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III.—*A Visit to Easter Island, or Rapa Nui, in 1868.* By
J. LINTON PALMER, F.R.C.S., Surgeon of H.M.S. *Topaze*.

Read, January 24th, 1870.

THIS little island, which has been rendered celebrated by the gigantic stone images which are so plentiful in it, is also so isolated as to require the special notice that it is in $27^{\circ} 8' \text{ s. lat.}$, and $109^{\circ} 24' \text{ w. long.}$, about 2000 miles from the South American coast, and 1000 from Pitcairn Island, or the Gambier Islands. It is mentioned in the voyages of many navigators, who in their notices of it do not always agree. In the account of the voyages of Captain Cook, the names there given to the island we found to be those of districts in it. I have given the native name, which originates from the fact, that many generations ago, a large migration to it took place from the island of Oparo, or Rapa-iti (Small Rapa). This island is about 1900 miles due west of Easter Island, which from its greater size was called Rapa Nui or Great Rapa. In length it is about 12 miles, and in breadth 4 miles, somewhat like a cocked-hat in shape, the base towards the south; the ends are high and bluff, and there is a tall hill, 1050 feet, an extinct crater in its centre. It is of volcanic origin, and abounds in craters, but these have been extinct for so long that no tradition of their activity remains. As they are of interest, I may mention the position and names of some of these craters.

1. *Terano Kau*.—This is a very large one at the south end of the island; in diameter it is about a mile, and is 600 or 700 feet deep. The bottom, which is flat and 1200 yards across, is a bog, with reeds and sedge, and many pools here and there; these were found to be 26 or 30 feet deep. There is a zigzag path to the bottom of the crater, as a farm-garden has been made by a settler, Captain Bornier. At the south side of the crater is the gap by which the last lava-flow escaped, and the north side is pretty well clothed with Hibiscus, *Broussonetia*, &c.

2. *Terano Hau*, not far from the centre of the island, is very much smaller, and is dry. This is the source of the red tuff which has been quarried to form the head-dresses, or crowns, of the large trachyte images, as the material can be found in mass, here only.

3. *Otu-iti*.—"The little hill," which is at the north-east end of the island, is very similar to Terano Kau, but of smaller size. It stands isolated in a large plain, and furnishes the grey lava (Trachyte) of which all the images are made. The largest images, and the only ones now erect, are at this hill.

