin and all repudiate them.

4. The Pallavaram sarcophagi which have been so well described by Mr. Thorowgood are made of burnt clay, and in one fragment of a broken one which I saw, the hard outer layer of the straw which had been mixed with the clay is still extant. The oblong vessels hitherto seen vary in length from upwards of six feet down to a little over two feet, and stand on strong legs which have somewhat the appearance of a pig's snout, nose downwards. The larger sarcophagi have as many as twelve legs and the smaller six and each leg is hollow, from seven to eight inches high, and pierced about midway with two round holes which were probably made to facilitate the escape of gases in firing the clay. Looking at the vessel sideways, it has at a little distance some resemblance to a big caterpillar. The fragments of the coffins and the pottery found inside them have been deposited in the Museum, and will be described by Dr. Thurston; but I may be permitted to make a few cursory remarks here regarding them, and also with reference to the usual contents of dolmens and kindred structure in Southern India. The upper edge of the Pallavaram sarcophagi appears to be generally defined with a moulding ornamented with oblique depressions made with the tip of the potter's finger. The employment of earthenware coffins instead of chambers made of stone was probably determined by the absence of gneiss capable of being easily split up into thin slabs, which is so common in some other districts. These oblong earthenware sarcophagi have as yet only been found in the districts of Nellore, Chingleput and North Arcot.

5. Mr. Thorowgood also mentions the occurrence of large globular sepulchral urns. These are very common in some districts, and are generally pyriform like the gravid human uterus, and with a process at the small end like the cervix uteri. As man, especially uncultivated man, delights in symbolism, it has occurred to me that the uterine shape of the urn was intended to indicate the return of the body to the womb of mother-earth. This view is further strengthened by the fact that the body must have been placed in the urn in a crouching position just as the foetus is doubled up in the gravid human uterus. In the southern part of the Tamil country these large pots are called *Mudee Muttar tãri* and in the north *Mada Madaka tari*. The popular belief regarding these urns is, according to Bishop Caldwell, that in ancient days men lived to a great age and shrunk to the size of a cat. They were then put in lamp-niches in the walls to keep them out of harm, and when at last the relatives got tired of the aged pigmies they put them in these large jars and left them to die. This is contradicted by the size of the bones found in the urns, which are generally those of ordinary sized individuals, and is simply one of these myths which are sure to fasten on any object or subject the explanation of which is lost in the mists of antiquity. Besides the large pyriform jars there are also occasionally found big vessels of a fusiform shape, and one of these exhumed at Pallavaram has been sent to the Museum by Mr. Thorowgood.

6. The articles which are lodged in dolmens and sarcophagi along with human bones, or in the places which once contained the latter, form a very curious paraphernalia, and plainly point to some glimmering idea of a future life, analogous to the

present, having been entertained by the dolmen builders. Thus there are personal ornaments in the shape of beads, rings, &c., small pots for holding food or water, and various implements and weapons. Some of the beads are cornelian and have some show of patterns on them worked into the stone by grinding, and containing a hard white enamel which renders the patterns more distinct. The dolmen pottery, except the very large sepulchral vessels, has evidently been moulded on a wheel, but unfortunately this does not afford any clue to the age of the articles, as the potter's wheel is depicted on the walls of Thebes, which date centuries anterior to Christ, and we know that it has been used in China for untold ages. In some cases the small articles of dolmen pottery have a fine polish identical with that seen in some modern specimens and which we know is communicated by rubbing the surface with the seeds of *Gyrocarpus Asiaticus*. In addition to this, some articles are ornamented by narrow parallel waved stripes alternately brown and red, and apparently laid on in the shape of colored pigments and then protected by some kind of transparent varnish. Nothing in the shape of inscriptions has ever been found on the pottery, but rectangular hieroglyphics are occasionally seen scratched on some articles, but in forms so simple and showing such a want of uniformity that one can hardly imagine they had any meaning common to a number of people. Everywhere in Southern India a great resemblance may be observed in shape and size of the vessels found in these prehistoric graves, a fact indicative of a primitive state of civilization, for, as culture advances, the forms and ornamentation of pottery become more diverse and complicated.

7. Although the persons who constructed the dolmens and buried in urns were well acquainted with the use of metals, curious to say no coins with one exception have been found in any of the *Pandu-kuris*. The exception referred to occurred in Coimbatore, where it is said some of the irregular shaped punch-struck silver coins called *eldlings*, and bearing rude Buddhist symbols, were found in a grave. Unfortunately we have no certain knowledge as to the age of those coins, although we know that they are very old; Sir W. Elliot says it may be presumed they were found in circulation when the Aryans entered Hindustan. But all that this shows merely is that the dolmens were constructed subsequent to the date of that invasion; how long subsequent we do not know.

8. South Indian dolmens and prehistoric graves differ in one important respect from those found elsewhere, viz., in the fact, that they never contain any implements belonging to the stone age. This, however, is of no value as a chronological fact, as some Indian tribes were making stone hatchets in modern times, and all that it shows, therefore, is that stone implements and weapons were not in common use when the graves were constructed.

9. In a dolmen in the Coimbatore District some small human figures in copper were found. They are now lodged in the Museum and are believed to be of Jain origin. A number of bronze articles also have been found in the curious Nilgiri cairns. Some of those interesting relics have evidently been turned in a lathe; all are of elegant shape and one is more Grecian than Indian in its style and form. But a curious fact connected with the bronzes is, that they are generally found associated with pottery figures of the rudest description representing men and animals, and in one instance a small lingam accompanied them. According to Mr. Broughton the composition of the Nilgiri bronze is copper 70 per cent. and tin 29.89 per cent. This is not the place to discuss the significance of bronzes in South Indian dolmens, &c., as such finds are exceptional and local; but they form such an important link in the yet unexplored history of a very interesting series of antiquities, that it was impossible to avoid all notice of them here.

