

THE ANCIENT BURIAL MOUNDS OF JAPAN.

By ROMYN HITCHCOCK.

It would appear that when the famous Jimmu Tennō, the divinely descended first Emperor of Japan, the child of the sun and the ancestor of the present reigning dynasty, began his journey through the land, he met with two kinds of inhabitants. There was a race of Tsuchi Gumo, described as people with tails, who lived in underground burrows or caves. I have elsewhere endeavored to show that there probably was, in fact, a race of pit dwellers who disappeared toward the North, leaving traces of their existence in the pits of Yezo.* In addition to these, there was a race of "hairy savages" which we have no difficulty in identifying as the Ainos,† who are known to have formerly lived in southern Japan.

I have only alluded to these two peoples in order to remove any possible question which might arise as to the Japanese origin of the tombs of which I am to speak. Although many of them are very ancient, they are certainly Japanese. This we know partly from tradition, but more certainly from the articles interred with the dead. Had they a pre-Japanese origin, we would expect to find within them vessels of pottery of a more ancient pattern, such as the predecessors of the Japanese left behind them in the shell mounds.

One of the earliest modes of burial in Japan was in artificial caves, hewn out of the solid rock on hillsides. It has been said that the early Japanese lived in caves. This is very doubtful, for although there are natural caves in certain parts of the country, they are not found where the history of the people begins, in Idzumo and Yamato.

Nevertheless, the idea of cave life was familiar to the Japanese, for the legend of the Sun goddess who entered a cave and closed the entrance with a stone, leaving heaven and earth in darkness, is a very early and important myth.‡ It is also said, that in the reign of Jimmu

* The Pit Dwellers of Yezo, by Romyu Hitchcock. Report U. S. Nat. Mus., 1890, p. 417.

† The Ainos of Yezo, by Romyu Hitchcock. Report U. S. Nat. Mus., 1890, p. 429.

‡ Shinto, or the Mythology of the Japanese, by Romyu Hitchcock, Report U. S. Nat. Mus., 1891, p. 489.

Temō "the inhabitants were still plunged in barbarism and mostly lived in caverns." (Klaproth.)

Prof. Milne has brought together many allusions to the early cave dwellings* of Japan taken from native writers, but all of these may as readily have reference to the aborigines as to the Japanese themselves, and it seems to me with greater probability.

The Chinese character which is translated "cave" means "apartment," or "a cave or pit dug into the earth." It is uncertain what kind of dwellings or caves are thus designated. Some chambers were built with stones and may have been the dolmens which will soon be described; others were made of turf and recall the dwellings of the Kuriles. While much of this uncertainty is due to the use of an ambiguous Chinese character in writing, the examination of the true caves, natural and artificial, indicates that if ever the Japanese were cave-dwellers it was before they migrated to Japan.

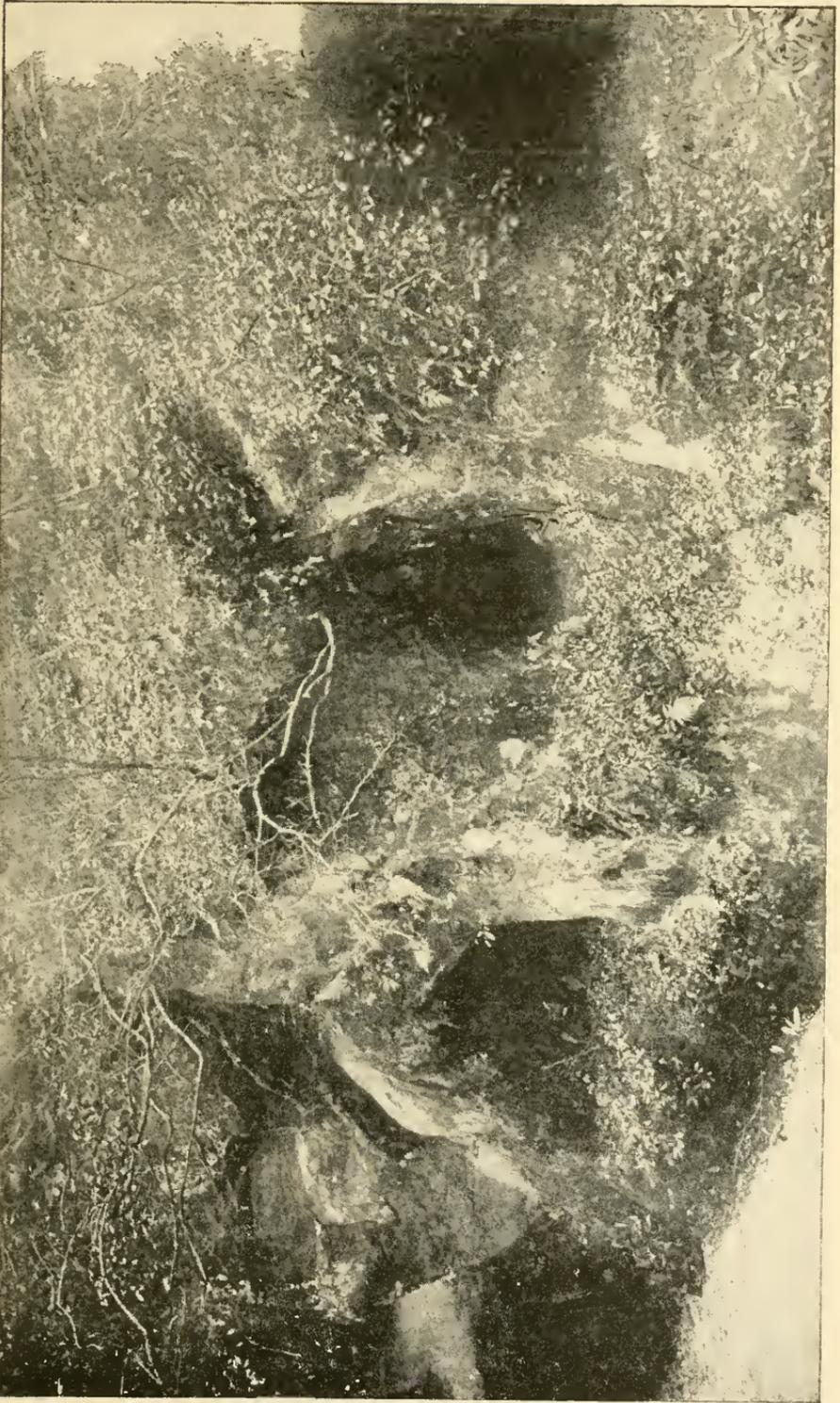
The observations here brought together are the result of considerable travel and intimate association with Mr. W. Gowland, formerly chemist of the Imperial mint at Osaka. Mr. Gowland has spent several years in the study of the Japanese mounds, and he is the only person who possesses sufficient accurate and valuable information upon the subject to prepare a comprehensive monograph. It is to be hoped that the results of his years of labor and observation will be published. His fine collection of relics from the tombs, now in the British Museum, is unique and of great value. It can never be duplicated. Many a day we have tramped together on the rough mountain sides, searching for tombs or sepulchral caves, and at evening compared notes and recounted experiences in Japanese hotels. I recall the cozy comfort of those neat matted floors, the bronze *hibachi* with its steaming kettle, the savory and unsavory dinners, both varieties of which are furnished in Yamato, and many other incidents familiar to the traveler in the interior of Japan.

Several distinct methods of burial have prevailed in Japan at different periods. These may be distinguished as follows:

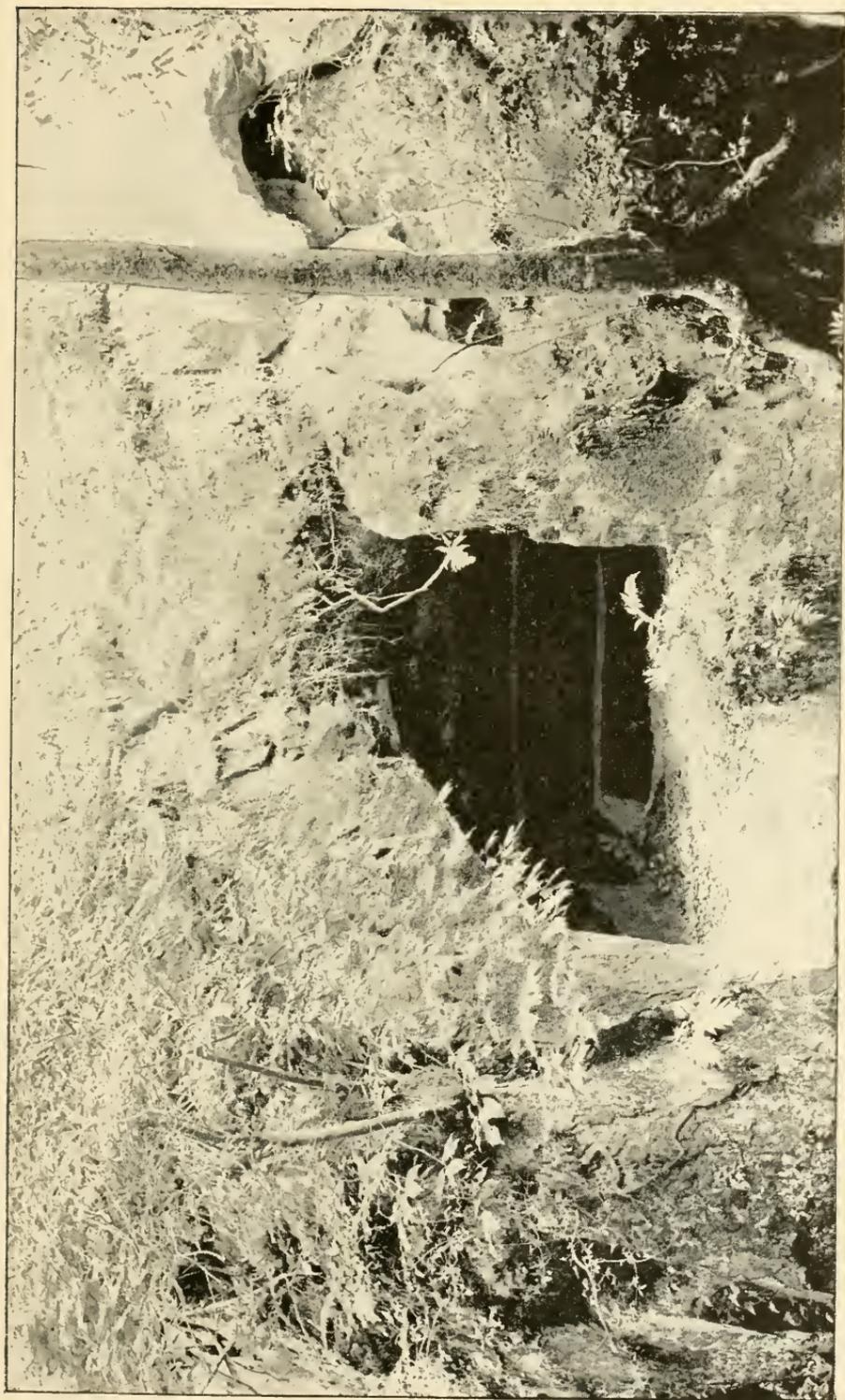
- (1) Burial in artificial caves.
- (2) Burial in simple mounds of earth.
- (3) Burial in mounds with rock chambers or dolmens.
- (4) Burial in double mounds or imperial tumuli.

The chronological sequence of these different modes of burial is largely a matter of speculation. Among the earliest was interment in artificial rock caves. Such caves are quite numerous in various provinces. In Pl. XXXIII we have a view of four such caves in Kawachi. The fronts are crumbling away and we look directly upon what were originally the dark interiors. The largest of this group shows the remains of a stone coffin cut from the rock *in situ*. Originally the caves were entered through small apertures, which were doubtless at one time closed

* Trans. Asiatic Soc. of Japan, VIII.



CAVES IN KAWACHI.



CAVE SHOWING REMAINS OF STONE COFFIN.

with stones. Probably all were provided with either stone or clay coffins, but now only fragments of these remain. Pl. XXXIV shows the remains of the coffin just referred to. Usually the coffins are placed at the back of the caves, raised on a shelf a few inches from the floor.

The caves vary greatly in size, but they never reach very large proportions. Perhaps they average 5 feet in height and 6 to 10 feet square. They contain no remains whatever except the fragments of coffins. If they ever did enclose articles of pottery or treasure interred with the dead, the vandalism of the peasants has robbed every one of them. I have crawled on hands and knees into many of these gloomy recesses, inhabited by bats which fly unpleasantly near one's face, and searched by the light of a candle for what might be found, but with no further reward. I well remember one occasion when Mr. Gowland and I were long entombed in the close, damp atmosphere of a cave, not far from Kokubu. We proposed to photograph the interior with the flashlight. To place our two cameras at the mouth of the cave required several hours of hard digging with hammer and knife, and the contortions required in focusing were too wonderful for description. We focused on a burning candle held at different points to outline the field of view. Finally the light flashed; and if the spirit of the departed ancient still hovered around its tomb, as the people believe, and if it had progressed far enough in the transcendent thought of the western world to grasp the fantastic idea of a bodily rising from the dust, I think it must have believed the resurrection day had come.

The most we can say of the caves is, that they are numerous in some sections, that they were used only for burial, and that probably they preceded in time the rock-built dolmens. No date can be assigned to them. There is not a vestige of a skeleton, not a line of inscription, nothing but the soft, half-decomposed rock remaining, to bear witness of the veneration bestowed upon the dead in ages past. The great question presented now for the ethnologist to solve concerns the origin of the custom of cave-burial among the Japanese.

The God Take-mika-dzuchi was famous for his desperate combats with demons. On the island of Kashima there is a mound known as *Oni-dzuka*—demon mound. It is said that the God killed a devil there and buried him, heaping the earth above him. This was before the time of Jimmu Tennō. Such a mound doubtless represents the earliest form of burial among the Japanese.* Examples of such simple mounds, averaging about 4 to 8 feet in height, are numerous in the country. Such is the character of the traditional mound of the first emperor, dating from the seventh century B. C.

* H. Von Siebold has described a small mound 8 feet in height and about 20 feet in circumference, without any coffin, in which six coins were found, two of which were recognized, the first as from the time of Shofu Gempo, 1004 B. C., the second of Seiso Gempo, 961 B. C. The importance of this find is easily overestimated, and it cannot be regarded as very significant of the age of the mounds.

II. Von Siebold, in his *Notes of Japanese Archaeology*, writes that the earliest mode of burial in Japan was under a mound or tumulus. About 400 to 500 years after the death of the first Emperor, stone coffins, made of several stone plates, or more rarely of a single block, were introduced. These measured 6 to 12 feet by 3 to 5 feet and the sides were 3 to 6 inches thick. There were handles on the sides of the cover. I have not seen any coffins made of stone plates such as Von Siebold describes, but coffins hewn out of solid blocks of stone are not uncommon.

The date of the introduction of stone coffins, according to Von Siebold, as above stated, is from B. C. 85 to A. D. 15. He gives a range of a century. The *Kojiki* tells of the establishment of stone coffin makers in the reign of Suinin, 29 B. C. to 70 A. D. These dates are not to be depended upon, for the early Japanese chronology is very unreliable. It is not improbable that stone coffins were made much earlier than the dates given, for it is difficult to believe that the rock caves and simple mounds in which the coffins are found are not much older than the Christian era.

Pl. XXXV represents a simple mound of earth near Domioji, in which a stone coffin was buried, now exposed by the washing away of the earth. Observe the size and shape of the coffin, which is a good type. In my experience such mounds with stone coffins are not common.