Near the Terano Hau is a rounded hill of obsidian; it is

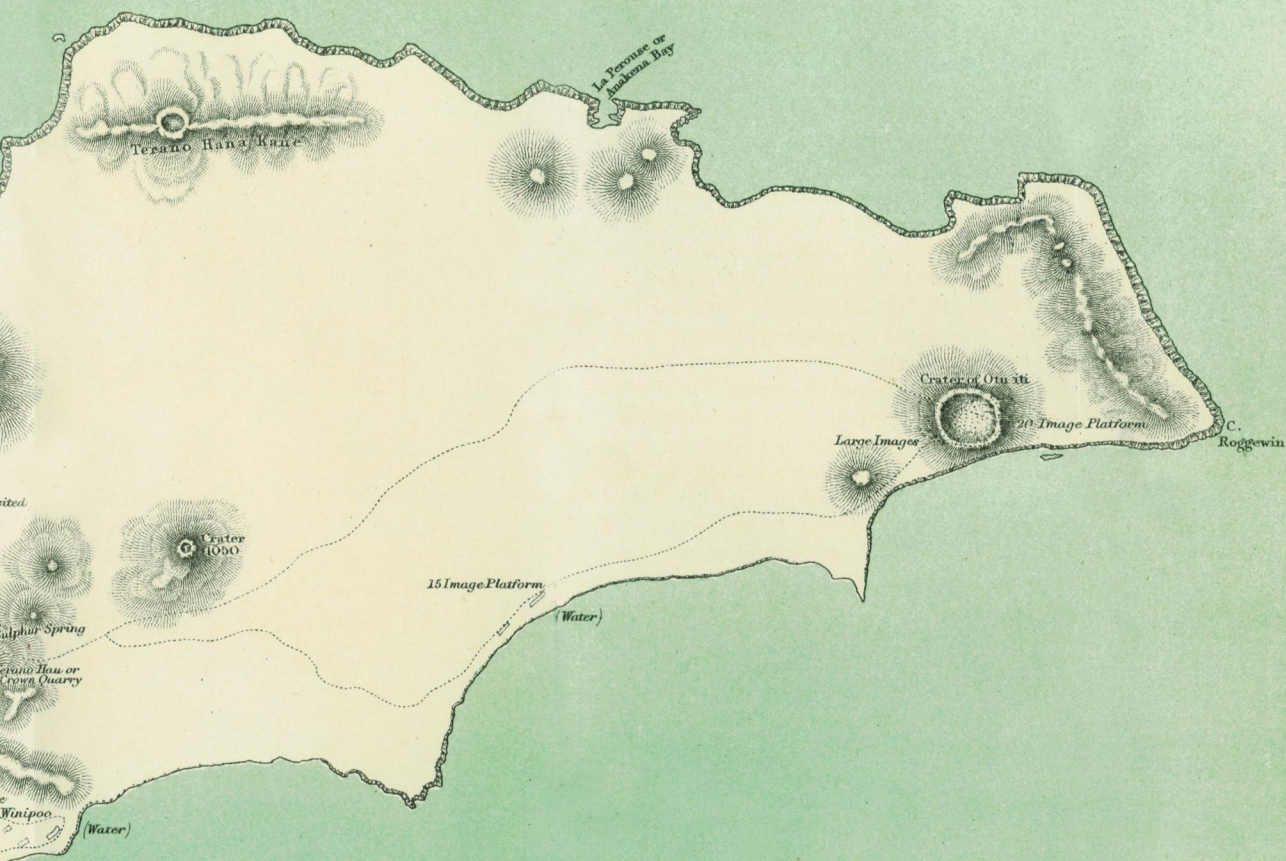


Chart of
RAPA-NUI
 OR
EASTER ISLAND

(South Pacific Ocean)

to accompany the Paper by
 J. L. Palmer, Esq^r R.N.

*Cooks Bay is in Lat. 27° 8' South
 Lon. 109° 24' West .*

capped with a white earth apparently argillaceous. I was not on it. All the hills are rounded, and the soil on their slopes, and in the intervening valleys, being nothing but decomposed lava, is very fertile. I should say that there are many small blocks of harder lava mixed with the soil, which render walking over the island very tiring, the paths being just broad enough to put one foot in, and necessitating a swinging gait, very irksome to acquire. The whole island is volcanic; I did not see any sedimentary deposits, nor diatom-earth. Roggewin, who visited the island in 1722, but whose narrative is to be received with caution, says that, "the island was full of trees, which were in full fruit;" this has never been corroborated by subsequent visitors. There were boles of large trees, *Edwardsia*, coco palm, and hibiscus, decaying in some places, when we visited the island, but, though La Pérouse left fruit trees with the inhabitants, we saw no traces of them. From the size of some of the paddles and rapas, large trees must have existed. Just now the only approach to wood is found in the sheltered nooks, bushes of 10 to 12 feet high, of hibiscus, *Edwardsia*, *Broussonetia*, &c. The rate of growth of these is extremely slow.

As to the supply of fresh water on the island, a good deal of misapprehension has existed. In several of the craters there are many deep pools of it; in those of the Terano Kau these are fully 25 feet deep, and I have tasted it pure and fresh from many places, near the shore. At Winipoo, not only is there a subterranean reservoir (to which a tunnel leads from the face of the cliff), but on the very sea beach the natives have made a cistern to catch the water which distils from a little runnel. I did not see that the natives had sunk any wells. On the road from Otuiti are many pools of small size, but the natives warned us not to drink of them. They chew, to appease their thirst while journeying, sugar-cane, which is even now, though uncultivated, abundant, or sweet potato. At meal times they use salt water as seasoning with their vegetables, and this must have led to the belief that they used it alone, from the absence of fresh water. At Otuiti I was told distinctly that there was no water, except that in the pools of the crater.* As to the water of the sulphur spring mentioned in Cook's voyages (and which is close to Terano Kau), we found that though it had a distinctly mineral taste, it was not very unpalatable, and in sufficient quantity to satisfy our pretty large and thirsty party. The rocks in most of the gullies are evidently stream-worn, but

* *Ina voi—ina ina*: no water, none at all—a pleasing notice to us when parched with thirst, and at sundown!

now not the smallest brook exists. The soil, as a rule, seems moist enough not to require particular irrigation.