10. Articles made of iron are very common in the *Pandu-kuris*, and consist of bill-hooks or grass knives, swords, arrow-heads, &c. In most cases the metal has been completely destroyed by rust, but the articles still retain their original shape, and if carefully handled may be preserved by soaking them in glue and then covering with varnish. So far I believe no trace of iron has been found amongst the contents of the pottery coffins of Pallavaram, but its absence in the graves hitherto opened may be due to the same condition as has caused all traces of bones to disappear, viz.,

their proximity to the surface. In others with a good protective covering of earth it is probable that iron articles will be found. The presence of iron in these graves unfortunately gives no clue as to the date of the dolmens, for so far as we know this metal was extracted from the ore and used in the arts centuries before the dawn of the Christian era. In discussing the antiquity of the iron age in India, Fergusson in his "Rude Stone Monuments" points out, that in the third or fourth century of our era the natives made the great iron pillar at the mosque near the Kutub Delhi, a feat of mechanical skill which could not, owing to the size of the structure, have been executed in any country in Europe before the introduction of steam machinery and the Nasmyth hammer.

11. The most important contents of prehistoric sepulchres are of course human bones, but in many cases only the dust remains or the bones have suffered so much from decay as to be of little scientific value. So far as I know no complete specimen of a skull has ever been found, but the fragments would seem to indicate that the people were dolicho-cephalic and had low, narrow, retreating foreheads. The fragments of other parts of the skeleton found indicate that the individuals were of no great size.

12. Sir Walter Elliot held the opinion, and so do others, that the dolmens were erected by the Kurumbers, and this view receives support from the fact that at the present time the shepherds of this race in North Arcot erect dolmens upon a small scale when a Goudu or head of a sept dies. On the other hand, it seems strange that any great difference should be found in the plan of such monuments if they were the work of one race.

13. It appears to me that not one but many races living at different times were the constructors of the dolmens. In fact, that these structures indicate a certain stage in the mental history of a people, and are due to a psychological principle which is the constant outcome of intellectual development. "The association of ideas, the need of giving to them a natural and sensible expression, the desire of perpetuating the memory of an important event, such would be the entirely psychological explanation of the origin of the monuments in question, whether the *obos* of the Mongols, the *kurgans* of Siberia, the *tumuli* of the mound-builders, or the *cromlechs*, the *peulrans*, the *dolmens*, and the *menhirs* of Brittany, India and Africa." The differences which we see in them would probably be due to the nature of the constructive materials available, and to the variation in customs and beliefs.

APPENDIX to Dr. Bidie's Report on the discovery of graves near Pallavaram.

With reference to paragraph 2 of G.O., No. 118, dated 25th January 1887, I have the honor to report that I have visited the site of the ancient graves on the slope of the hill at Pallavaram and to forward some drawings of some of the relics which have been unearthed during recent excavations.

As indicated in the plans and photographs forwarded to Government by Mr. F. N. Thorowgood, the general direction of the graves is east and west. Those graves which I myself saw brought to light were so brittle, and broke so easily when deprived of the support of the surrounding earth, that it was impossible to remove them in their entirety. Fragments of the graves, showing the crude attempt at ornamentation, and of the hollow legs by which they were supported, have been presented to the Government Central Museum by Mr. F. N. Thorowgood and Mr. A. Rea. The large urn made of red clay referred to by Dr. Bidie in his report (paragraph 5) measures 34 inches in length and 16 inches in its widest diameter, and has been deposited in the Central Museum, as likewise have a number of the black or red clay chatties, vases and other utensils which have been discovered at Pallavaram, and resemble those described by Mr. Maurice Phillips* as having been found in tumuli in the Salem District. Like the graves, many of these utensils are very brittle, but some are in a good state of preservation.

No trace of iron implements, beads, coins or bones has, so far as I am aware, been as yet discovered at Pallavaram, but it is possible that future search may bring further objects of antiquarian interest to light.

MADRAS,
13th April 1887.

(Signed) E. THURSTON,
Superintendent, Govt. Central Museum.

* Report of Tumuli or ancient Burial-places in the Salem District, 1872.

ORDER—dated 12th May 1887, No. 671, Public.

Communicated to the Director-General of Archaeological Survey in India with reference to his letter, No. 141, dated 12th February 1887.

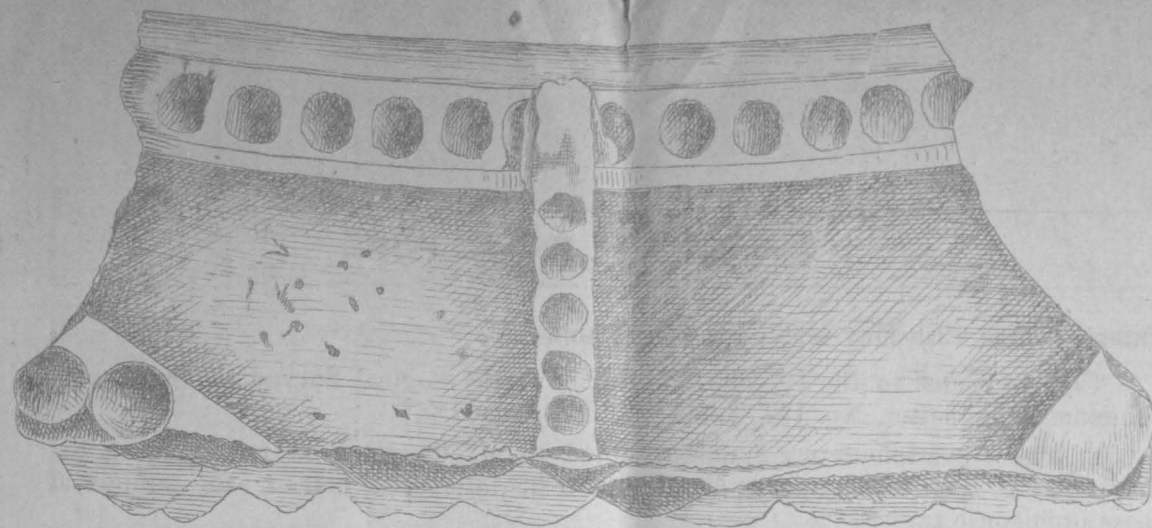
2. The Government are much indebted to Mr. Thorowgood for bringing his discoveries to their notice, and to Dr. Bidie for his interesting notes on the subject of these prehistoric graves.