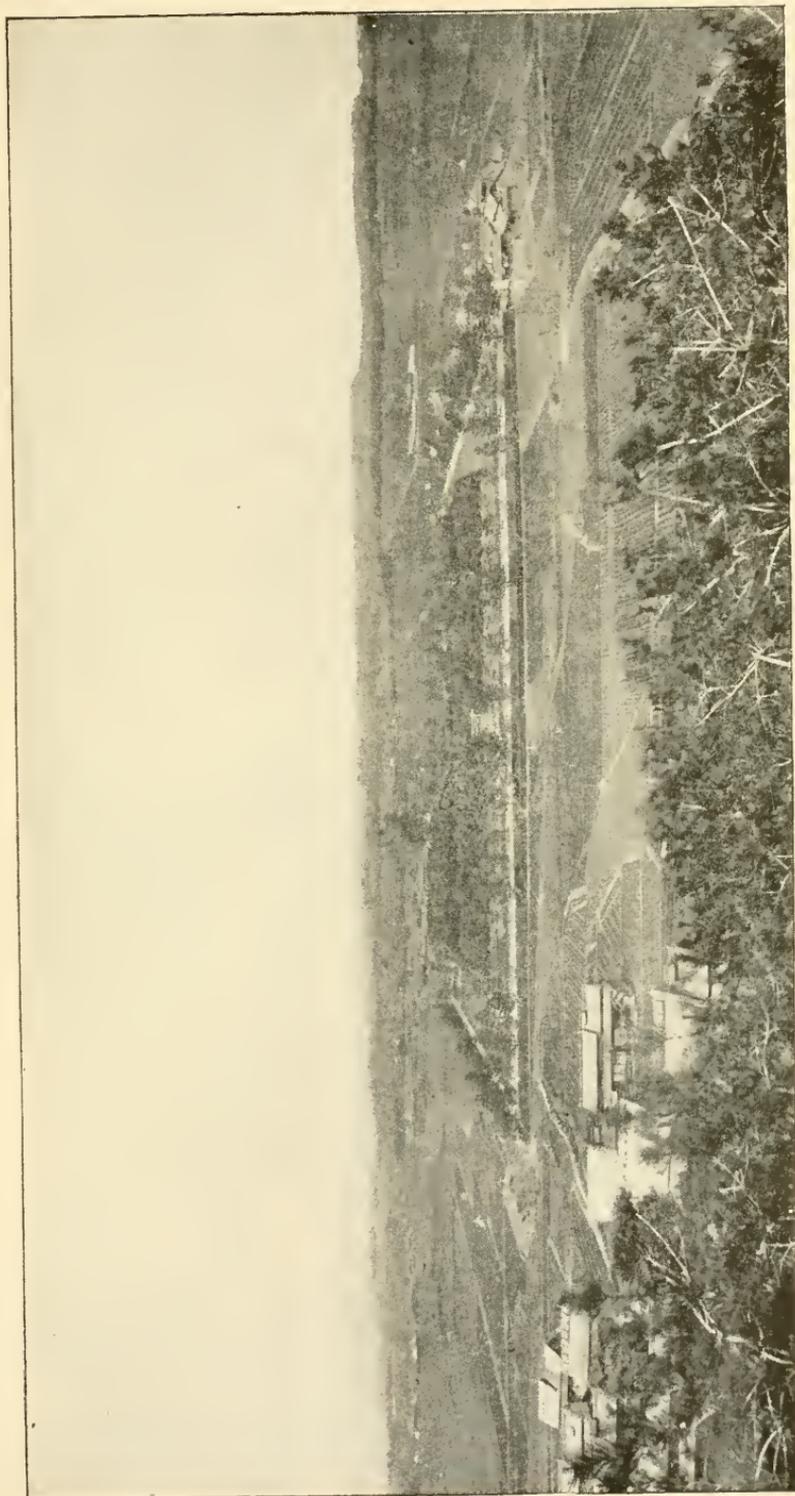
Since it is impossible to follow a chronological order in describing the different forms of mounds, it will be more convenient to consider first the imperial mounds.

The first fifteen Mikados were nearly all buried in the Province Yamato. The first Mikado, Jimmu Tennō, who is reputed to have lived in the seventh century B. C., and died at the good old age of 127 years, is said to be buried at a famous hill in Yamato, known as Unebi Yama. This small hill rises from the broad Yamato plain, a conspicuous object for miles around. The spot of burial is in the plain near the base of the hill, and is now surrounded by a fine stone fence. The photograph (Pl. XXXVI) was taken from the hillside. The large inclosure is entered through a broad gateway opposite the cluster of houses seen on the right. A fine, graveled walk surrounds the inner inclosure, and on certain days only the people are permitted to enter and make their devotions in front of the *torii* or temple gateway, which is to be seen at the middle of the inner wall, facing south. Every year the Mikado sends an officer to this place to make offerings to his departed ancestor. This ceremony takes place in the presence of officials and a company of soldiers on the 3d of April.

The imperial tombs are known as *Misasagi*. To the right, and a little beyond the inclosure of the first emperor, there is a conspicuous white wall surrounding a mound. This is the Misasagi of the second emperor. This mound and other imperial tombs of the same era belong to a type which I believe is peculiar to Japan. They will be designated double mounds because the two ends are elevated with a depression



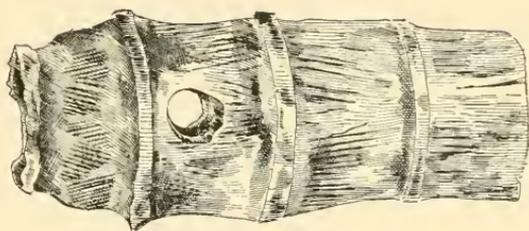
STONE COFFIN *in situ*, DOMICOLI.



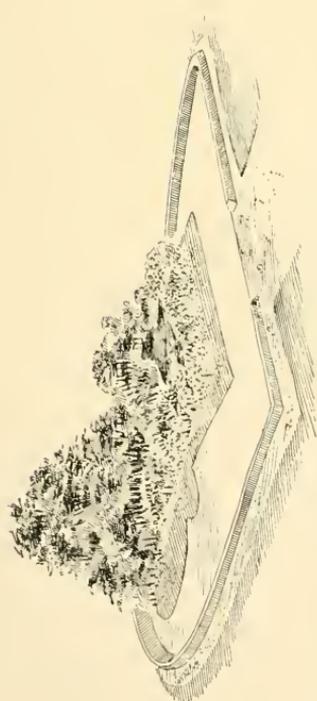
MISASAGI OF JIMMU TENNŌ.



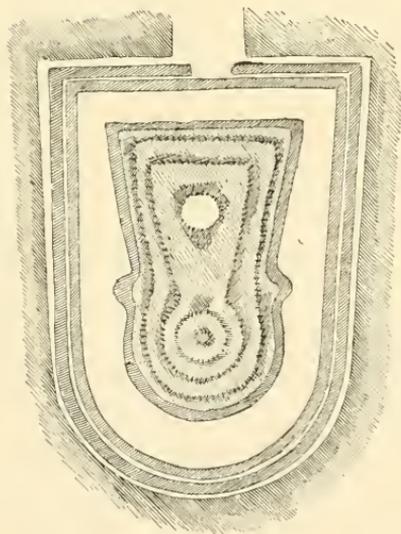
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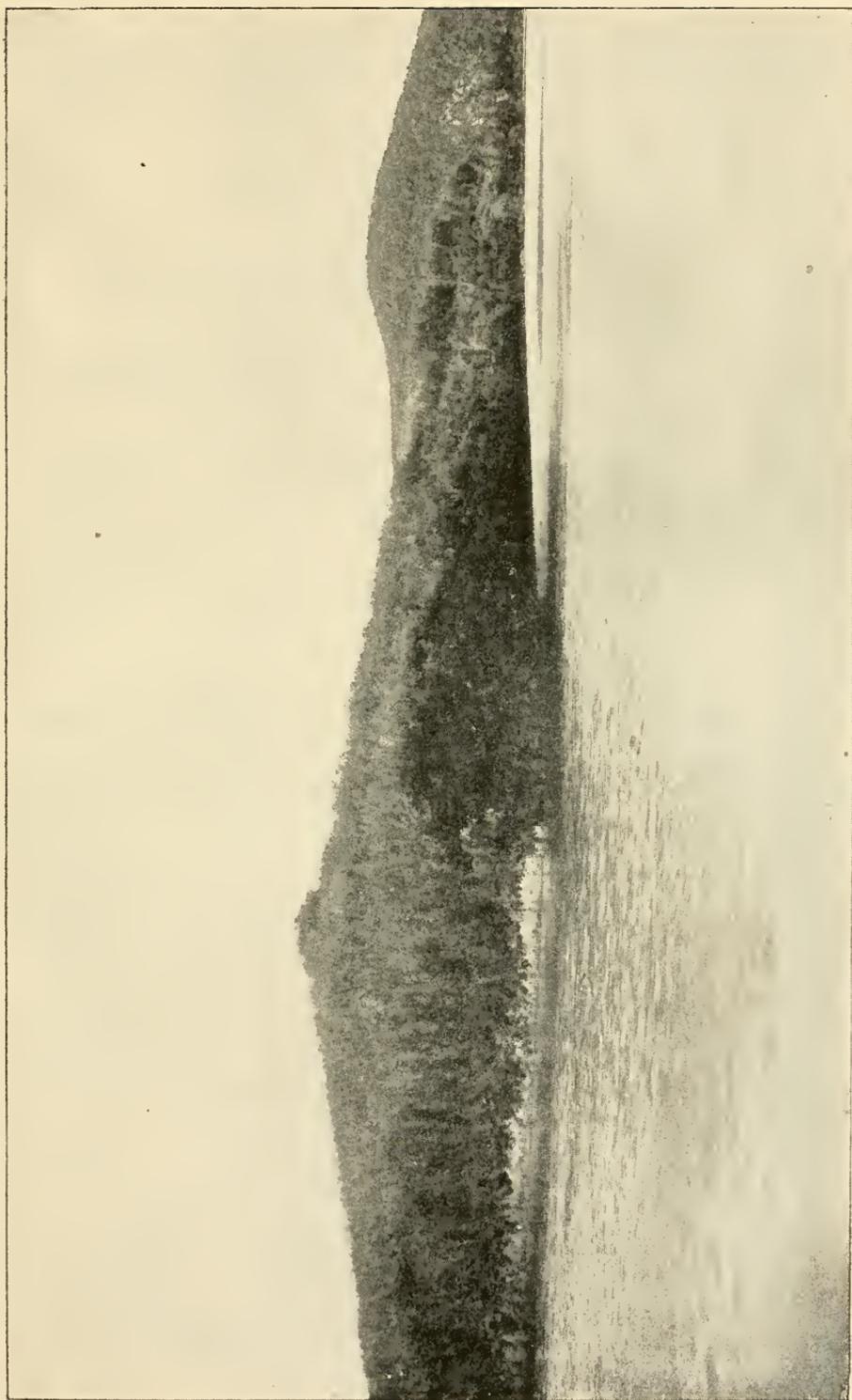
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3. TERRACED MOUND, SEVENTH CENTURY. (From a Japanese sketch.)

4. CYLINDER. (From a Japanese sketch.)

1. A DOUBLE MOUND. (From a Japanese sketch.)

2. GROUND PLAN OF A DOUBLE MOUND. (From a Japanese sketch.)



TUMULUS OF NINTOKU TENNŌ.

between them. The mounds are entirely surrounded by deep moats filled with water.

It is unfortunate that these tumuli are being improved and beautified by the general Government, for their original character is thereby changed beyond recognition. We have a good illustration of this fact in the mound last mentioned. A few years since (in 1882) it was surrounded by an old wooden fence, octagonal in form, measuring about 33 paces across the southern end. Now the inclosure is square and very much larger. The archaeologist may well deplore the activity of the Japanese in this direction, for these old tumuli of Mikados of the mythical age are being so changed that their primitive character and shape are forever lost. White stone fences, carved stone lanterns and torii, and graveled walks have no association with the strict simplicity of the past. Nothing can justify to an ethnologist such alterations as have already been carried out in Yamato.

Pl. XXXVII is copied from Japanese drawings. For these, and for others of the same character, I am indebted to the courtesy of Mr. K. Yamanouchi, secretary of the imperial household department. The first drawing on the left purports to represent the earliest form of double mound. Here we see the wide moat and two distinct elevations with a depression between them. The deep depression is the result of weathering and was not a part of the original design. The south end is straight, the north end rounded. The interment was at the top of the northern elevation.

The ground plan is more clearly shown in the lower drawing. The sides are constricted to correspond with the depression at the top. The two lateral projections are not often seen. The sides of the mound are terraced as represented. This terraced structure will soon receive closer attention. The interment was in the center of the smallest circle, at the top of the rounded end. This form of mound is ascribed by the Japanese to the period from Jimmu Tennō to 640 A. D. As this period embraced about twelve centuries it may be accepted as probably correct.

The original form of the double mound is only to be made out by the careful examination of numerous examples, for nearly all have become greatly changed by weathering. The tumulus of Nintoku Tennō, near Sakai, is represented in Pl. XXXVIII as seen from the southeast. In this picture may be seen the straight southern end of the mound, the exaggerated depression at the top, and the constricted side. The wide and deep moat is only an inner moat, for this mound is doubly protected. This mound, according to Japanese reckoning, dates from about the fourth century. The height of this tumulus is about 100 feet and the circuit of the base 1,526 yards.

The tumulus of Keitai Tennō is a very large mound, a landmark for miles around in the rich, flat valley of the Yodo, not far from Ibaraki. On the signboard is an inscription which was translated for me as follows: "Kei-tai Tennō mishima misasagi. Distance around, 519 ken 6

bu. No one permitted to go inside. No fishing or shooting allowed.⁷ The absurdity of this official declaration of the size is obvious when we consider that it is the same as stating the distance around an irregular mound to tenths of an inch. The figures would be about 3,114 feet and 0.6 of an inch. The Emperor Keitai is reputed to have lived in the sixth century. He was one of the last Emperors known to have been buried in a double mound.

Near Nara there are two mounds known as Onabe and Konabe. The former was quite carefully measured by Mr. Gowland and myself. The length north and south was found to be 485 feet along the top, the length at the base being considerably more. The top of the southern end is 78 feet wide. The northern or burial end rises 20 feet above the depression in the top.

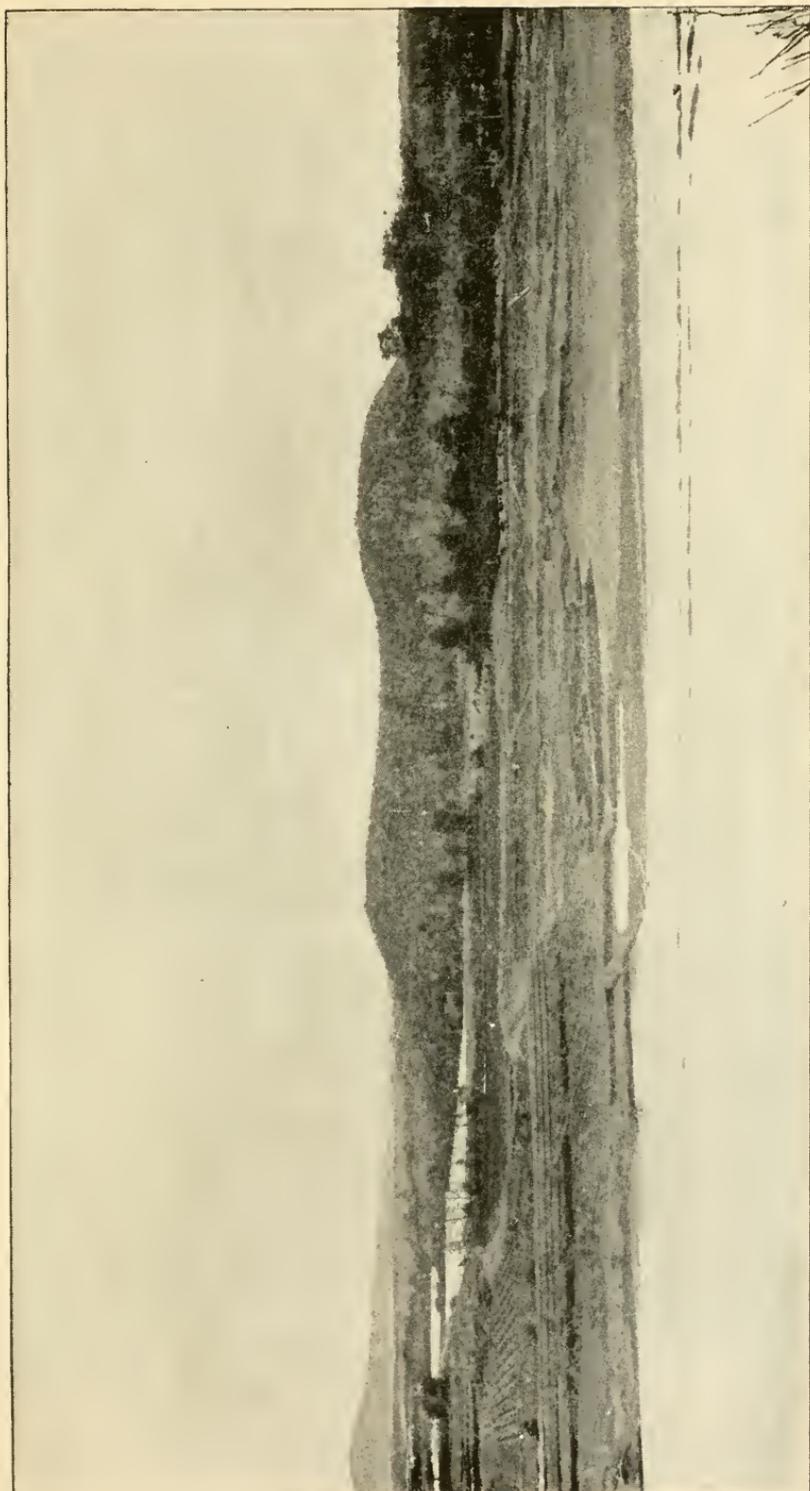
The other mound, Konabe (Pl. xxxix), is here shown as seen from Onabe. Here again is shown the straight southern end and a portion of the moat. This mound is in pretty good preservation, and the contour line of the top does not descend much below the height of the southern end.