The coast line is bluff, irregular, yet not much indented. The slope of the land is more gradual to the south-east shore, where the cliffs are of varying heights. At the ends of the island, as much as 800 feet, at Angaroa (Cook's Bay) is a sandy beach. This, though an open roadstead, is the best anchorage. The swell and surf round the island frequently prevent any chance of landing. This was the case with H.M.S. *Portland* in 1852—also with Captain Amasa Delano, in 1808. There are not many outlying rocks—very little seaweed was to be seen, although La Pérouse says it was used as food. Its name was then go-e-mon, it is now au ké. There was plenty of flat sponge on the rocks and boulders at the landing place.

We did not take any fish with the line, but at some time there must be some, and large ones too, if one may judge by the size of the hooks, made of stone, with which the natives used to take them. Large flying-fish are not uncommon, and I saw plenty of small fry, close inshore; several nets we obtained have small ($\frac{1}{2}$ inch) meshes. Crayfish, which are taken by the natives diving for them, and crabs, are common and good; shellfish also. I saw no oysters, but there were plenty of univalves, and, in the stone houses at the Terano Kau, there was an abundance of the shells of a small periwinkle (piripi), *Nerita*.

As in the rest of Polynesia, no quadruped has been found peculiar to the island. The rat is in great abundance. Pigs have been landed by some visitors: but were not allowed to breed. Roggewin says hogs were domesticated: there is no name for such a beast in their language, and I did not find any drawing of such in the mural paintings at Terano Kau. Birds were quite as scarce; some sea fowl were seen, but the ordinary domestic fowl was the only other bird; and these were in sufficient number. Small birds altogether absent.

Reptiles. *I was told* some one had seen a lizard, but this was a solitary instance; and in questioning all those who had been wandering over the island I was answered negatively, nor did I see one myself. No snakes exist.

No coleoptera were collected, but I think I saw one or two species. Centipedes exist. I saw no butterflies except one very like the *Cynthia cardui*, and one like the *Sulphur Butterfly* so common in England. Flies were exceedingly annoying to any one in places out of the free current of wind. There were no mosquitoes. Fleas were in myriads even in a grotto at Anakena (La Pérouse Bay). But no collections were made of the fauna of the island, which is meagre enough.

The vegetables which were cultivated were the sugar-cane, like that of Tahiti, very good, and now found self growing in numerous parts. Several kinds of yams. A remarkably good sweet potato, white, and when raw very like the chestnut in taste, and in this state is used to quench the thirst of the natives when travelling. It is very good also when cooked. There are no coconut-palms now growing, but boles of large ones are to be found. A wild gourd is common, 'it was used formerly for water-bottles. The tii-plant is pretty plentiful, but is put to no other use than for wattling of the grass houses, and as javelin-shafts. Of flowering plants we saw but few. The vervain, *Verbena officinalis*, is common everywhere, growing into bushes of as much as 4 feet in height; but it was imported some years since in a French ship, M. Bornier told me. None of the fruit trees, left by La Pérouse, could be found. I saw no tobacco plants. Of ferns there are some very beautiful, of the genus *Asplenium*, and several new varieties have been sent to Kew Gardens. Sedges and other bog plants grow in great profusion in the craters which are wet, but I regret that I was not able to collect any for an herbarium. The hill sides are covered with a fine grass which serves capitally to fatten animals, if we may judge by the state of some sheep now there.

The look of these people has been commented on by all visitors. Mendanā (1566) says, some were almost white, and had red hair. They were so well shaped and of such stature that they had much the advantage of the Spaniards. La Pérouse contradicts (1722) Roggewin's account as to their enormous height, and in many cases, singular leanness; but speaks favourably of them, and passes a high encomium on the beauty and form of the women, who he says, resemble Europeans in their traits and colour. Cook coincides. The Jesuit priest Eugène (1864) says the same; that they most resemble the Marquesans of all the other Polynesians,—many quite white, he says. We found them, in 1868, although under great disadvantage at the time of our visit, robust enough, and well grown, and they had a more European cast of countenance than the rest of the natives of the islands we visited. Three of the crania from a burying-place at Winipoo were brought home, two of which are in the College of Surgeons, London. The tracings and measurements of the other were sent to Prof. Huxley. In disposition they are friendly, affable, and merry, excessively indolent, very fond of finery and adorning themselves. La Pérouse says they had an amazing fondness for the hats of their visitors; we found our trowsers equally coveted. The men, says Frère Eugène (1864), were in their habits all thieves, and distrusted one another, and as the island abounds in caves and hiding places, these were