(True Extract.)

H. E. STOKES,
Ag. Chief Secretary.

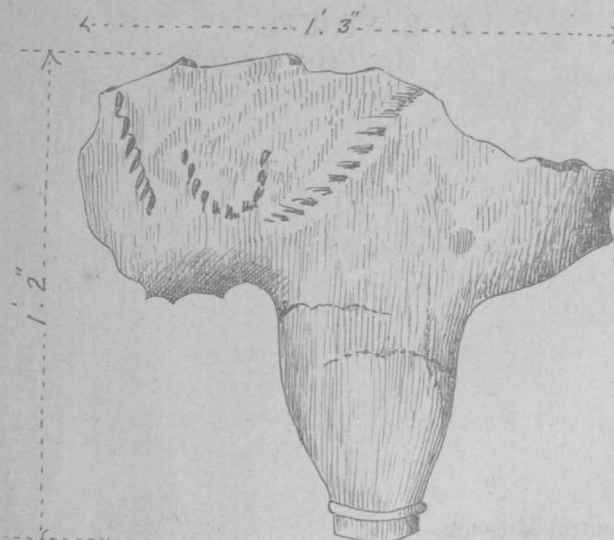
To F. N. Thorowgood, Esq.
„ Surgeon-General G. Bidie, C.I.E.
„ E. Thurston, Esq., Superintendent, Government Central Museum.
„ the Director-General, Archaeological Survey of India.
„ A. Rea, Esq.
„ the Collector of Chingleput.
„ the Public Works Department.

Exd. L. Passaigne.



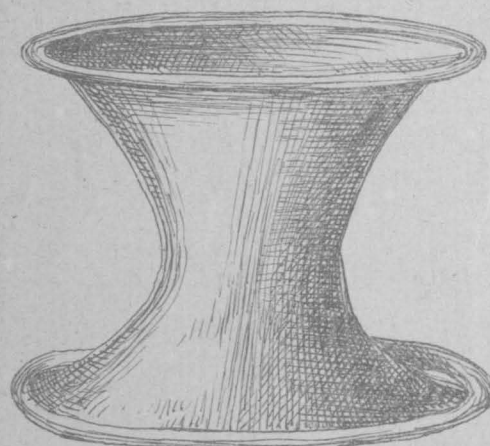
PORTION OF GRAVE SHEWING MOULDING. PALLAVERAM.

1/2 NAT. SIZE.



FRAGMENT OF (SUPPOSED) HEAD END OF GRAVE.

FIG: I.



ONE OF THESE FOUND IN GRAVE. BLACK COLOUR.
HOLLOW AND WITH NO BOTTOM 5 1/4" DIAMETER

FIG: 5.



FIG: 6.

ONE OF THESE FOUND IN GRAVE. BLACK COLOUR. 8" HIGH.

LITHO BY R. BALDREY 601 LITHO DEPT. MADRAS.



TWO OF THESE FOUND IN GRAVE.
BLACK COLOUR. 3 1/2" HIGH

FIG: 2.



ONE OF THESE FOUND IN GRAVE. YELLOW COLOUR. 5" HIGH

FIG: 3.

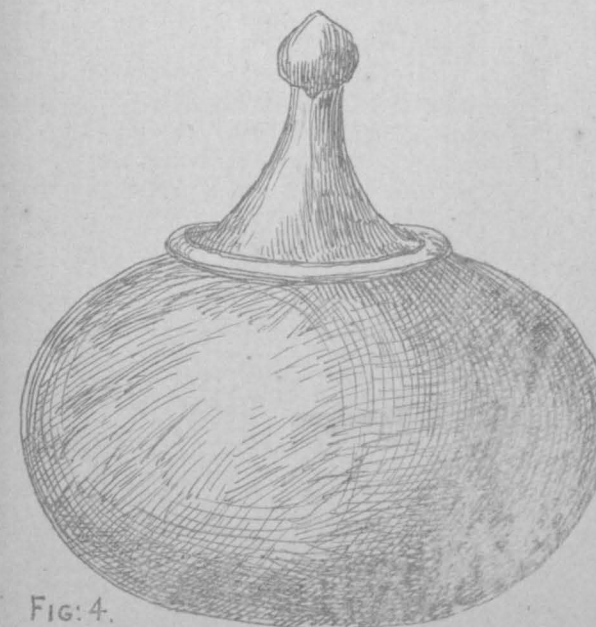


FIG: 4.

ONE OF THESE FOUND IN GRAVE.
BLACK COLOUR. 8" DIAMETER
LID FOUND SEPARATE.

(Signed) F. N. Thorowgood

18.5.86.

Govt. of (1887) Madras.

PUBLIC.

Order thereon No. 1729 W
a/28th June/87.

Communicated
to the Suplt Engr & Civil
in contrⁿ of G.O. No. 300
Wd. 4-2-87.

(Ed) 20 &
W

Issued

Recd.

Encl.

G.O., 12th May 1887, No. 671.

No. 1729 W a/28th June/87
MAY.

Archæology.

Communicating to the Director-General of
Archæological Survey in India reports by Drs.
Bidie and Thurston on the antiquarian discoveries
at Pallavaram; and expressing indebtedness to
Mr. Thorowgood and to Dr. Bidie in connection
therewith.

6TH DECEMBER 1886, No. 2532, PUBLIC.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper:—

From Dr. J. BURGESS, C.I.E., Director-General, Archæological Survey of India,
to the Chief Secretary to Government, dated Madras, 22nd November 1886,
No. 551.

With reference to Mr. Rea's report, and G.O., dated 7th October 1886, No. 2102,
I have the honor to remark that I have this day visited Pallavaram, for the purpose
of inspecting the primitive graves and grave circles; and regret to have to call the
attention of Government to the following:—

2. As pointed out by Mr. Rea in his communication, dated 7th September 1886,
the heavy rains naturally swelled the earth, and in all the graves I have seen, the
earthenware coffins are now burst and broken. Cattle stepping over them have also
contributed to the general destruction. The stone circles also, with one or two excep-
tions of minor importance, have been, in whole or part, dug up, and the stones broken
and removed. It is much to be deplored that full two months have elapsed since the
attention of Government was called to these very ancient and interesting remains; and
no action has yet been put in force by Government for their protection; and that,
notwithstanding the recent orders of the Government of India for the protection of
such remains from the vandalism, or worse, of contractors, these have been to such a
large extent destroyed.