A distant view of the mound of Ojin Tennō, in Kawachi, shows well the original shape of the double mounds. The depression between the two ends is very slight, the northern end being somewhat higher than the southern, the contour line between them descending gently from the former and rising a very little to the latter. A nearer view of the same mound (Pl. xl) shows the depression exaggerated, owing to an unfavorable point of sight. But in this picture we have another conspicuous feature of all the recognized imperial tombs, a plain wooden inclosure with a gateway, painted white, situated on the outer border of the moat opposite the middle of the south end of the mound. This picture also gives an idea of the great size of the mounds, by comparison with the man in the field.

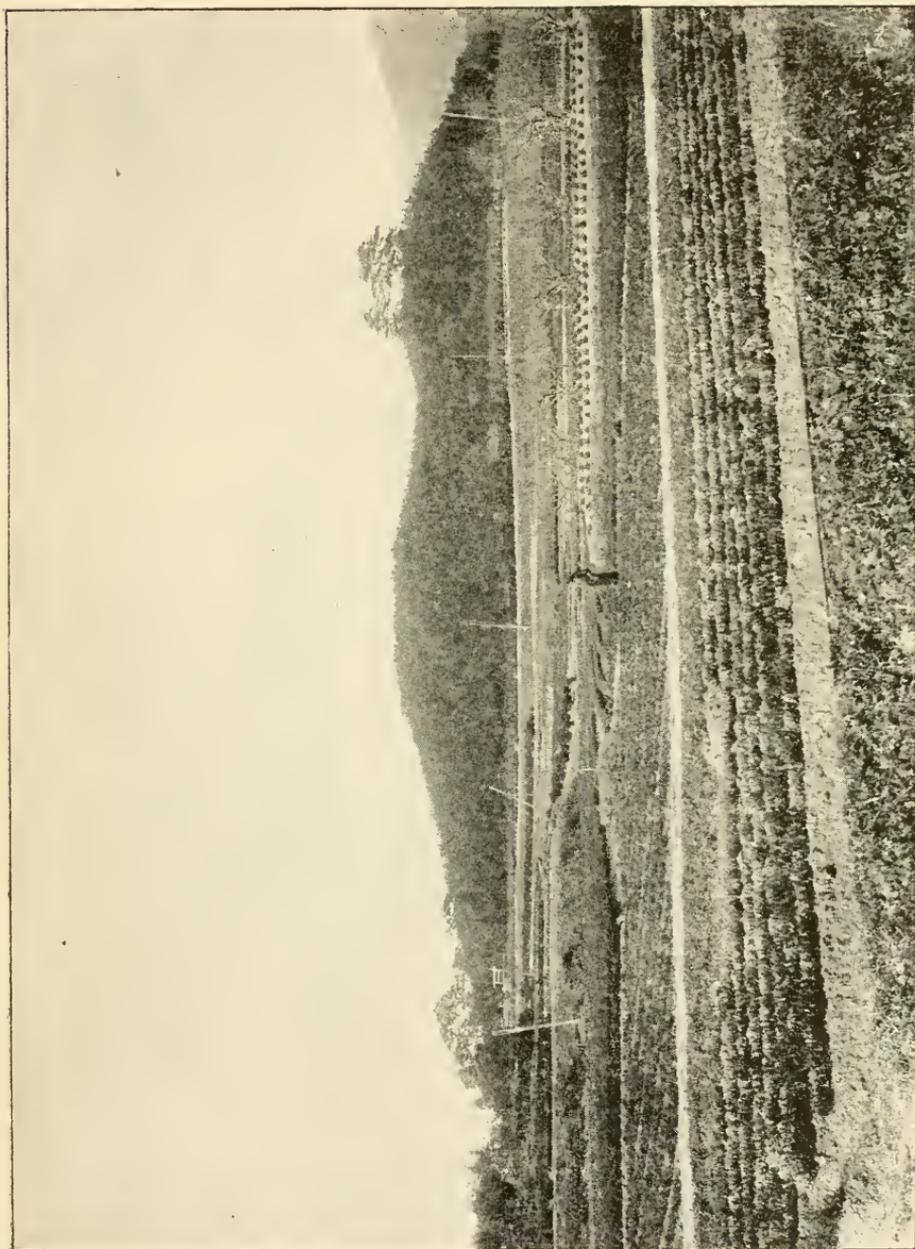
The wooden gateway is again shown in Pl. xli. It is always closed. The design calls to mind the gateways at the Ise shrines, the ancient form of *torii* not often seen elsewhere.

Mr. E. Satow has described two mounds in Kodzuke, one of which is shown in Pl. xlii as represented in his drawing. In shape it is a double mound, but it has a chamber with an entrance at the side and in this respect it differs from all the mounds I have seen. This mound is 36 feet in height, 372 feet long, and 284 wide. The chamber is entered through a passage 33 feet in length. There are two chambers, separated by a low sill of stone, the outer 24 feet in length, the inner 6 feet, the height being about 6 feet. Mr. Satow concludes that these mounds date from about 50 B. C., but this is very uncertain.

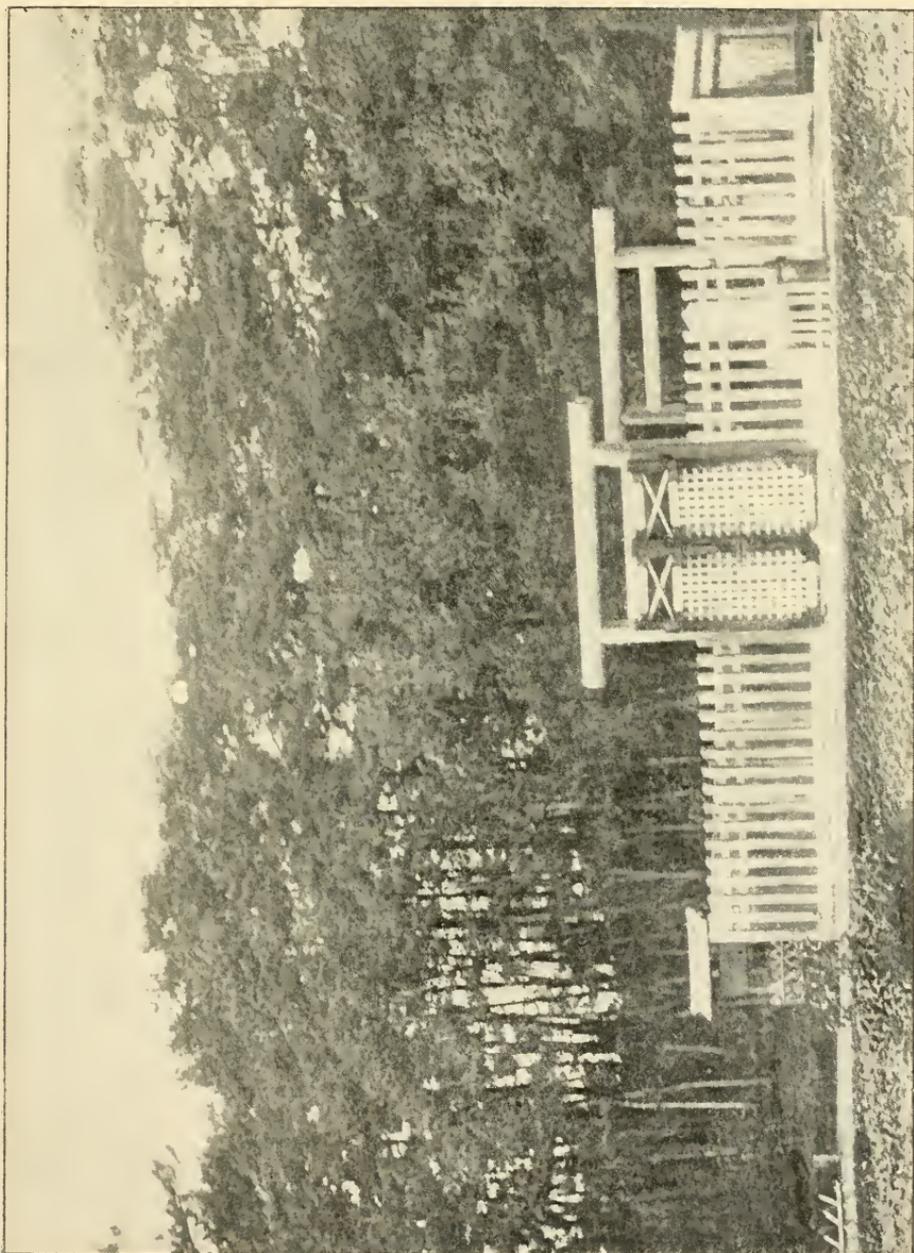
In the year 646 the size of tombs which persons of different ranks might build was specifically stated. "A prince might be buried in a vault 9 feet long and 5 feet wide within, covered by a mound 72 feet square and 40 feet high. A thousand laborers might be employed in



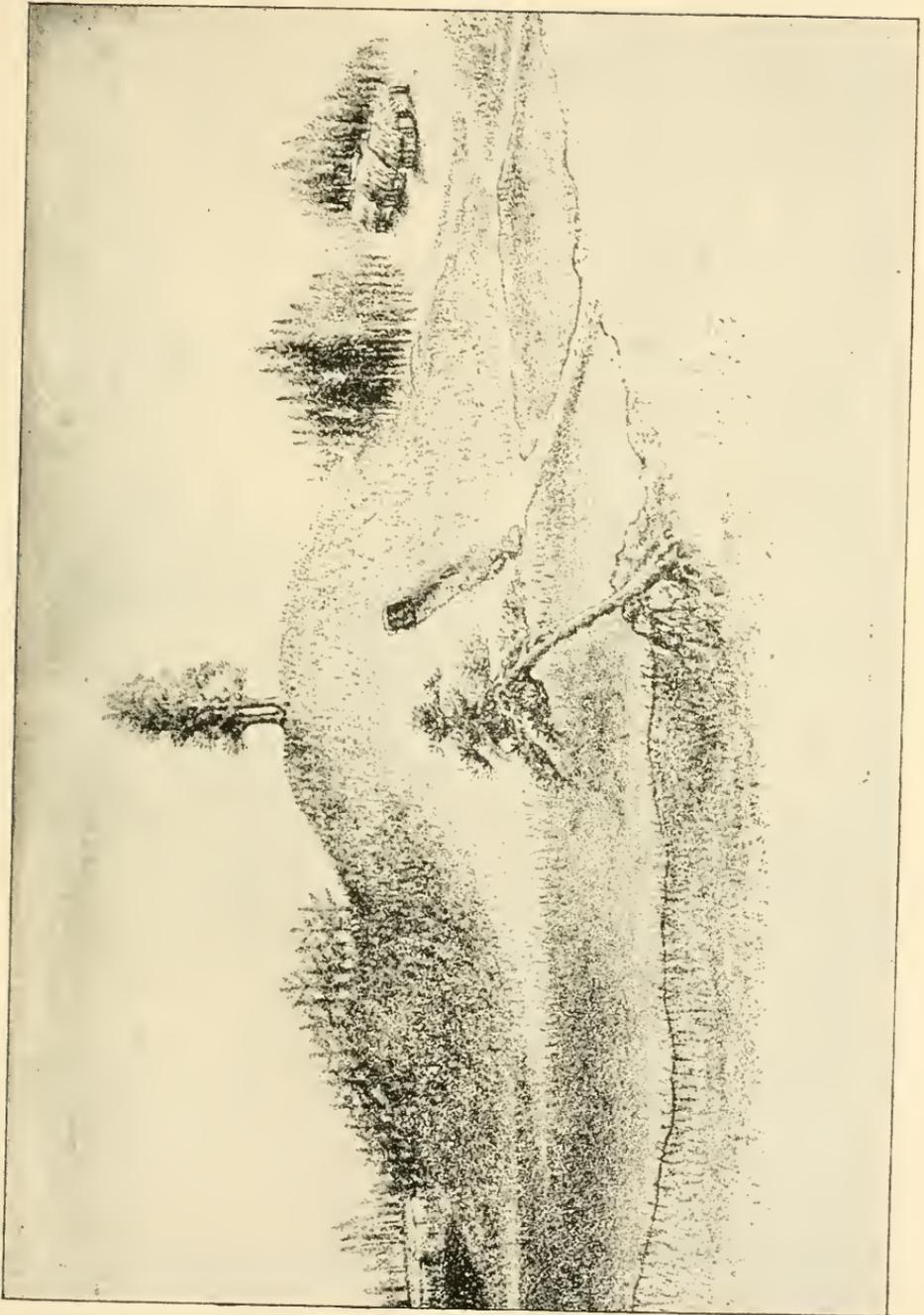
TUMULUS NEAR NARA-KONABE.



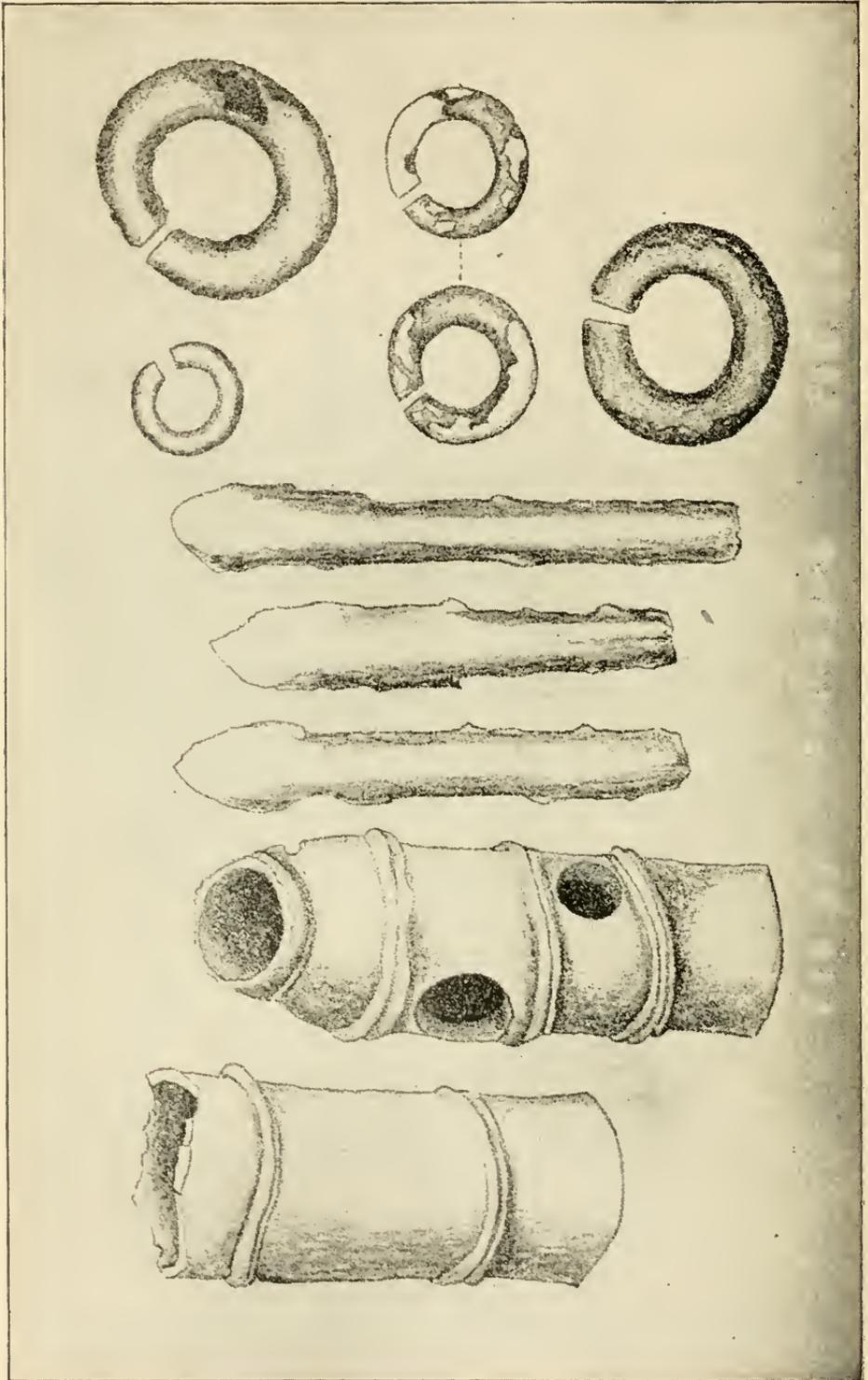
TUMULUS OF OJIN TENN.