3. If they could now be promptly protected from every further interference, it
may be possible that, notwithstanding the very large number of graves wantonly
exposed, there may still be some that have not been interfered with, and, if protected
till after the rains, it might be possible, under special skilled supervision, to exhume
and remove one or more of these remarkable coffins, entire, to the Museum. Mr. Rea,
I think, could do this. Regretting that so little attention is paid to antiquarian objects
of such peculiar interest,—I have, &c.,

ORDER—dated 6th December 1886, No. 2532, Public.

Communicated to the Collector of Chingleput, for report and action with reference
to paragraph 3 of Dr. Burgess' letter.

(True Extract.)

H. E. STOKES,
Ag. Chief Secretary.

To the Collector of Chingleput.
„ the Director-General, Archæological Survey of India.
„ A. Rea, Esq.
Copy to the Public Works Department.

Exd. A. Raitt.

SE & Civil.

No 3349 May 18-12-86.

Govt. of (1886) Madras.

Communicated to the
Supg. Engineer & Circle

1st of Jan

W

Issued

Recd.

Encl.

G.O., 6th December 1886, No. 2532.

No 3349 May 18-12-86

DECEMBER.

Vide Ch. 72 with Saw as/1

Archæology.

Communicating to the Collector of Chingleput, for report and action, letter from the Director-General, Archæological Survey, regarding the injury done to the primitive graves recently discovered near Pallavaram, and their future preservation.

S. E. V. Circle

With order

25TH JANUARY 1887, No. 118, PUBLIC.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following papers :—

From J. BURGESS, Esq., LL.D., C.I.E., Director-General, Archæological Survey of India, to the Chief Secretary to Government, dated Madras, 1st January 1887, No. 2.

On Thursday last, in company with the Collector of Chingleput and Mr. Thorowgood, I visited the prehistoric graves and stone circles at Pallavaram. I then learnt for the first time that Mr. Thorowgood had reported on these remains as early as August last, and I have the honor to request the favor of a perusal of all the correspondence relating to the subject.

2. The Collector, Mr. Johnson, has forbidden any quarrying on the hill where the best specimens of the stone circles are still left; and if the uncovered graves near the quarries could be protected from cattle or other molestation until the rains are well over, Mr. Rea might attempt the removal of one or two of the most perfect to the Government Museum.

From E. C. JOHNSON, Esq., Acting Collector of Chingleput, to the Chief Secretary to Government, dated Saidápet, 5th January 1887, No. 3.

With reference to the instructions contained in G.O., No. 2532, Public, dated 6th December 1886, I have the honor to report that I have visited the site of the archæological curiosities therein referred to in company with Dr. Burgess, and have made arrangements for their preservation.

2. The pottery coffins first found (as related in Mr. Rea's letter, embodied in G.O., No. 2102, Public, dated 7th October 1886), were situated below the Tirusulam western hill, where quarrying for the harbour works is in full swing, and where it would be inadvisable to interfere with it; nor is it necessary to do so, as the coffins are not by any means confined to this locality; portions of similar ones being exposed in the course of every water channel crossing the plain to the south of the eastern Tirusulam hill over an area of a square mile. None of these have as yet been excavated; Dr. Burgess and Mr. Rea being of opinion that the only chance of getting any out intact is to attempt the operation in the very dryest weather. Steps have been taken to prevent this area being disturbed by any, except the officers of the Archæological Department.

3. The whole of the eastern hill at Tirusulam, nearly half a mile in length, has been at one time covered with sepulchral boulder circles, each of which probably had a cairn or dolmen in the centre. Except in three cases the central stones have disappeared, and in many cases the outer ring of boulders has also been damaged, sometimes by quarrying, as often by diluviation. As there is no present necessity for quarrying on this hill, there being ample material elsewhere in the neighbourhood, I have, after consulting with Mr. Thorowgood, the Superintendent of the Harbour Works, forbidden quarrying on and at the foot of this hill altogether. This order will cause no inconvenience at present, nor probably for a good many years to come; should it, in future, be found that the hill or any part of it is required for quarrying purposes, it will then be necessary for the Archæological Department to say definitely how much of it should be permanently reserved.

ORDER—dated 25th January 1887, No. 118, Public.

Recorded.

2. The Government await the report of the visit promised by Dr. Thurston and Surgeon-General Bidie to these graves.

3. The undermentioned documents will be forwarded to the Director-General of Archaeological Survey of India for perusal and return :—

Demi-official from Mr. F. N. Thorowgood, dated 2nd August 1886.

Do. from Surgeon-General Bidie „ 4th „ „

Do. from Mr. F. N. Thorowgood „ 7th „ „

Letter from Dr. Thurston, Superintendent, Government Central Museum, dated 22nd December 1886.

4. Some photographs and plans submitted by Mr. Thorowgood, and which were sent to the Superintendent, Government Central Museum, will be forwarded to Dr. Burgess when returned by that officer.

(True Extract.)

H. E. STOKES,
Ag. Chief Secretary.

To the Collector of Chingleput.

„ the Director-General, Archaeological Survey of India, with papers.

„ A. Rea, Esq.

„ Surgeon-General G. Bidie, C.I.E.

„ E. Thurston, Esq., Superintendent, Government Central Museum.

Copy to the Public Works Department.

F. N. Thorowgood, Esq.

Govt. of (1887) Madras.

PUBLIC.

N^o 304 N^o 4-2-87
Communicated
to the Supdy. Engineer,
V circle, in continua-
-tion of G.O. No. 3349W.
dated 18th Dec. 1886.

(sd) J. O. H.

W.

Issued

Recd.

Encl.

G.O., 25th January 1887, No. 118.

JANUARY.

Archæology.

Recording, with remarks, letters from the
Director-General, Archæological Survey of India,
and the Collector of Chingleput respecting the
prehistoric graves recently discovered at Pallá-
varam.

12TH MAY 1887, No. 671, PUBLIC.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following papers:—

From F. N. THOROWGOOD, Esq., to the Chief Secretary to Government
dated Madras, 18th August 1886.

I have the honor to submit herewith two plans and three photographs referring
to some ancient graves which have been discovered recently near Pallávaram in the
course of quarrying stone for the Madras Harbour works. I also submit a short account
of the discoveries so far as I am able to do so.

2. The plan marked No. 1 is traced from the Revenue Survey maps of the district
and shows a general view of the country where the remains have been found, and the
portion colored red is shown to an enlarged scale on plan No. 2. On this last plan
the positions of many (but not all) graves are shown in detail, as well as the direction
(as regards the points of the compass) in which they lie.

3. The general surface of the ground is uneven and slightly sloping, covered
with vegetation of different sorts and with rocks and boulders cropping up all over
the place.

4. In the course of excavation last month (July 1886) some coolies came upon a
large round chatty buried about one foot below the surface, and a few minutes after-
wards some smaller chatties were opened out. This discovery so alarmed the cooly
who laid the chatty bare that, incredible though it may appear, he ran away from
work and literally died from fright the same evening. I visited the spot in the course
of my usual routine a few days afterwards and carefully examined the ground till I
found apparently another chatty in a small watercourse filled with boulders. On
excavating round it the chatty was found to be a long chest made of burnt clay stand-
ing on ten hollow pottery legs, one of the legs of which I have roughly sketched in
figure 1. A slab of stone covered the chest, but this appeared to me to have been the
result of accident and not to be laid on the chest by human hands. A pattern or
moulding ran round the top edge of the sarcophagus (if such it be) and a slight pattern
is shown in the sketch, figure 1. After removing some thick pieces of pottery from the
top I very carefully removed all the earth which completely filled the chest, but found
nothing whatever inside.

5. Photographs A, B, and C represent the general shape of this and of the other
graves discovered, but the first one discovered I broke up in cleaning it out.

6. Since then I have found twenty-one similar cases, varying from six feet in length
standing on twelve legs, to two feet four inches in length standing on six legs. It will
be observed from the plan that they all lie nearly in a east and west direction.

7. The one represented by photograph A is one of the largest, and is marked at
A on plan No. 2. The letters B and C on the plan denote where photographs B and
C were taken respectively. The arrow on the photographs gives a bird's eye sugges-
tion of the north point.

8. Photograph C shows one of the small graves or chests, but I have, since the
photograph was taken, found a still smaller one lying within five feet of a larger one
as in the photograph.

Supdy. Eng. V circle.

With order

9. At the grave marked D on the plan, within one foot six inches of the chest was found a wide-mouthed vessel of thin black pottery, not similar to the pots now used by natives.

10. The grave E, which is a very fine specimen, I very carefully cleaned out, and found in it chatties and vessels as shown in the accompanying very rough sketches, figures 2, 3, 4, 5, and 6.

11. These articles were all quite full of earth and were distributed over the length of the chest. Not a vestige of a coin, ring, implement or bone was found in any case that I have examined. In case E I found two annular pieces of pottery of thin black material similar to figure 5, but larger in diameter.

12. Distributed about amongst these curious cases are numerous large spherical chatties from twenty to twenty-four inches diameter, some quite close to the surface, others two or three feet, all filled full and tightly with earth.

13. The patterns on the sides of the cases vary and are in some instances absent altogether.

14. It will be understood that I submit this account and these rough sketches, &c., &c., simply with the view to describing briefly what has been found, so that, if the discoveries are held to be of antiquarian interest, some more competent person may take the matter up more thoroughly. In the meantime the relics are being preserved.

15. The photographs were taken by Mr. A. Lee Pogson, Assistant Superintendent, Madras Harbour Works, and, I think, do him great credit.

From the Director-General, Archaeological Survey of India, dated 12th February 1887, No. 141.

From E. THURSTON, Esq., Superintendent, Government Central Museum, to the Chief Secretary to Government, dated Madras, 13th April 1887, No. 361.

I have the honor to forward herewith the reports by Dr. Bidie and myself on the antiquarian discoveries at Pallavaram, in accordance with Public G.O., No. 118, dated 25th January 1887, together with drawings, plans, photographs and correspondence on the subject.

ENCLOSURES.

From G. BIDIE, Esq., M.B., C.I.E., Surgeon-General with the Government of Madras, to the Chief Secretary to Government (through the Superintendent, Government Central Museum), dated Fort St. George, 6th April 1887, No. 224.

With reference to paragraph 2 of G.O., No. 118, of 25th January 1887, I have the honor to report to the Right Honorable the Governor in Council, that in company with Mr. Thorowgood I lately visited the prehistoric graves near Pallavaram. Such burial-places are known to the natives in some districts as *Pandu-kuris* or *Pandu-kulis*, and in other districts as *Pandava-gudlu*, *Pandaval-kovil*, &c.

2. In the place where the earthen vessels described by Mr. Thorowgood were found, the stone circles which usually surround sepulchral tumuli have disappeared, and the earth of the mounds has also been washed away, so that the pottery cists are quite on the surface. This exposure and the porous nature of the soil have led to the entire disappearance of all human remains, not a fragment of a bone having as yet been found.

3. Ancient burial-places are common in Southern India, but differ much in their construction. In some instances they are simply kistvaens, in others—and more commonly,—dolmens or cairns as on the Nilgiris, and lastly, we have the coffin-like vessels, such as those under notice, made of coarse pottery. The dolmens also differ in type, being in some cases roomy stone-built chambers with a cap-stone, the whole being usually buried in the earth; while in other localities they stand free, the dolmen being

surrounded with several circles of stone slabs with rounded tops, like the head-stones in a modern graveyard. Excellent specimens of the latter type exist at Tralabanda, Bapanatham near Palmanér and in the Kolar district, but this style is not common. The dolmens vary in size, some of those buried in tumuli having a floor area of $8\frac{1}{2} + 5\frac{1}{2}$ feet and being as much as $6\frac{1}{2}$ feet in depth. In some cases a rectangular stone slab like a couch or bed, and supported at the corners by bits of stone, like legs, has been found resting on the floor of the dolmen. In fact, the construction of these sepulchral chambers shows some resemblance to the dwellings of the living, and we shall find that the similarity was still further maintained by the deposit along with the dead body of household utensils, arms, ornaments and tools, such as were used by the person when alive. It seems also pretty clear that the tumulus with its dolmen in the interior or outside on the crown of the elevation, and its enclosing concentric circles of stones, was the prototype of the Buddhist tope or dagoba with its rails, mound and relic casket. At present there is no people in Southern India who practise dolmen burial, and the time at which these monuments were constructed is so remote that no existing race has any reminiscences of their origin and all repudiate them.