GATE OF TUMULUS.



MOUND IN KODZUKE. (FROM SATOW.)



CYLINDERS, RINGS, ETC. (FROM SATOW.)

the construction, and the work was to be completed in seven days. A vault for a functionary of the highest rank was to be of the same dimensions, but the mound was to be only 56 feet square and 22 feet high, while only half the number of laborers was allowed." (Satow.)

Reference has been made to the terraced character of these mounds. This structure is shown in a Japanese drawing of a mound of a later date than that ascribed to the double mounds, reproduced in the upper right-hand figure of Pl. XXXVII. This form of mound is said to date from about the seventh century. It is a single mound.

This terraced structure is exceedingly interesting because of the remarkable method adopted to protect the terraces from being washed away by the heavy rains of spring and early summer. Along the borders of the moat and around the edge of each terrace, also planted in circles at the top of the mound, around the place of interment, there have been discovered rows of closely placed cylinders of clay of peculiar form. These are hollow cylinders, very roughly made, with one or more lateral apertures.

One of these cylinders is well represented in Pl. XXXVII, copied from a Japanese drawing. This one measured: Height, 16 inches; greatest circumference, 22 inches. The top is constricted, and this feature will be referred to further on. Another one measured as follows: Height, 10 inches; circumference at base, about 30 inches; circumference at top, about 24 inches.

A slightly different form, in which the lateral apertures are placed at right angles to each other and at different heights, is figured by Mr. Satow from the mounds in Kodzuke, concerning which he says: "The mounds were built up in three tiers [terraces]. On the top of each tier was a fence formed of terra-cotta pipes about 2 feet high, connected by wooden poles or bamboos passed through holes about half way from the base." Mr. Satow's tubes measured $11\frac{1}{2}$ to 14 inches in length by $4\frac{1}{2}$ to 6 inches in diameter. Pl. XLIII, taken from Mr. Satow's article,* represents a cylinder with apertures at right angles. This cylinder with a constricted top Mr. Satow calls a "corner post," assuming that the holes were made for bamboo connections.

At a mound near Nara we found some of the cylinders exposed by weathering. Pl. XLIV shows how they occur *in situ* around the base of the mound. The cylinders are open at both ends and have three ribs. They vary considerably in size. One of fair average size measured as follows: Total height, $16\frac{3}{4}$ inches; height to top of upper rib, $15\frac{3}{4}$ inches; distance between upper and middle rib, $4\frac{3}{8}$ inches; distance between middle and lower rib, $4\frac{1}{2}$ inches; diameter, 12 to 14 inches; lateral aperture below middle rib, $1\frac{5}{8}$ inches; diameter of lateral aperture, 2 inches.

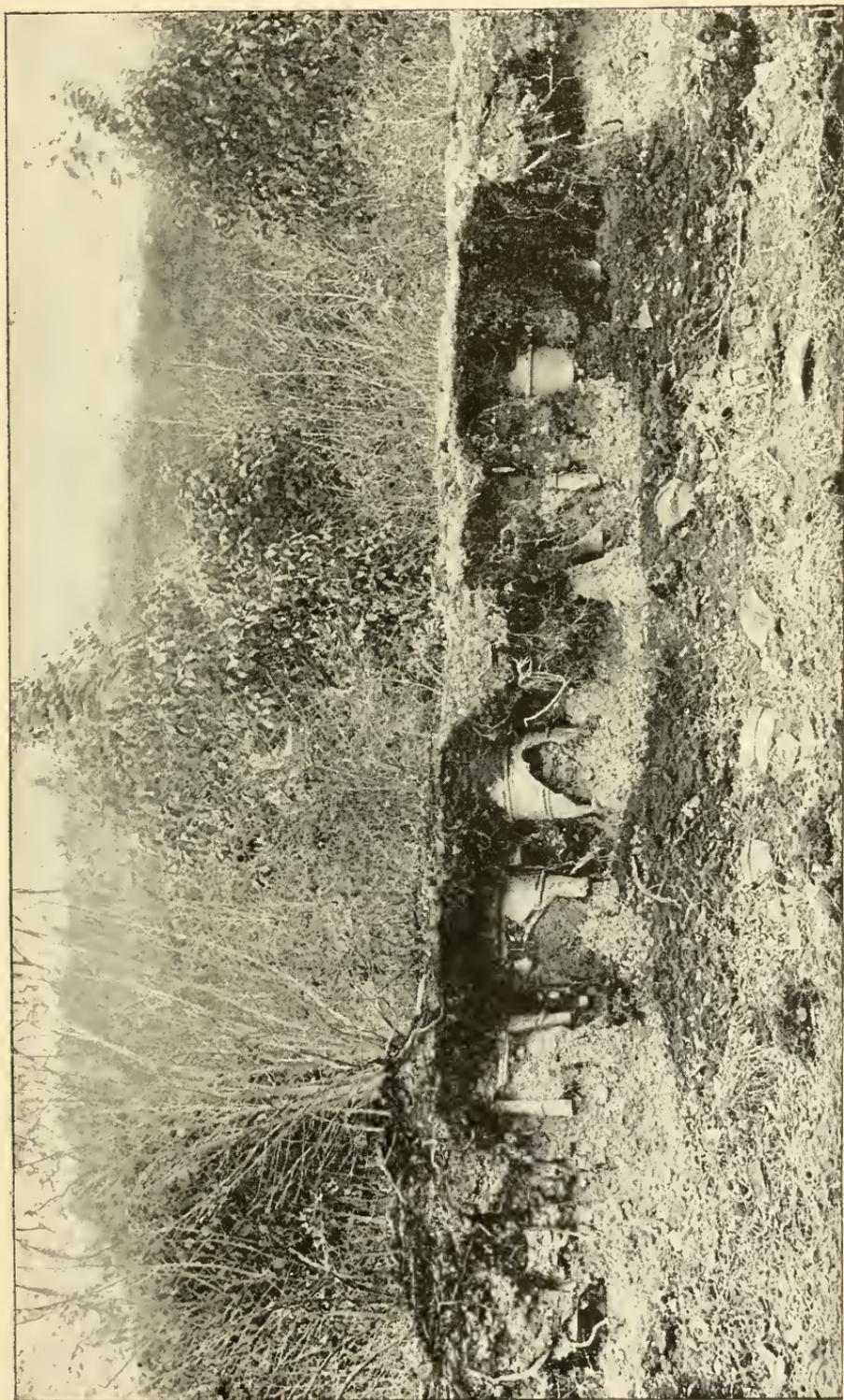
The cylinders were undoubtedly introduced to prevent washing down of the terraces and the banks of the moats. They must have been made in enormous quantities. The use of the lateral aperture is not

definitely known. The idea of a fence, such as Mr. Satow suggests, made by joining the cylinders with bamboos passed through the holes would be most obvious. But I am not aware that Mr. Satow really found any such bamboos, and the position of the cylinders shown in this picture, and as we examined them *in situ*, showed that the lateral apertures were directed outwards, thus precluding the idea of lateral connection. Moreover, the cylinders are placed so close together as to render any such connection improbable.

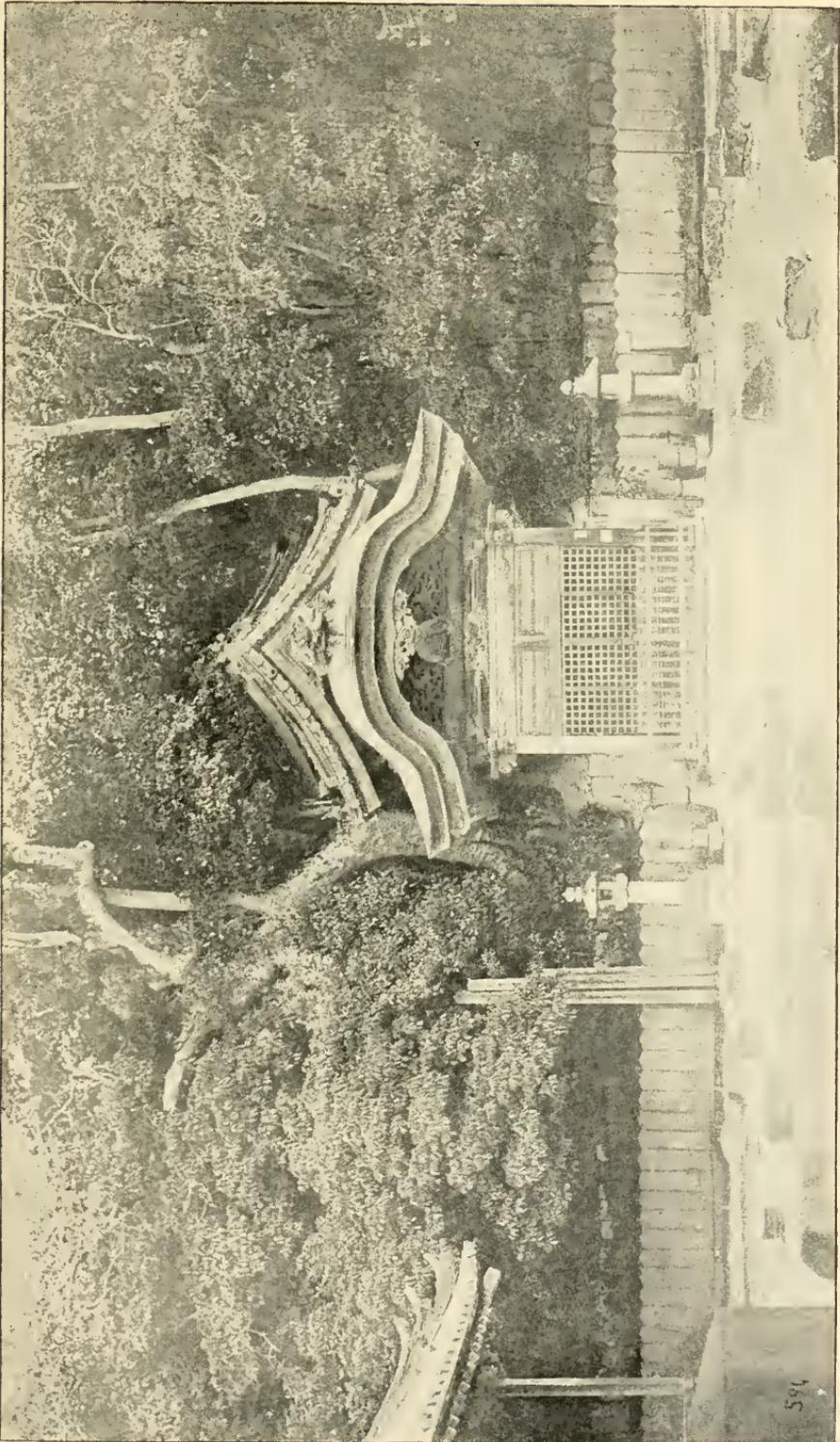
I was quite anxious to obtain one or two specimens of these cylinders for the National Museum, and my experience in this connection may not be without interest to those who like to speculate upon the motives of human conduct. It occasionally happens that the mounds are sold by the Government, for agricultural purposes, when the cylinders are destroyed by the plow by thousands. In the mounds still uninjured by the laborer the cylinders are being destroyed by the effects of the weather. Such being the case, one would naturally suppose that the authorities would readily second any effort to preserve specimens of the cylinders from destruction in public museums. But a more pronounced case of dog-in-the-manger than was exhibited in this matter by the Japanese officials has not come to my experience.

One day Mr. Gowland and I made a trip to Nara for the purpose of getting some cylinders from the mound represented in Plate XLIV. This, and another mound near by, had been disposed of for agricultural purposes, and we were therefore confident of success. Accompanied by the Governor and another official of the Ken, we soon reached the mounds, about 2 miles out, and threading our way across the mud of the drained moat we found the exceptionally fine exposure of cylinders which the photograph shows. But when we broached the matter of digging them out, we were told that authority to do so must come from Tokio. Well, there was no other course open to us, and I concluded, that at the risk of being snubbed, I would do my best to get some cylinders for the National Museum. My first application was to the minister of education, Mr. Arinori Mori, but he declared that he could not aid me in the matter. The president of the Imperial University, Mr. Watanabe, had already assured me verbally that if I would write to him he would be most happy to aid me. I did write to him, and his secretary "was instructed to convey Mr. Watanabe's regrets that he could not assist" me. Finally I ventured to apply directly to the Imperial Household Department. In my letter I stated that there were two mounds near Nara "from which cylinders can be obtained with very little digging, and it will only be a short time when they will be destroyed by the effects of the weather." All my letters were written in behalf of the Smithsonian Institution and U. S. National Museum; but they availed nothing. The cylinders are being destroyed by thousands, and I could only bring home some of the fragments.

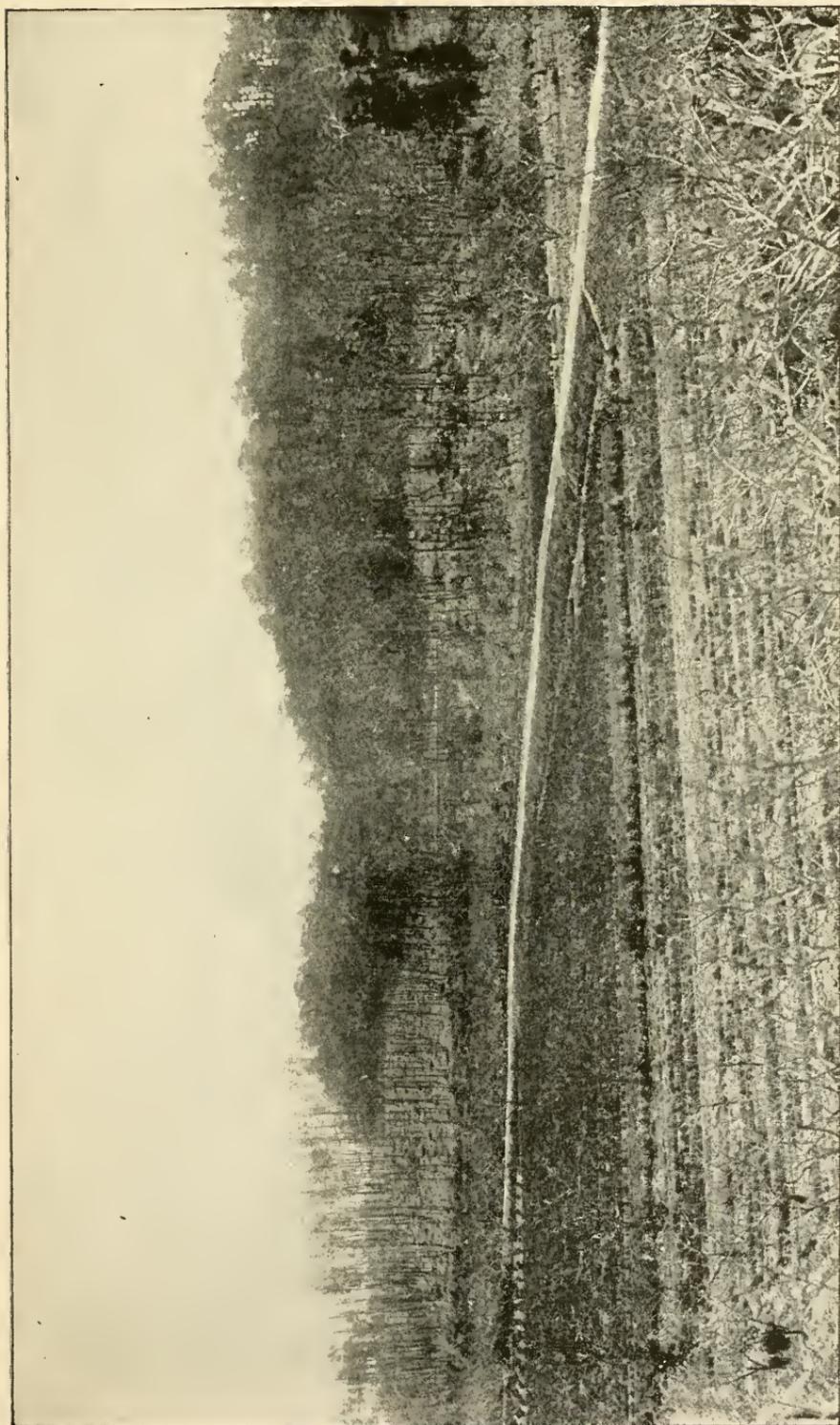
We have no clew to the date when the cylinders were introduced, but