4. The Pallavaram sarcophagi which have been so well described by Mr. Thorowgood are made of burnt clay, and in one fragment of a broken one which I saw, the hard outer layer of the straw which had been mixed with the clay is still extant. The oblong vessels hitherto seen vary in length from upwards of six feet down to a little over two feet, and stand on strong legs which have somewhat the appearance of a pig's snout, nose downwards. The larger sarcophagi have as many as twelve legs and the smaller six and each leg is hollow, from seven to eight inches high, and pierced about midway with two round holes which were probably made to facilitate the escape of gases in firing the clay. Looking at the vessel sideways, it has at a little distance some resemblance to a big caterpillar. The fragments of the coffins and the pottery found inside them have been deposited in the Museum, and will be described by Dr. Thurston; but I may be permitted to make a few cursory remarks here regarding them, and also with reference to the usual contents of dolmens and kindred structure in Southern India. The upper edge of the Pallavaram sarcophagi appears to be generally defined with a moulding ornamented with oblique depressions made with the tip of the potter's finger. The employment of earthenware coffins instead of chambers made of stone was probably determined by the absence of gneiss capable of being easily split up into thin slabs, which is so common in some other districts. These oblong earthenware sarcophagi have as yet only been found in the districts of Nellore, Chingleput and North Arcot.

5. Mr. Thorowgood also mentions the occurrence of large globular sepulchral urns. These are very common in some districts, and are generally pyriform like the gravid human uterus, and with a process at the small end like the cervix uteri. As man, especially uncultivated man, delights in symbolism, it has occurred to me that the uterine shape of the urn was intended to indicate the return of the body to the womb of mother-earth. This view is further strengthened by the fact that the body must have been placed in the urn in a crouching position just as the fœtus is doubled up in the gravid human uterus. In the southern part of the Tamil country these large pots are called *Mudee Muttar tãri* and in the north *Mada Madaka tari*. The popular belief regarding these urns is, according to Bishop Caldwell, that in ancient days men lived to a great age and shrunk to the size of a cat. They were then put in lamp-niches in the walls to keep them out of harm, and when at last the relatives got tired of the aged pigmies they put them in these large jars and left them to die. This is contradicted by the size of the bones found in the urns, which are generally those of ordinary sized individuals, and is simply one of these myths which are sure to fasten on any object or subject the explanation of which is lost in the mists of antiquity. Besides the large pyriform jars there are also occasionally found big vessels of a fusiform shape, and one of these exhumed at Pallavaram has been sent to the Museum by Mr. Thorowgood.

6. The articles which are lodged in dolmens and sarcophagi along with human bones, or in the places which once contained the latter, form a very curious paraphernalia, and plainly point to some glimmering idea of a future life, analogous to the

present, having been entertained by the dolmen builders. Thus there are personal ornaments in the shape of beads, rings, &c., small pots for holding food or water, and various implements and weapons. Some of the beads are cornelian and have some show of patterns on them worked into the stone by grinding, and containing a hard white enamel which renders the patterns more distinct. The dolmen pottery, except the very large sepulchral vessels, has evidently been moulded on a wheel, but unfortunately this does not afford any clue to the age of the articles, as the potter's wheel is depicted on the walls of Thebes, which date centuries anterior to Christ, and we know that it has been used in China for untold ages. In some cases the small articles of dolmen pottery have a fine polish identical with that seen in some modern specimens and which we know is communicated by rubbing the surface with the seeds of *Gyrocarpus Asiaticus*. In addition to this, some articles are ornamented by narrow parallel waved stripes alternately brown and red, and apparently laid on in the shape of colored pigments and then protected by some kind of transparent varnish. Nothing in the shape of inscriptions has ever been found on the pottery, but rectangular hieroglyphics are occasionally seen scratched on some articles, but in forms so simple and showing such a want of uniformity that one can hardly imagine they had any meaning common to a number of people. Everywhere in Southern India a great resemblance may be observed in shape and size of the vessels found in these prehistoric graves, a fact indicative of a primitive state of civilization, for, as culture advances, the forms and ornamentation of pottery become more diverse and complicated.

7. Although the persons who constructed the dolmens and buried in urns were well acquainted with the use of metals, curious to say no coins with one exception have been found in any of the *Pandu-kuris*. The exception referred to occurred in Coimbatore, where it is said some of the irregular shaped punch-struck silver coins called *eldlings*, and bearing rude Buddhist symbols, were found in a grave. Unfortunately we have no certain knowledge as to the age of those coins, although we know that they are very old; Sir W. Elliot says it may be presumed they were found in circulation when the Aryans entered Hindustan. But all that this shows merely is that the dolmens were constructed subsequent to the date of that invasion; how long subsequent we do not know.

8. South Indian dolmens and prehistoric graves differ in one important respect from those found elsewhere, viz., in the fact, that they never contain any implements belonging to the stone age. This, however, is of no value as a chronological fact, as some Indian tribes were making stone hatchets in modern times, and all that it shows, therefore, is that stone implements and weapons were not in common use when the graves were constructed.

9. In a dolmen in the Coimbatore District some small human figures in copper were found. They are now lodged in the Museum and are believed to be of Jain origin. A number of bronze articles also have been found in the curious Nilgiri cairns. Some of those interesting relics have evidently been turned in a lathe; all are of elegant shape and one is more Grecian than Indian in its style and form. But a curious fact connected with the bronzes is, that they are generally found associated with pottery figures of the rudest description representing men and animals, and in one instance a small lingum accompanied them. According to Mr. Broughton the composition of the Nilgiri bronze is copper 70 per cent. and tin 29.89 per cent. This is not the place to discuss the significance of bronzes in South Indian dolmens, &c., as such finds are exceptional and local; but they form such an important link in the yet unexplored history of a very interesting series of antiquities, that it was impossible to avoid all notice of them here.

10. Articles made of iron are very common in the *Pandu-kuris*, and consist of bill-hooks or grass knives, swords, arrow-heads, &c. In most cases the metal has been completely destroyed by rust, but the articles still retain their original shape, and if carefully handled may be preserved by soaking them in glue and then covering with varnish. So far I believe no trace of iron has been found amongst the contents of the pottery coffins of Pallavaram, but its absence in the graves hitherto opened may be due to the same condition as has caused all traces of bones to disappear, viz.,

their proximity to the surface. In others with a good protective covering of earth it is probable that iron articles will be found. The presence of iron in these graves unfortunately gives no clue as to the date of the dolmens, for so far as we know this metal was extracted from the ore and used in the arts centuries before the dawn of the Christian era. In discussing the antiquity of the iron age in India, Fergusson in his "Rude Stone Monuments" points out, that in the third or fourth century of our era the natives made the great iron pillar at the mosque near the Kutub Delhi, a feat of mechanical skill which could not, owing to the size of the structure, have been executed in any country in Europe before the introduction of steam machinery and the Nasmyth hammer.

11. The most important contents of prehistoric sepulchres are of course human bones, but in many cases only the dust remains or the bones have suffered so much from decay as to be of little scientific value. So far as I know no complete specimen of a skull has ever been found, but the fragments would seem to indicate that the people were dolicho-cephalic and had low, narrow, retreating foreheads. The fragments of other parts of the skeleton found indicate that the individuals were of no great size.

12. Sir Walter Elliot held the opinion, and so do others, that the dolmens were erected by the Kurumbers, and this view receives support from the fact that at the present time the shepherds of this race in North Arcot erect dolmens upon a small scale when a Goudu or head of a sept dies. On the other hand, it seems strange that any great difference should be found in the plan of such monuments if they were the work of one race.

13. It appears to me that not one but many races living at different times were the constructors of the dolmens. In fact, that these structures indicate a certain stage in the mental history of a people, and are due to a psychological principle which is the constant outcome of intellectual development. "The association of ideas, the need of giving to them a natural and sensible expression, the desire of perpetuating the memory of an important event, such would be the entirely psychological explanation of the origin of the monuments in question, whether the *obos* of the Mongols, the *kurgans* of Siberia, the *tumuli* of the mound-builders, or the *cromlechs*, the *peulrans*, the *dolmens*, and the *menhirs* of Brittany, India and Africa." The differences which we see in them would probably be due to the nature of the constructive materials available, and to the variation in customs and beliefs.

APPENDIX to Dr. Bidie's Report on the discovery of graves near Pallavaram.

With reference to paragraph 2 of G.O., No. 118, dated 25th January 1887, I have the honor to report that I have visited the site of the ancient graves on the slope of the hill at Pallavaram and to forward some drawings of some of the relics which have been unearthed during recent excavations.

As indicated in the plans and photographs forwarded to Government by Mr. F. N. Thorowgood, the general direction of the graves is east and west. Those graves which I myself saw brought to light were so brittle, and broke so easily when deprived of the support of the surrounding earth, that it was impossible to remove them in their entirety. Fragments of the graves, showing the crude attempt at ornamentation, and of the hollow legs by which they were supported, have been presented to the Government Central Museum by Mr. F. N. Thorowgood and Mr. A. Rea. The large urn made of red clay referred to by Dr. Bidie in his report (paragraph 5) measures 34 inches in length and 16 inches in its widest diameter, and has been deposited in the Central Museum, as likewise have a number of the black or red clay chatties, vases and other utensils which have been discovered at Pallavaram, and resemble those described by Mr. Maurice Phillips* as having been found in tumuli in the Salem District. Like the graves, many of these utensils are very brittle, but some are in a good state of preservation.

No trace of iron implements, beads, coins or bones has, so far as I am aware, been as yet discovered at Pallavaram, but it is possible that future search may bring further objects of antiquarian interest to light.

MADRAS,
13th April 1887.

(Signed) E. THURSTON,
Superintendent, Govt. Central Museum.

* Report of Tumuli or ancient Burial-places in the Salem District, 1872.

ORDER—dated 12th May 1887, No. 671, Public.

Communicated to the Director-General of Archæological Survey in India with reference to his letter, No. 141, dated 12th February 1887.

2. The Government are much indebted to Mr. Thorowgood for bringing his discoveries to their notice, and to Dr. Bidie for his interesting notes on the subject of these prehistoric graves.

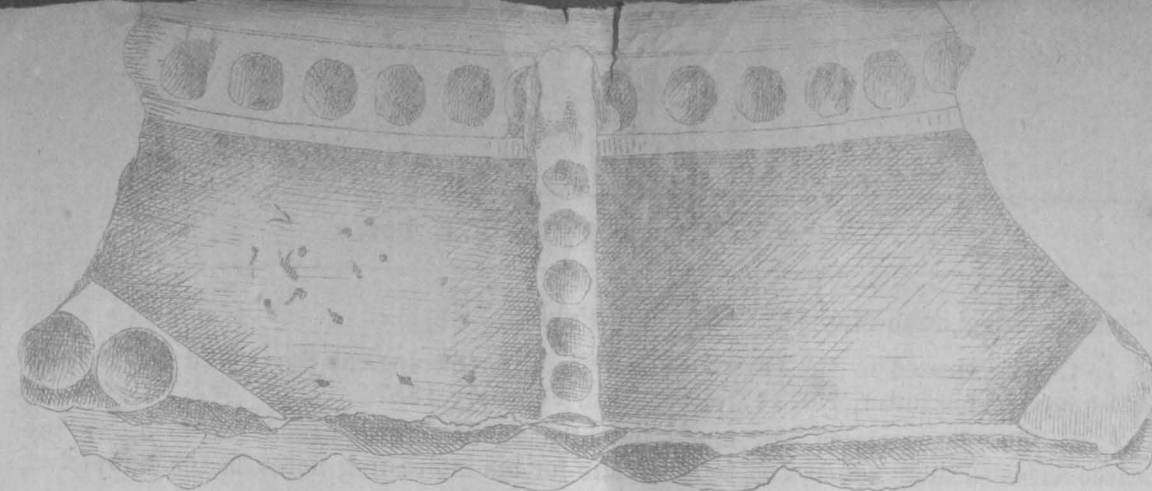
(True Extract.)