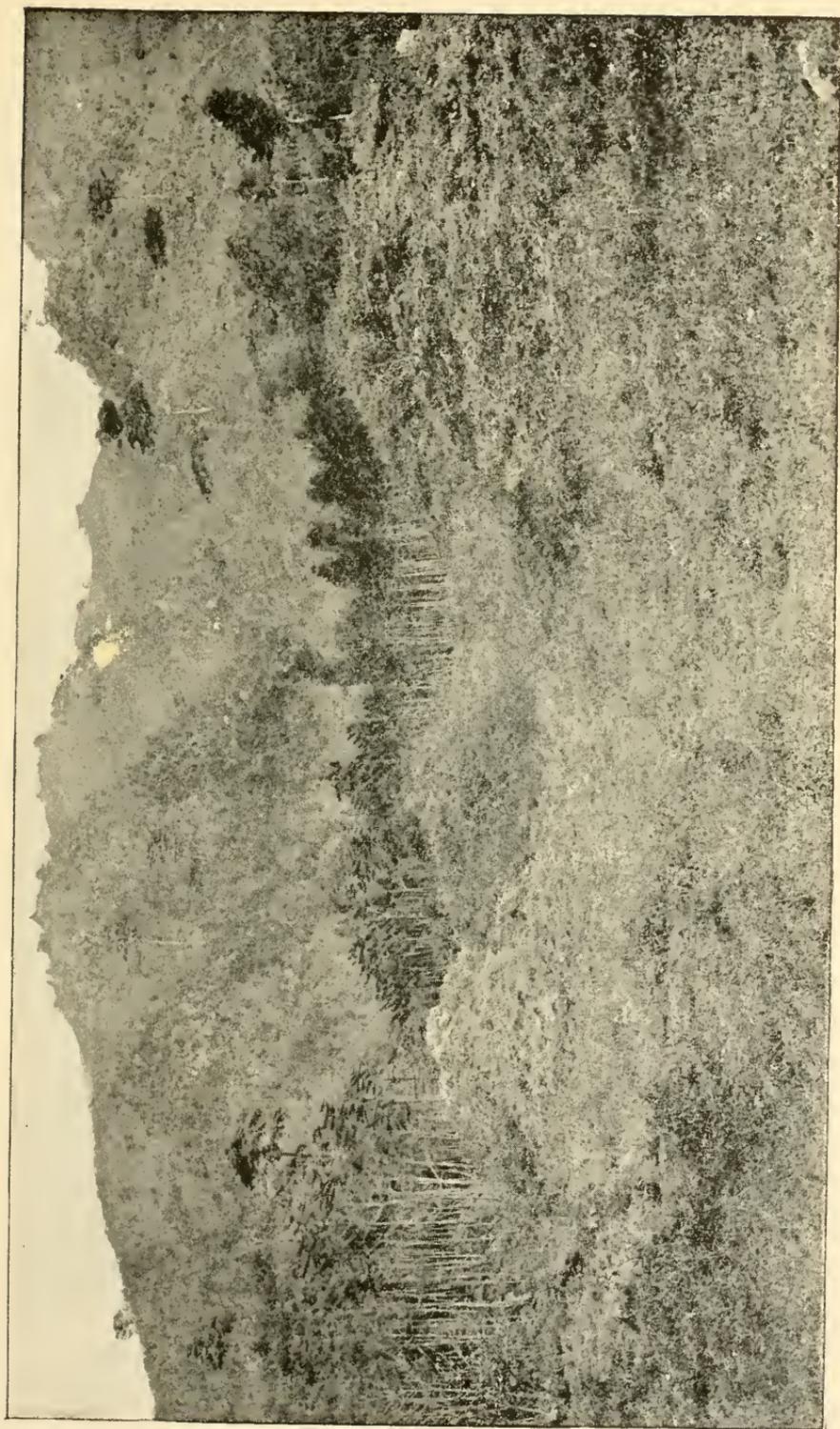
CYLINDERS *in situ*, KONABÉ.



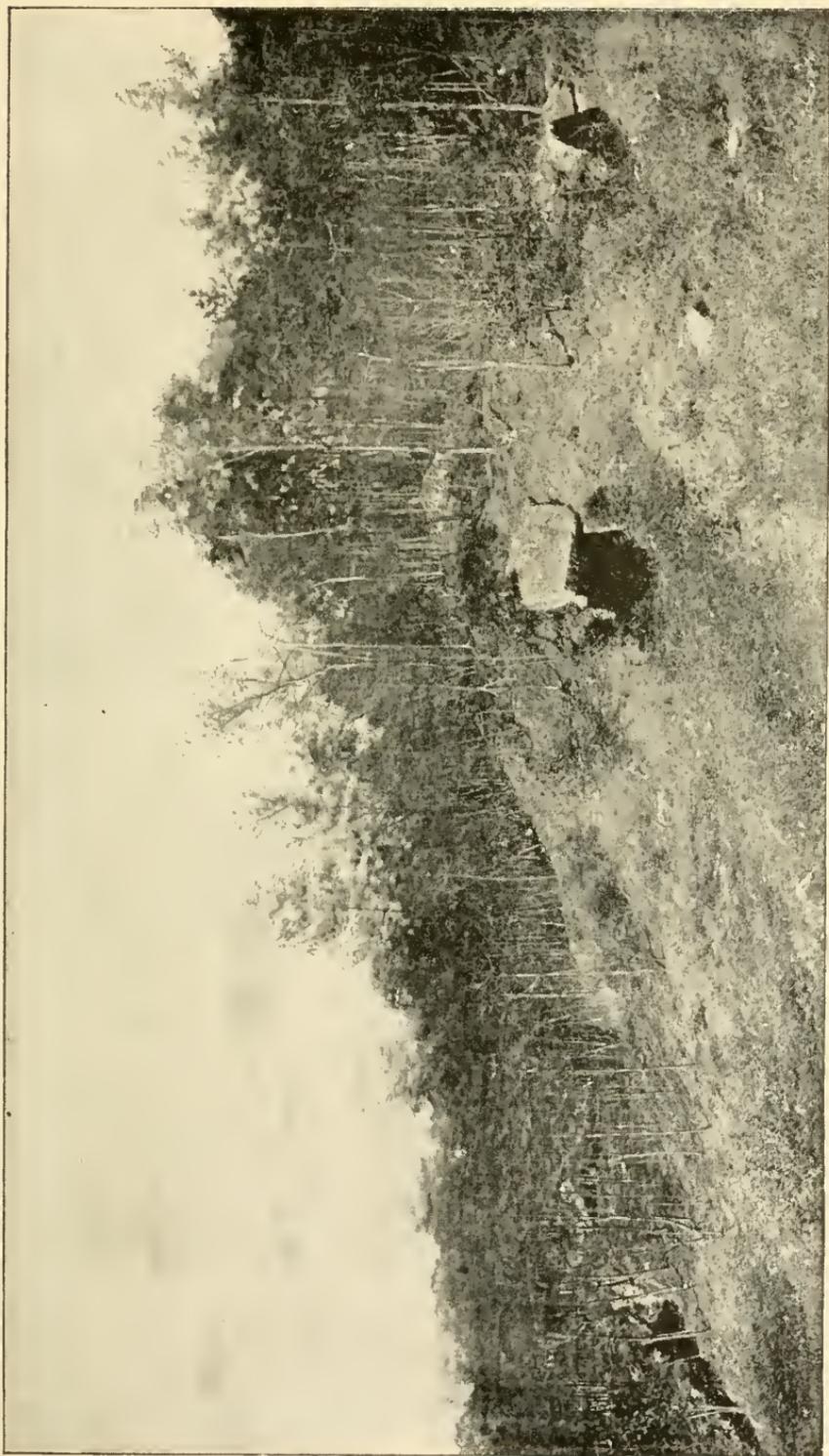
TOMB OF SHOTOKU TAISHI.



CHAMBERED MOUNDS. VIEW FROM THE MOUND OF OJIN TENNÖ.



CHAMBERED MOUNDS NEAR HATORI-GAWA.



ENTRANCES TO CHAMBERED MOUNDS NEAR HATORI-GAWA.

it is always interesting to know what the Japanese have to say concerning their ancient monuments, although all conclusions from this source, even when they are established by official sanction, are to be accepted subject to considerable doubt both as to dates and sequence in time. In response to my inquiry, Mr. K. Yamanaouchi very courteously replied as follows:

The clay cylinders, or haniwa, have their origin about the year 700* [400 A. D.], and since then they were in constant use till about the year 1600 [940 A. D.] for fortifying the loose soils around misasaki and the graves of noted personages.

The lateral apertures were perhaps made for binders to keep the cylinders firmly in row.

Most of the clay cylinders have been destroyed, and although no entire form of any one of them can at present be obtained, we can still discover that some of them were made into the forms of men and animals which were used as followers of the illustrious deceased, and buried with such persons.

The allusion to the "forms of men and animals" will be understood as we proceed.

Before leaving the imperial tumuli I would mention one more, the mound of Shotoku Taishi. This mound contains a chamber which is now closed by the temple represented in Pl. XLV, the gates of which are kept closed. The base of the mound is surrounded by two concentric rows of upright stones, the inner row evidently the older. Each stone of this row bears a Sanskrit character.

Leaving now the tombs of the emperors we come to simple chambered mounds, which are very numerous in many sections of the country. These mounds appear as circular heaps, frequently among cultivated fields, covered with trees. Pl. XLVI shows two mounds near the tumulus of Ojin Tennō. These are quite large. A famous place for chambered mounds is near Hatori-gawa where the view represented on Pl. XLVII was taken. In this may be seen four distinct hillocks on the hillside, and many others are scattered about on every hand. These mounds all contain rock chambers, usually built of rough unhewn stones, some of them of immense size. Long entrance passages, through which one may walk upright for 30 or 40 feet or more, sometimes lead to the chambers, in which there may or may not be one, rarely two, stone coffins.

Mr. Gowland has recently discovered chambers in mounds in Idzumo made of cut stones carefully fitted together, in which were stone coffins of excellent workmanship. The coffins there have large openings in the sides, the object of which is not understood.

When the covering of earth is removed from the buried chambers it is found that the chambers open through the passages, usually to the south. The earth has been washed away from many such mounds, leaving the rocks exposed. In Pl. XLVIII, from Hatori-gawa, we see the entrances to four such chambers. The large mound in front shows the dolmen structure well.

* The dates given are the years of the Japanese Empire, counting from 660 B. C., when the first Emperor ascended the throne. The reader is cautioned not to place much dependence upon these dates.

In more exposed situations we find the rocky structure quite bare, as in the dolmen in Pl. XLIX. A measuring stick 5 feet in length stands near the mouth.

High above the village of Kokubu, near the summit of the hills across the river, a great number of such dolmens are to be found. One of these (Pl. L) shows the structure of the chambers perfectly, except that the tunnel-like entrance has been shortened. This chamber fronts to the right hand of the picture. In some of the larger mounds the tunnel reaches the length of 60 feet and the chambers are correspondingly large. The tunnel sometimes opens into the chamber opposite the middle, but it more frequently runs nearer to one side than the other. The chamber itself is sometimes partly divided into two parts by a limb or projection from the sides and top. Such a dolmen is the one shown in Pl. LI, the interior of which is represented in Pl. LII. The interior is distinctly divided into an inner and an outer chamber.

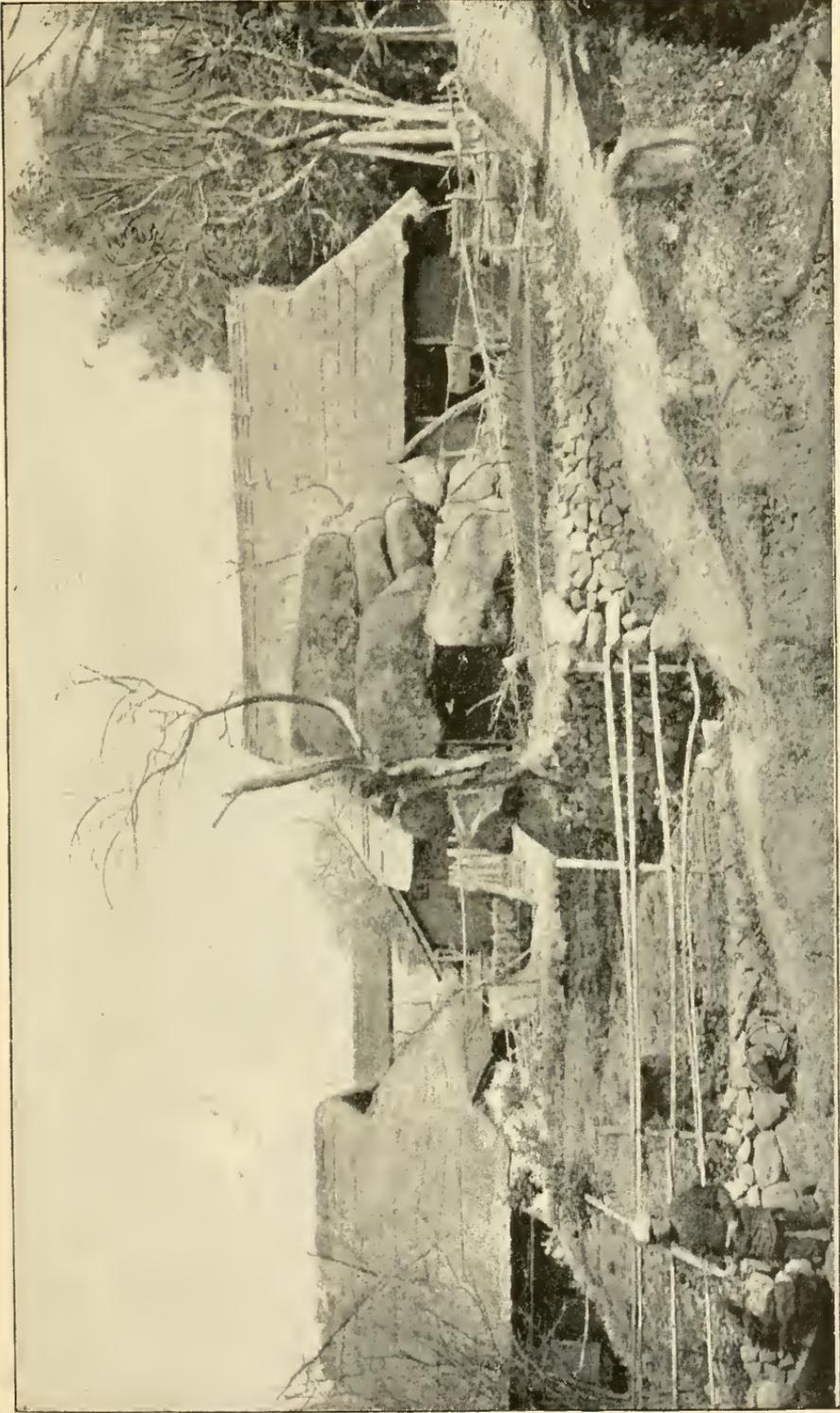
Near the summit of the hill already mentioned there is one very remarkable form of dolmen, Pl. LIII. It occupies a commanding position on the crest of the hill, the ground in front being so steep that it was very difficult to set up a camera to make a photograph. Observe the excavation in the back. This is better shown in Pl. LIV. Nothing like this is known anywhere else. It would seem that the rectangular recess at the back was used as a coffin, in which the body was placed and probably cemented in. A measuring stick 5 feet long lies on the ground, and affords some idea of the size of the stones used in the construction. A very large one forms the roof of the outer chamber.

Once more we will refer to the Japanese account of these chambered mounds. The same authority from which I have already quoted, says: "In all the sepulchers the first order of performing the burials was the piling up of the earthen mound, leaving an underground tunnel which leads from the outside to the very center of the mound. This mound done, the coffin, usually carved and made of stone, as represented in the sketch,* (Pl. LVI upper figure) in which the corpse was placed and sealed, was then introduced through the tunnel and placed in the center of the mound, and the tunnel was then filled up with stones."

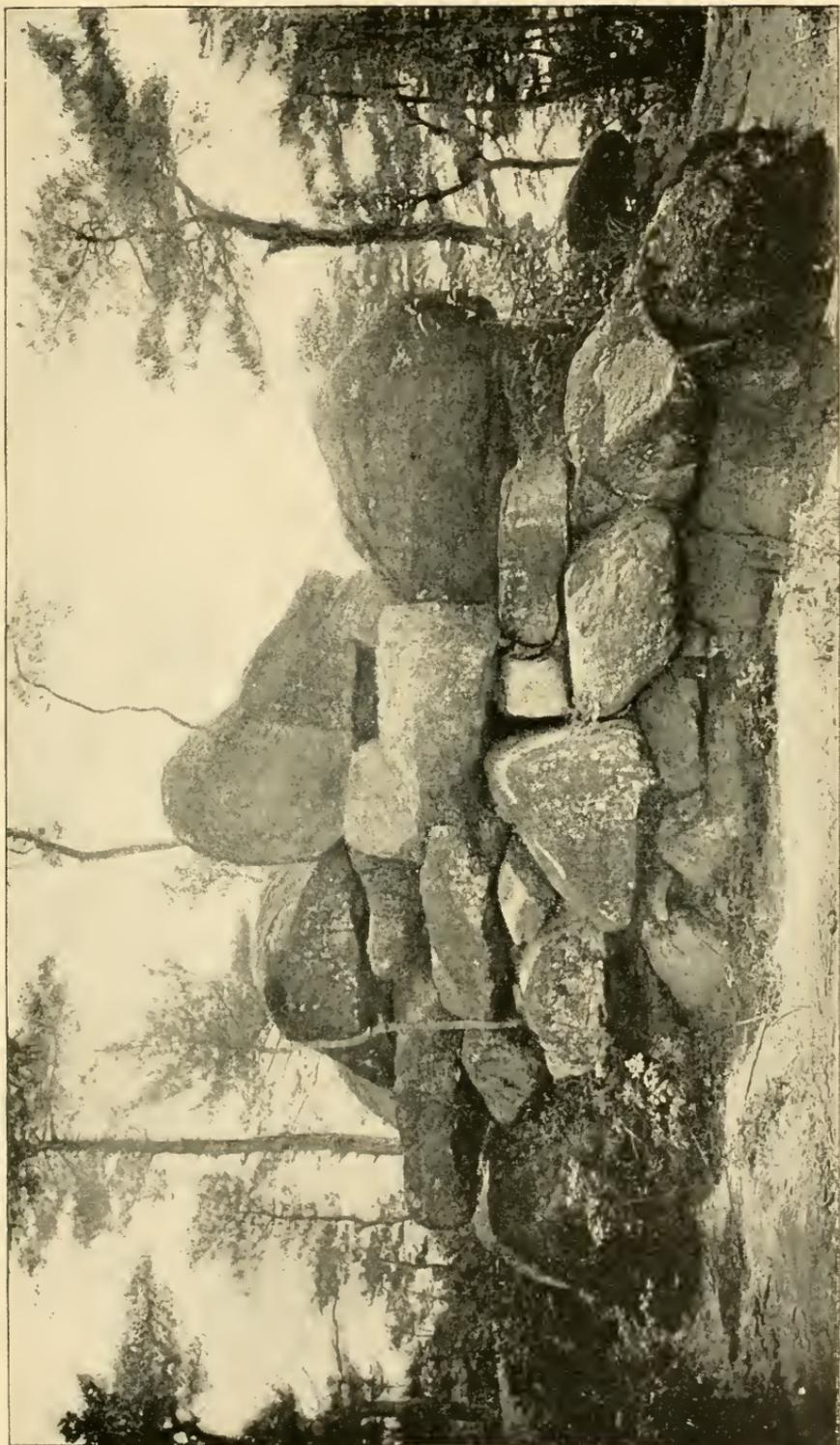
We have already seen that simple mounds without chambers were used for burial before chambers were thought of, and probably before coffins were devised. The coffins were certainly not always introduced through the galleries, as above described. The tunnels were certainly not filled up with stones, although their ends were probably closed with stones. Continuing our quotation, we read:

It seems that several forms of stone coffins were in use by the ancients since about the year 700 [40 A. D.]. The custom had no doubt been prevalent up to about the year 1600 [940 A. D.], when the use of clay coffins became predominant. The origin of the

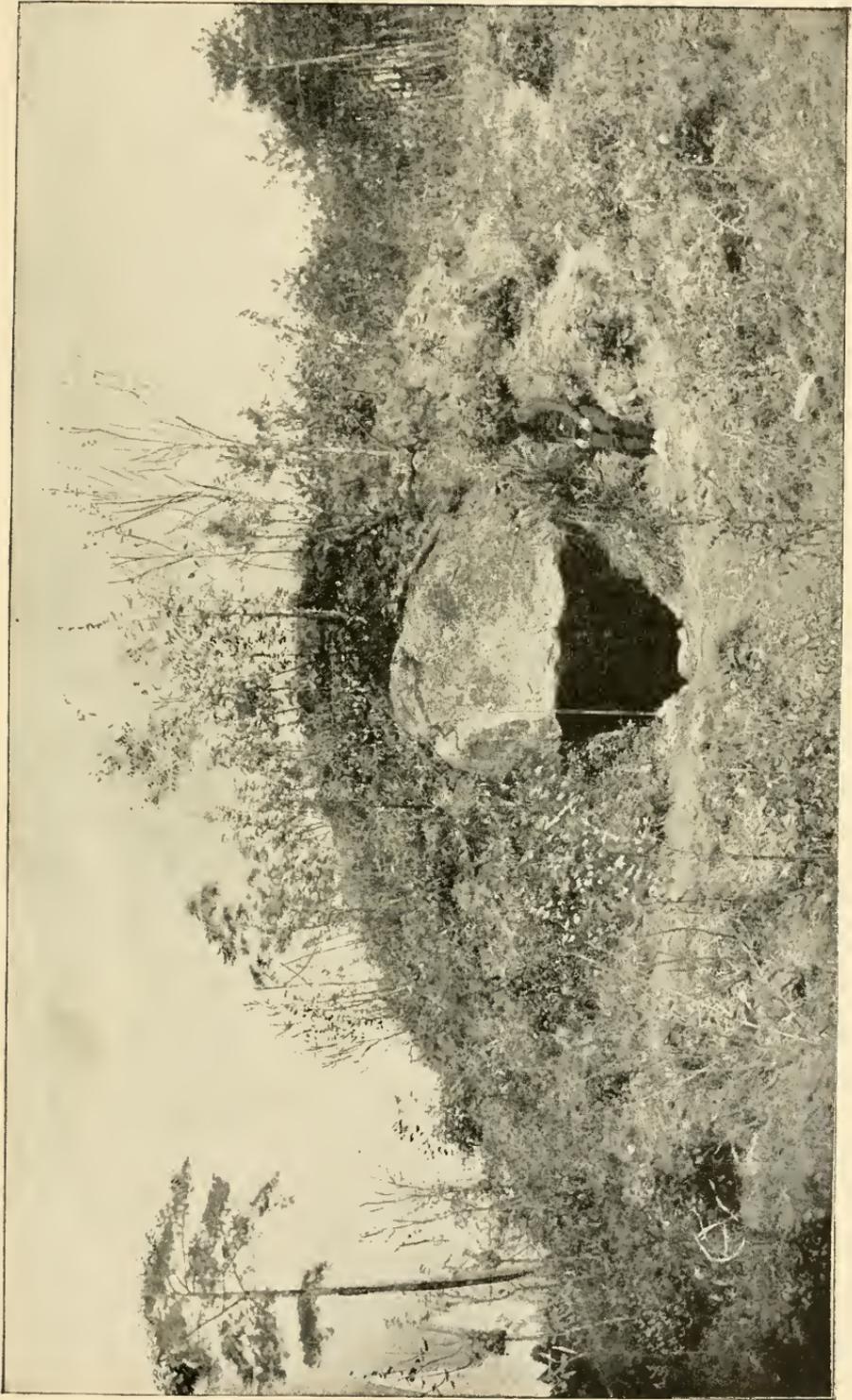
* The original sketches referred to in the text and some others are in the National Museum.



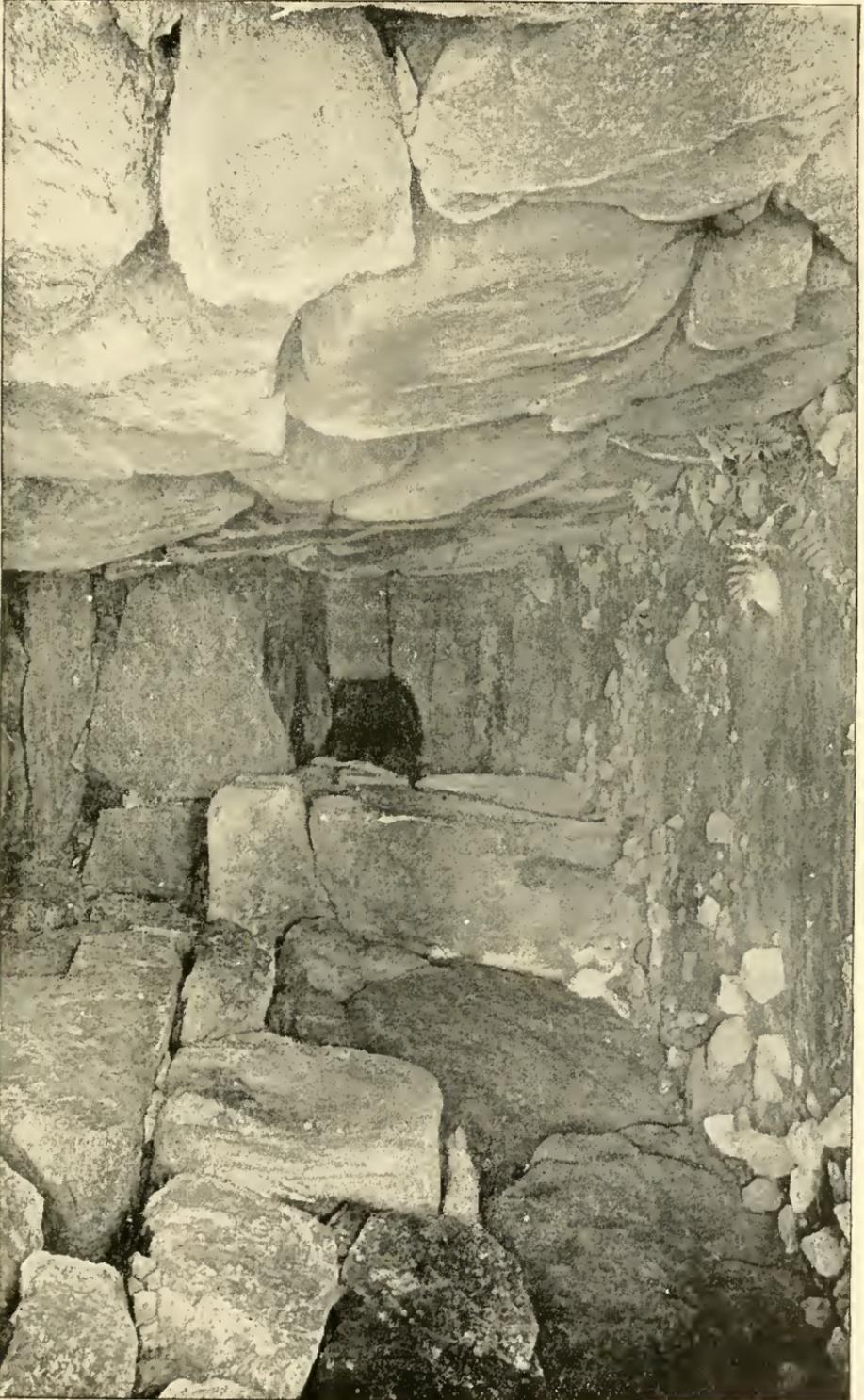
ROCKS OF CHAMBER EXPOSED.



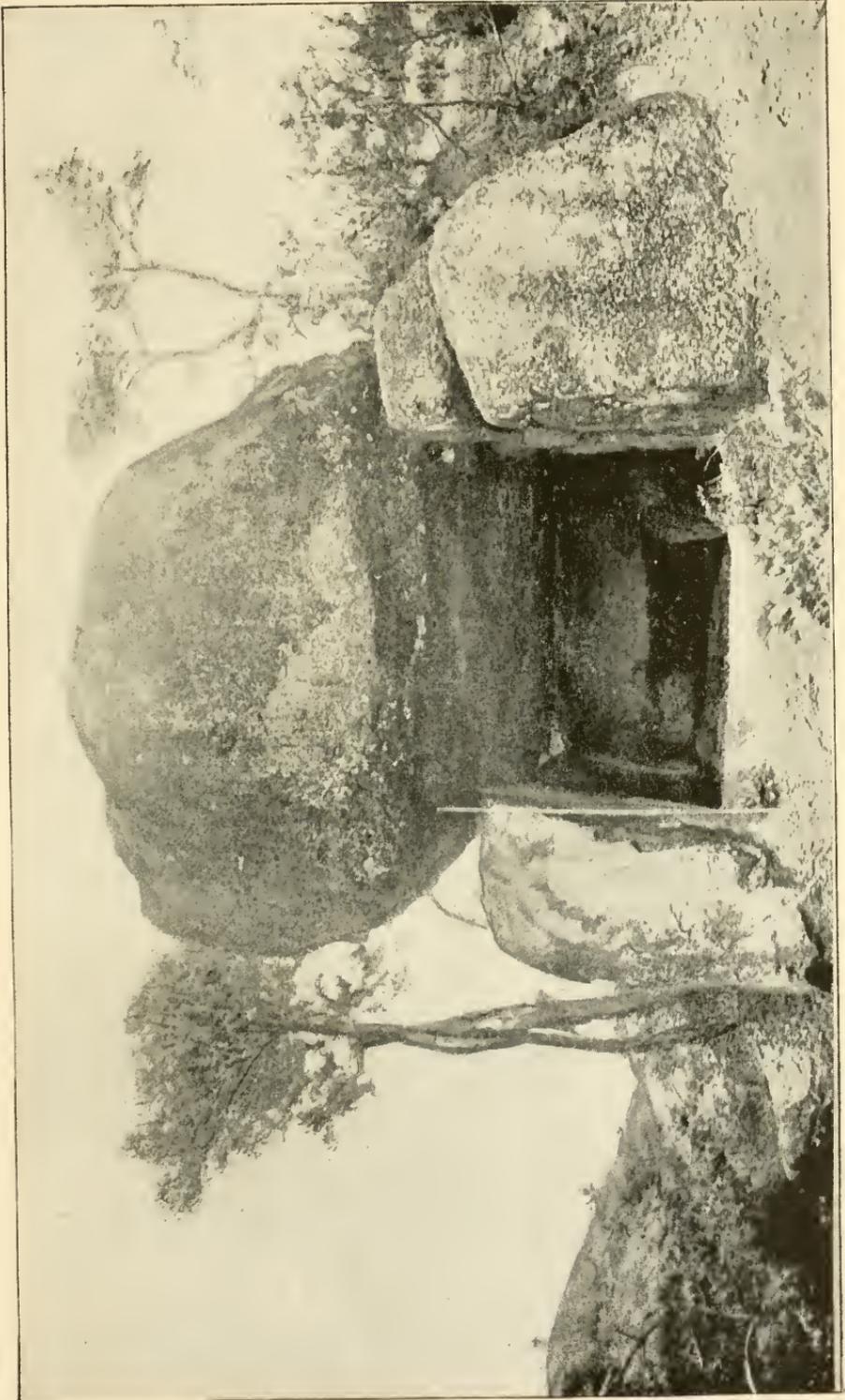
ROCKS OF CHAMBER EXPOSED.