W. Stoth

Ag. Chief Secretary.

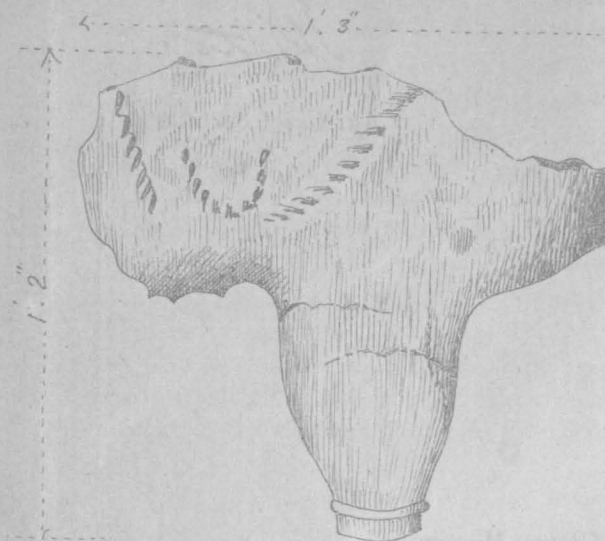
To F. N. Thorowgood, Esq.
 „ Surgeon-General G. Bidie, C.I.E.
 „ E. Thurston, Esq., Superintendent, Government Central Museum.
 „ the Director-General, Archæological Survey of India.
 „ A. Rea, Esq.
 „ the Collector of Chingleput.
 „ the Public Works Department.

Exd. L. Passaigne.



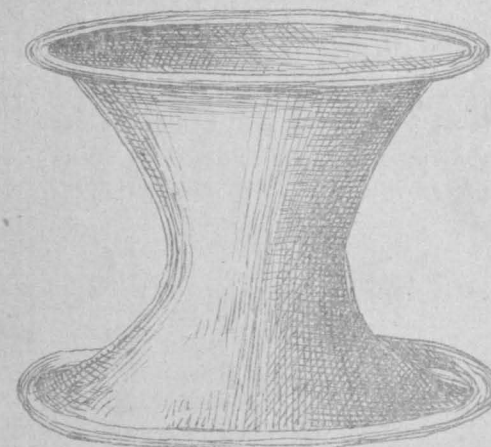
PORTION OF GRAVE SHOWING MOUNDING. PALLAVARAM.

1/2 NAT. SIZE.



FRAGMENT OF (SUPPOSED) HEAD END OF GRAVE.

Fig. 1.



ONE OF THESE FOUND IN GRAVE. BLACK COLOUR. HOLLOW AND WITH NO BOTTOM 5 1/4\"/>

Fig. 5.



Fig. 6.

ONE OF THESE FOUND IN GRAVE. BLACK COLOUR. 8\"/>

LITHO BY R. DALRYMPLE BOYD LITHO DEPT. MADRAS.



TWO OF THESE FOUND IN GRAVE. BLACK COLOUR. 3 1/2\"/>

Fig. 2.



ONE OF THESE FOUND IN GRAVE. YELLOW COLOUR. 5\"/>

Fig. 3.

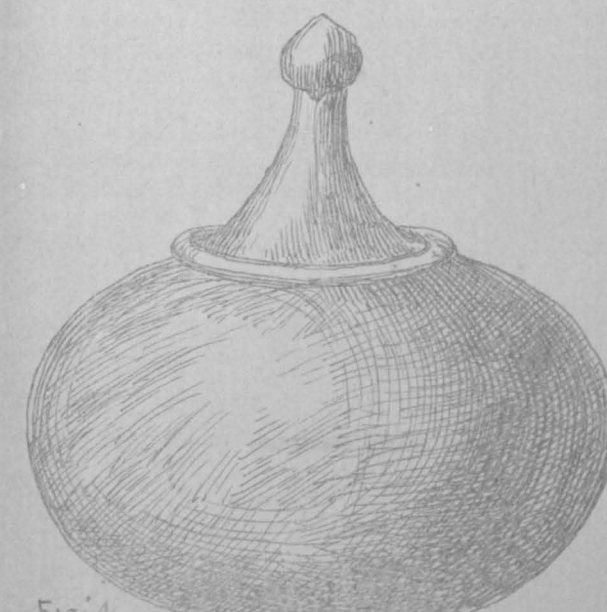


Fig. 4.

ONE OF THESE FOUND IN GRAVE. BLACK COLOUR. 8\"/>

(Signed) F. N. Thorowgood
 19. 5. 86.

304 W 4.2.87
3349 W 15.12.86

No 1729 W a/28th June/87
B

Communicated to the
Commⁿ to the
Supt Engineer
Supt Engr
V Circle in
V Circle in
Center of G.O. No.
Center of G.O. No.
304 W a/4-2-87
304. W. 34.2-87

Wm
22.6.87

Ju
23/6/87

PWC No 4698

Govt. of (1887) Madras.

PUBLIC.

(6)

1350

5

Issued

Recd. 21.6.87

Encl.

G.O., 12th May 1887, No. 671.

No 1729 W a/28th June/87

MAY.

Archæology.

Communicating to the Director-General of
Archæological Survey in India reports by Drs.
Bidie and Thurston on the antiquarian discoveries
at Pallavaram; and expressing indebtedness to
Mr. Thorowgood and to Dr. Bidie in connection
therewith.

S.E.V. Encl. 10
S.E.V. Encl. 10
S.E.V. Encl. 10

15.11.87
24.6.87

27.6.87

Q. 22.6.87. Q. 27.6.87. 11/2/7

27.6.87