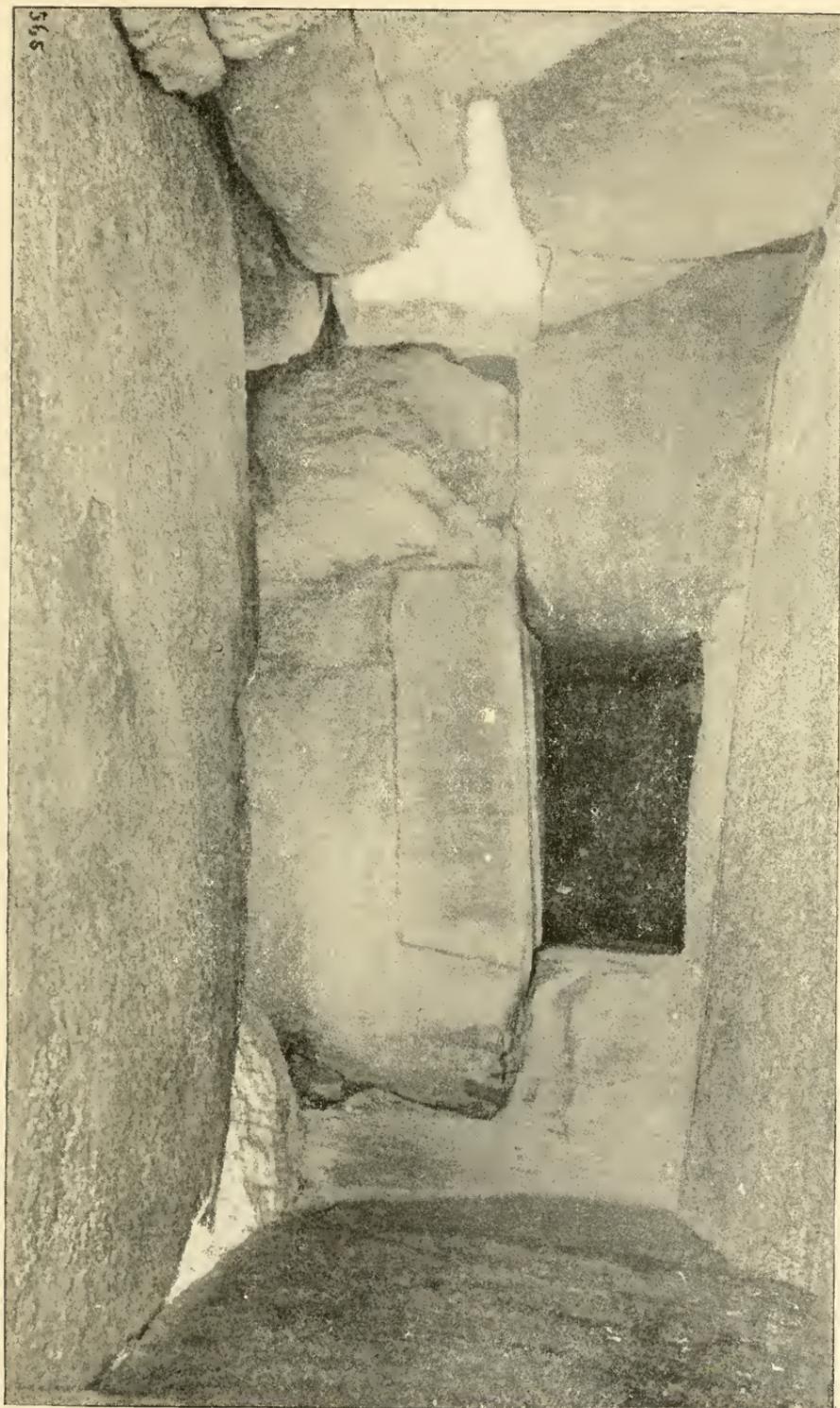
MOUND WITH A DIVIDED CHAMBER,



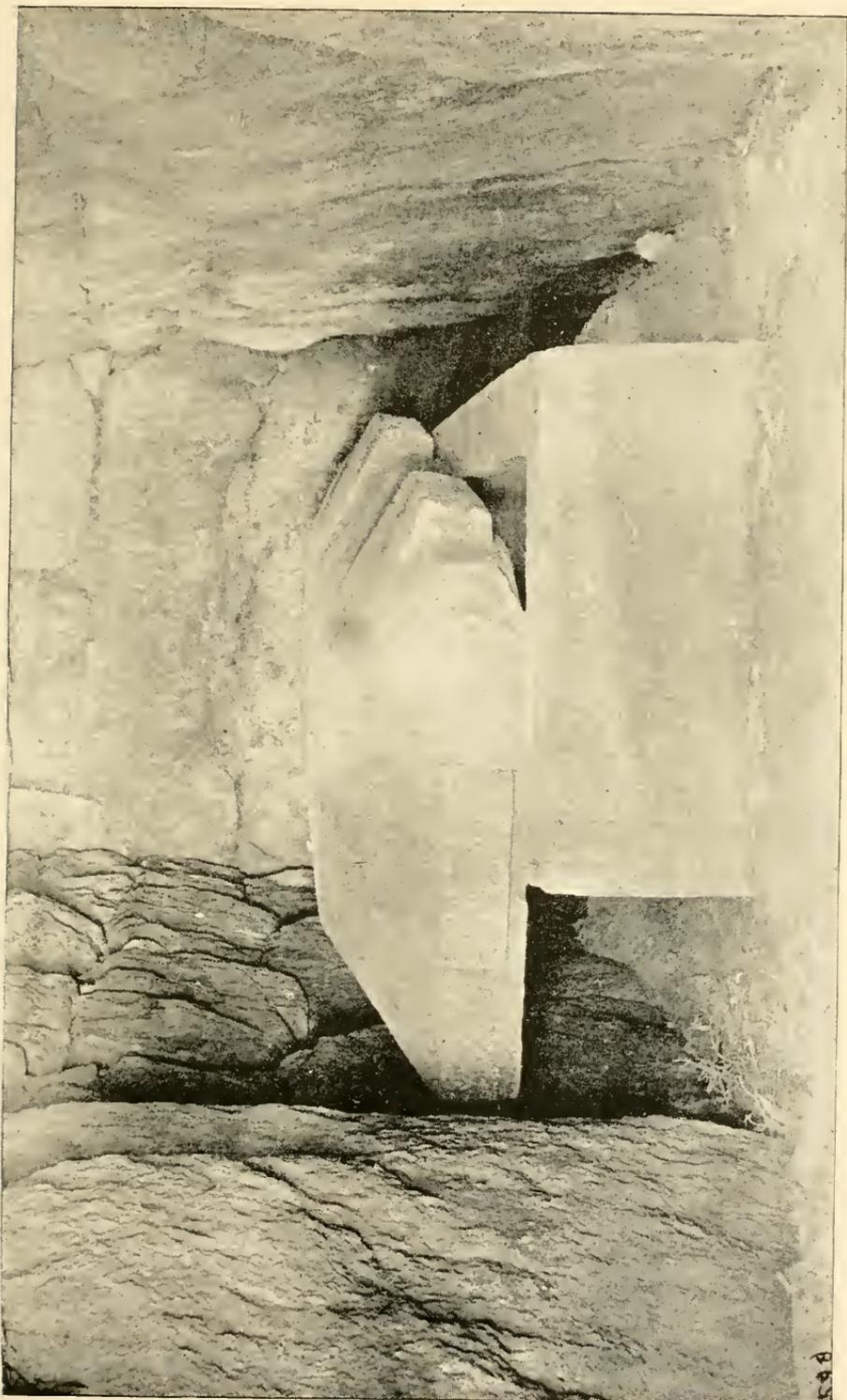
INTERIOR OF MOUND WITH A DOUBLE CHAMBER.



UNIQUE FORM OF DOLMEN.

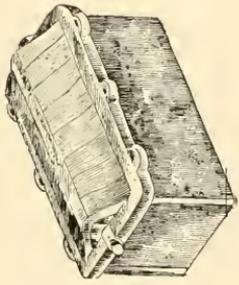


INTERIOR OF DOLMEN (PRECEDING PLATE.)

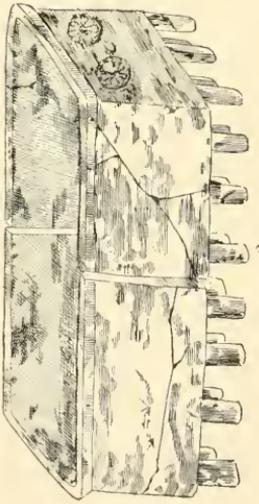


STONE COFFIN IN ITS CHAMBER.

1895

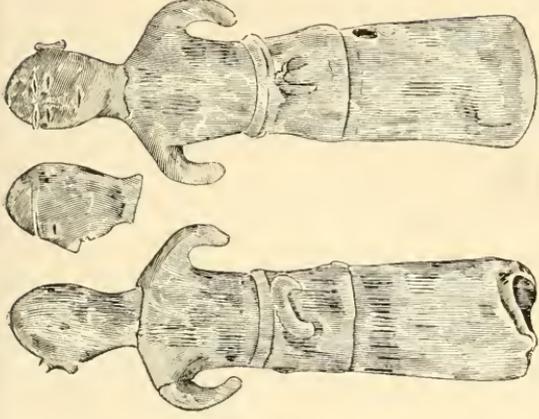


1



2

1. STONE COFFIN. (From a Japanese sketch.)
2. CLAY COFFIN. (From a Japanese sketch.)



3



4

3 and 4. Tsuchi Ningyo. (From a Japanese sketch.)

clay coffin seems to date about the year 1200 [540 A. D.], but its predominant use can not be traced before the year 1600 [940 A. D.].

To this there is an addendum in the form of an "N. B.," which is worthy of note as indicative of the spirit in which suggestions or criticisms are received by the learned officials of the Imperial Household. In my letter I had expressed a desire to know where the coffin represented in the sketch was to be found, and I ventured to say that the coffins were "often too large to be introduced into the mounds through the galleries, as you suggest, and sometimes there are two coffins." The answer was that the coffin came from Kumamoto, and the writer then adds: "The fact that these stone coffins were introduced through the galleries into the center of the burial mounds can never be disputed, being the result of actual digging when the galleries were discovered. The galleries that were discovered were large enough to introduce a large stone coffin." It would be a matter of very great labor to move one of those heavy stone coffins through a long gallery into its chamber, and since some of the galleries are 50 and 60 feet in length, and since in some cases the coffins are wider than the galleries, it is a natural inference that the chambers were frequently, if not usually, built around the coffins.

One of the best preserved stone coffins I have seen is shown in Pl. LV, photographed in its original position in its subterranean chamber. It is in a mound on the top of Domioji Yama.

Coffins made of clay were once very extensively used. Good specimens are rare, but fragments can be found in great abundance. Usually they are found in sepulchral caves or in mounds without rock chambers. They are occasionally found also in chambered mounds. In the lower part of Pl. LVI, from a Japanese drawing, is shown a clay coffin dug out of the earth in Bizen. It stands on numerous short legs. Its principal dimensions are in Japanese measure: *

Length.....	5 shaku.	8 sun.
Width.....	1 "	6 "
Height to top of lower part.....	1 "	2.5 "
Diameter of crests.....		4 "
Circumference of bottom of leg.....	1 shaku.	4 "
Height of leg.....		5 "

In at least one instance we found remains of stone and clay coffins together in a cave, showing them to have been contemporaneous.

Pl. LVII shows a clay coffin taken from a chambered mound in Settsu. When I first saw it and made the photograph it was perfect but soon after it was broken in two. The inside is shown in Pl. LVIII.

The mounds have yielded a great variety of articles buried with the dead, such as iron arrowheads, iron rings covered with bronze, rings of bronze or gilded bronze (Pl. XLIII), harness trappings of gold and silver, swords and other weapons, chains, glass beads, mirrors, and other relics.

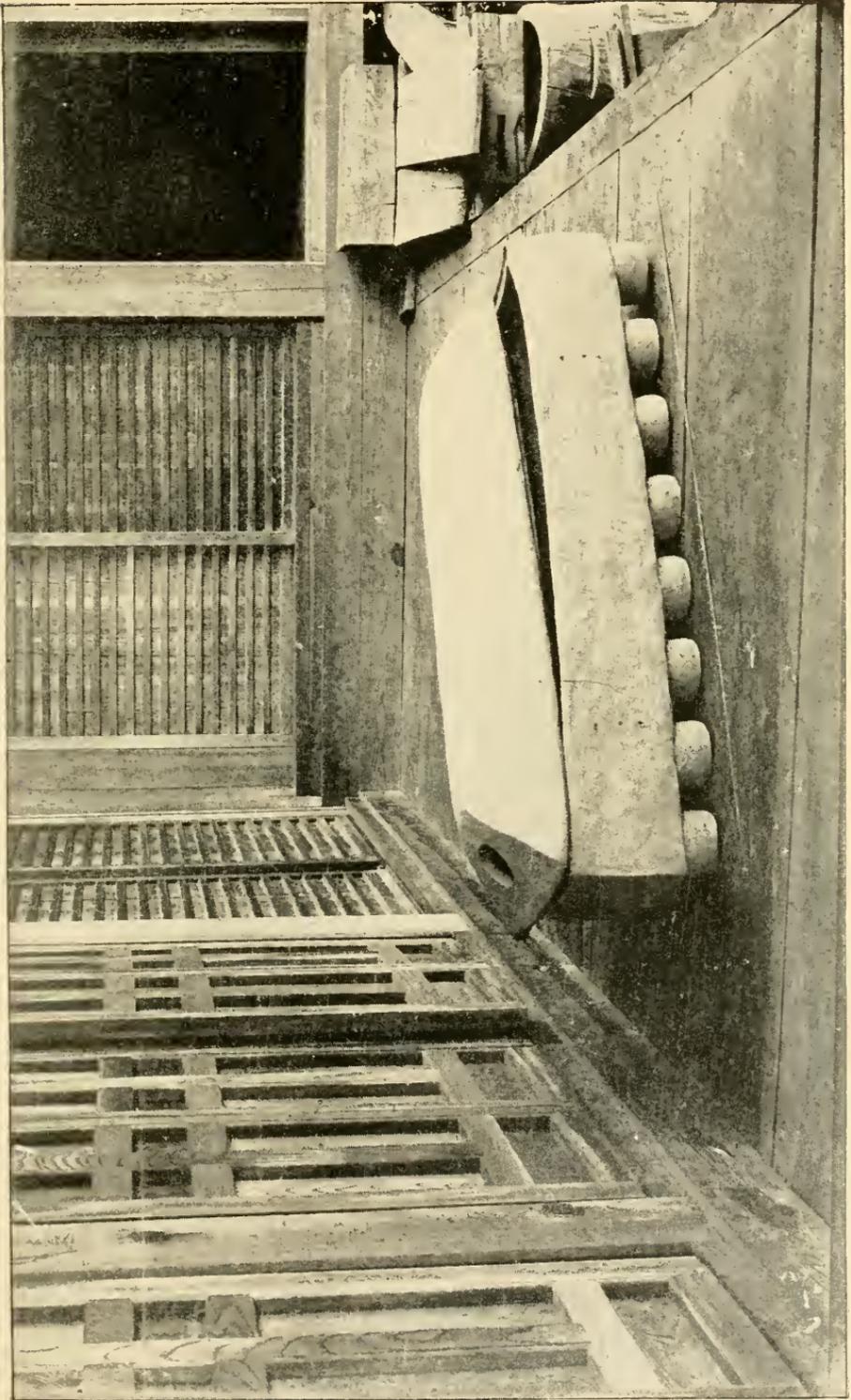
* A shaku is 1 foot; a sun is one-tenth of a shaku.

The tombs also contain vessels of pottery of various shapes, some of which are represented in Pl. LIX. Both the forms and style of decoration of these vessels, which are rudely made, are the same as those found in the tombs of Korea. Two very peculiar forms are shown in Pl. LX. It is a remarkable fact that the decoration on pottery from the Japanese mounds is much less elaborate than that found on the much older pottery of the shell-heaps and Yezo pits, which is usually designated as Aino pottery. The Aino pottery is so characteristically marked that the merest fragment can be recognized at a glance, without a possibility of confounding it with Japanese. It is difficult to explain the curious anomaly that the early pottery of a people who are famed at the present day for their productions in this kind of handiwork should be inferior to the earlier productions of their predecessors who have since absolutely lost the art of making pottery of any kind. A plate showing some of the peculiarities of the Aino pottery is published with an article entitled *The Ainos of Yezo*, by the present writer, published in the *Museum Report for 1890*.

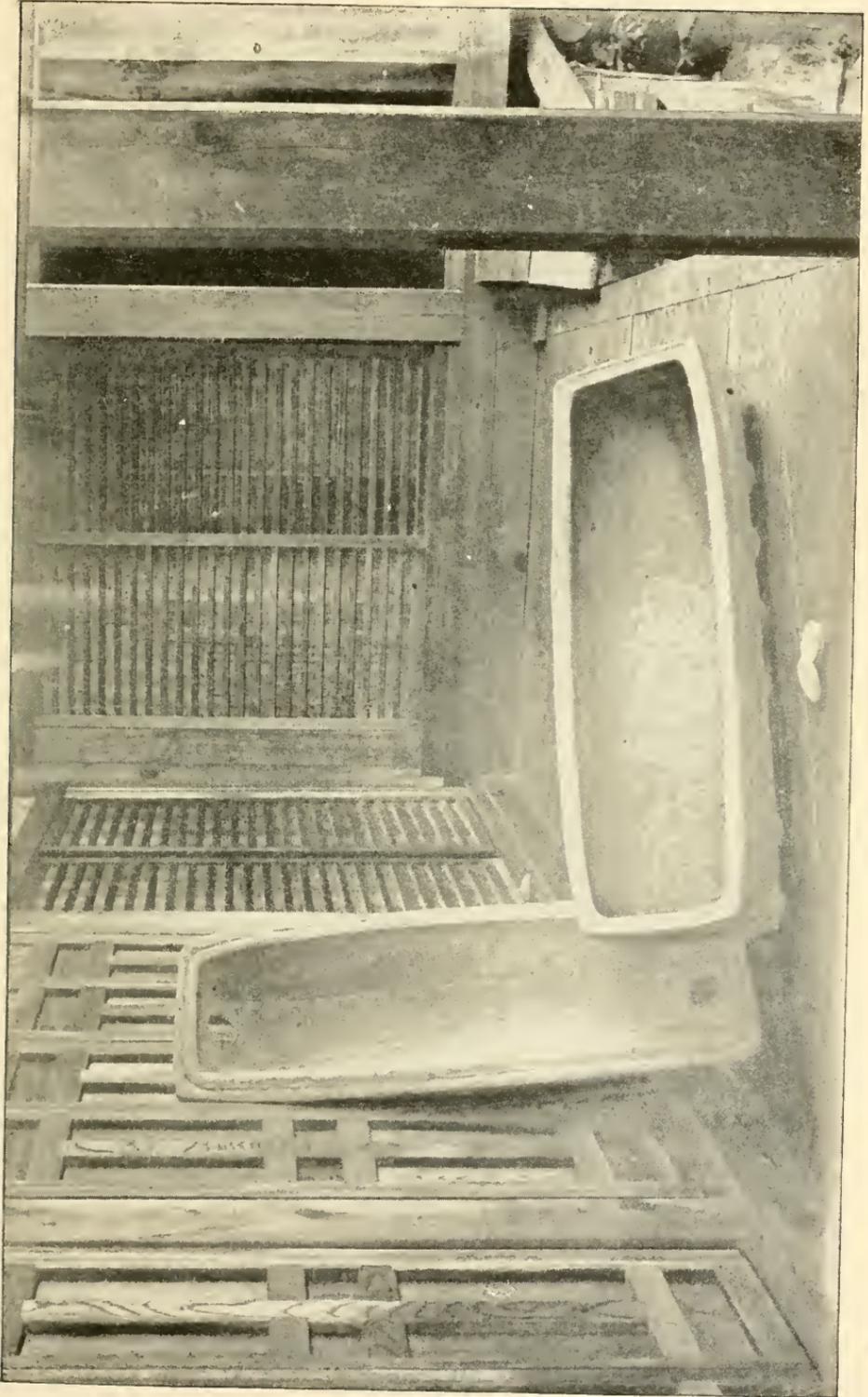
It was a very ancient custom in Japan to bury the retainers of a prince standing upright around his grave. Like many other customs, this came from China. In a book entitled *A Collection of Several Relations and Treatises Singular and Curious*, of John Baptista Tavernier, Baron of Aubonne, London, 1680, there is a direct notice of this custom in Tonquin. There are two illustrations of the procession of a King's funeral, and the description says: "Many Lords and Ladies of the court will needs be buried alive with him, for to serve him in the places where he is to go. I have observed, in passing through the Estates of the Raja or Prince of Velouche, which border on the Easterly parts of the Kingdom of Visapour, that the Wives suffer themselves to be buried Alive near their deceased Husbands, instead of being burned, as they practice in other Provinces in the Indies."

In the time of the Japanese Emperor Suinin (97 to 30 B. C.), his younger brother died and they buried all who had been in his immediate service around his tomb alive. "For many days they died not, but wept and cried aloud. At last they died. Dogs and crows assembled and ate them." The Emperor's compassion was aroused and he desired to change the custom. When the Empress Hibatsuhime no Mikoto died the Mikado inquired of his officers saying, "We know that the practice of following the dead is not good. What shall be done?" Nomi no Sukune then said, "It is not good to bury living men standing at the sepulcher of a prince, and this can not be handed down to posterity." He then proposed to make clay figures of men and horses and to bury them as substitutes. The Mikado was well pleased with the plan and ordered that henceforth the old custom should not be followed, but that clay images should be set up around the sepulcher instead.

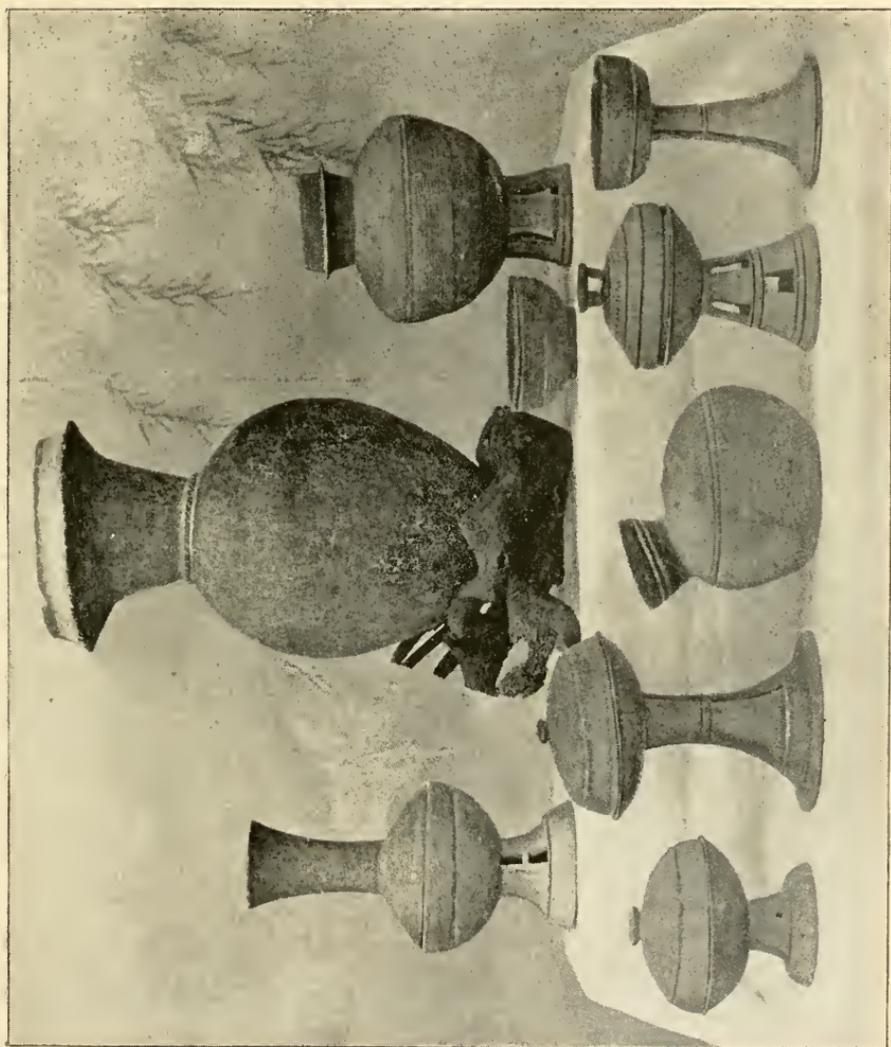
Even as late as the year 646 an edict was published forbidding the burial of living persons and also the burial of "gold, silver, brocade,



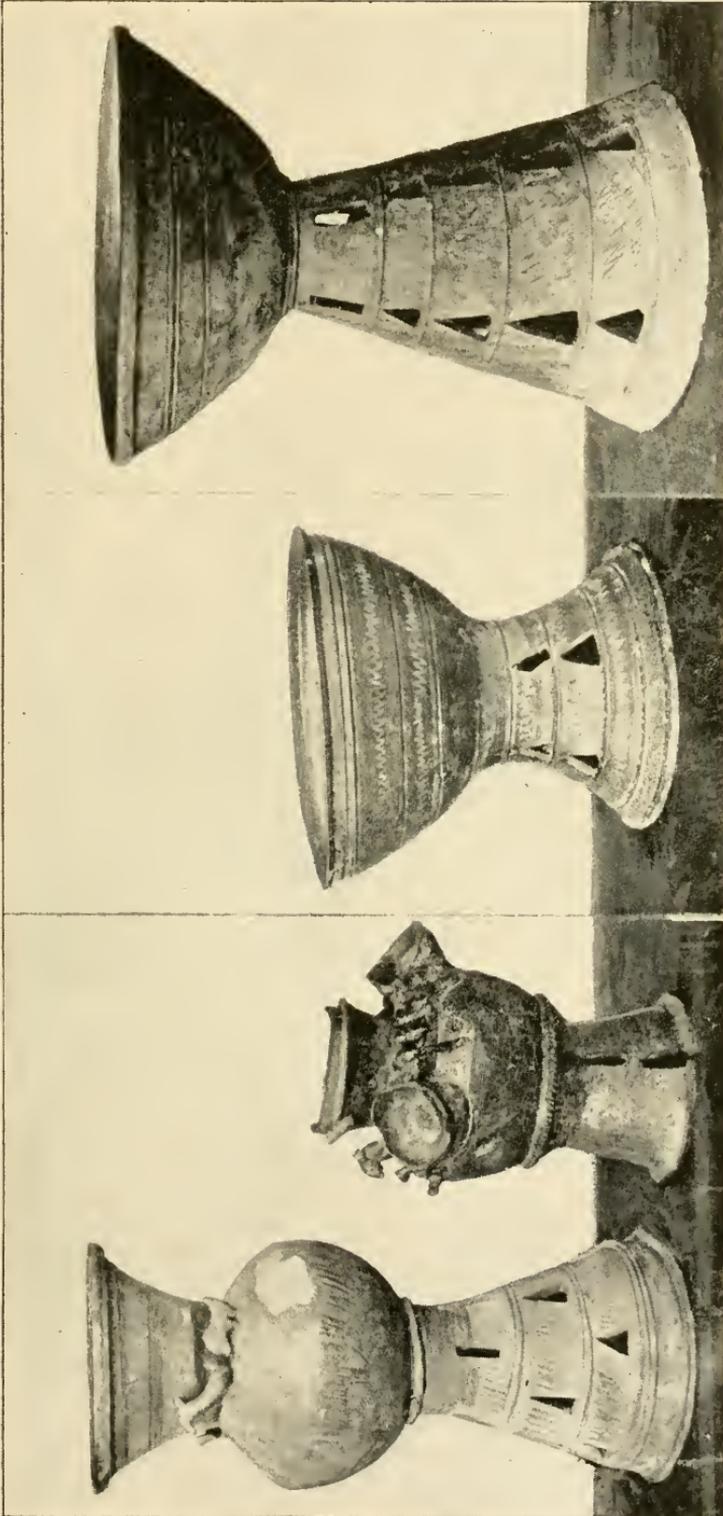
CLAY COFFIN. (PROVINCE OF SETTSU.)



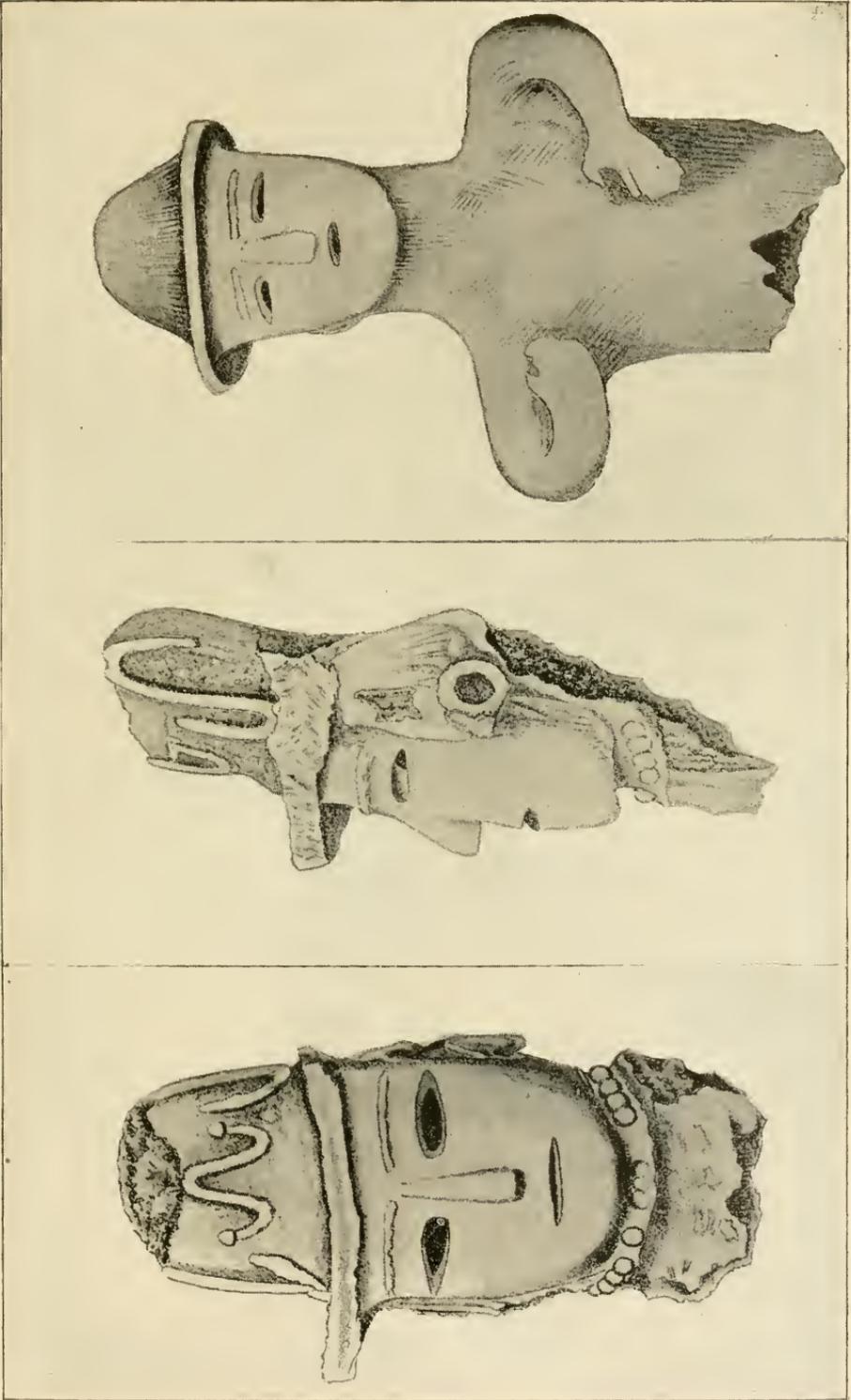
CLAY COFFIN. (PROVINCE OF SETTSU.)



BURIAL POTTERY.



BURIAL POTTERY.



Tsuchi Ningio. (From Satow.)



TSUCHI NINGIO. (GOWLAND COLLECTION.)



TSUCHI NINGIO. (From Von Siebold.)

diaper, or any kind of variegated thing." From this it might be inferred that the old custom of living burial was kept up to some extent even to the seventh century. The edict reads, "Let there be complete cessation of all such ancient practices as strangling oneself to follow the dead, or strangling others to make them follow the dead, or of killing the dead man's horse, or burying treasures in the tomb for the dead man's sake, or cutting the hair, or stabbing the thigh, or wailing for the dead man's sake."

The figures of clay thus introduced as substitutes for human sacrifices, and also to take the place of horses, are known as *tsuchi ningio*. Specimens of them are now very rare, and this fact leads to the supposition that the figures were not buried, but left exposed on or near the surface of the ground.

Von Siebold has figured three of these found in the Province of Musashi. He believes they were introduced about the year 2 B. C., and used until about 700 A. D. Some of these figures show beads around the neck and one of them has earrings.

I have brought together several illustrations from different sources, showing the character of these curious figures. Pl. LVI, from a Japanese drawing, represents two figures found in Musashi. The height of these images is about 20 inches.

Mr. Satow has described two specimens of *tsuchi ningio* from Kodzuke. Pl. LXI, copied from Mr. Satow's drawing, represents, on the left, two views of a portion of what was originally a sitting figure, complete to the knees. The hat is rather curious. Around the neck are head-like ornaments. Pl. LXII is a photograph taken from Mr. Gowland's specimen, now in the British Museum. Pl. LXIII is copied from von Siebold. The physiognomy of these figures is remarkable.

It seems probable that the figures were sometimes set on pedestals, and I am disposed to believe that the cylinders with constricted tops, already referred to (Pl. XLIII), were made to serve as supports for figures. The base of the last-mentioned image was evidently made to fit into a support of some kind. There is a circular aperture at the bottom corresponding to those perforations which we have observed in the cylinders.

Figures of horses are sometimes found. One of the Japanese sketches in the Museum represents a horse and his trappings as crudely molded as the human figures. It measures 2 shaku, 8 sun in length. (Pl. LVI.)

In closing this imperfect account of the Japanese graves, I would again allude to the much more extended observations of my valued friend and companion in Japanese travel, Mr. W. Gowland, and express the sincere hope that the results of his painstaking work in this field will soon be given to the world. The illustrations in this report are all from original photographs, except when otherwise stated.