always in request for shelter of the filchers. They are very patient of hunger, which they will rather suffer than work. Very dexterous in plaiting and carving both wood and stone; chips of obsidian are used for the former material, instead of chisels; they used obsidian flakes for razors and for their javelin heads. They practised circumcision.

The women, says La Pérouse, were fond of coquetry, which there seemed no disposition on the part of the men to restrain, nor were they jealous at it. Captain Amasa Delano, 1808, bears similar testimony.

Their mode of cookery was very simple. The various materials for the repast were wrapped in leaves, and baked in an underground oven filled with heated stones. They did not shed the blood of any animal, but stunned it; or suffocated it in smoke (like the Fuegians).

Cannibalism was practised. Four or six years since some Spaniards were eaten. From some remains, and native testimony, we were led to infer that human sacrifice took place, and burnt-offering was part of their religious worship.

The ground is so fertile, that a few days' work suffices to keep any family in subsistence for the entire year. Hence "they have no idea of agriculture," says Père Eugène. Yet the whole of the island has formerly been under cultivation, and rahui-stones are met with in every direction.

In consequence of the strong winds, the paper-mulberry (*Broussonetia*) was cultivated in small enclosures, with stout stone walls of about five feet high. The inner bark of this shrub served to make the mahuté (matué) for the blanket-coat of the men, which they called nuá.

Both sexes wore the maro, as commonly used in Polynesia. The men wore a cincture of woman's hair, as thick as a finger, and finished at each end by a tassel. The covering was a mantle over the shoulders, and fastened at the throat. This nuá was made of paper-mulberry for the men, and of fine grass for the women; and, says Captain Delano (1808), it was fastened round the waist, for them, and so hung nearly to the ground. The mantle was either white or made with brown patterns on it.

Both sexes used pigment for the skin; the men use not only earth of all colours, but also the sap of plants. The women were permitted red pigment only.

Tattooing was practised by the women more elaborately than by the men, and completely. In 1852 it was noticed, in particular, that they had a row of dots over the forehead, close to the hair, which ran down to the lobes of the ears. The women gather their hair into a knob at the crown of the head.

Both sexes wore ear-ornaments. The lobes were pierced, and

distended very much. Large wooden ornaments, or the vertebræ of sharks, were inserted. Roggewin says the priests wore great balls of wood hanging to their ears; some of these were sold to us, they were of the size of a fist, and carved into faces and joined together. They told us these were used at the dances. At their dances the men wore a gorget made of hard wood, lunate in shape, and each end terminated in a head; the concavity was worn uppermost, the profile of the face in the oldest gorgets was very aquiline. Also coronets of feathers, made like a modern hat without the brim; some we saw had the feathers radiating, like a flat diadem. They were usually made of dark metallic-looking hackles of the common fowl. La Pérouse says they much coveted the hats of the French.

In their hands, in place of weapons as used by the Maori, they carried short double-ended paddles, which they named "rapa." This had some symbolic meaning, as it occurs continually in the carvings and paintings, and also in the tattooing on the women's backs (1852). It would seem to be a human trunk, as at one end there is usually a face, and at the other a short phallus. It was not used for rowing.

Their weapons were the patoopatoo, or meré, a short club like that of the Maori; but I did not see any made of bone or stone, only of wood. They did not know the use of the sling. They used a pike for thrusting, and a javelin for casting; they both had heads of obsidian, the shafts made of pourou (hibiscus) and Tü (*Dracæna terminalis*); the javelin was thrown underhand, with the little finger foremost, and no throwstick was used. When an adversary was disabled, he was knocked into the head. They avoided bloodshed, and as the javelin-head was made for cutting more than for piercing, the legs and arms were more aimed at. The spear-shafts we saw were sometimes made of the stems of palm-leaves.

We saw no large war-clubs. The chiefs carried as a baton of office, a long staff as thick as the wrist, a little expanded and flattened at the lower end, and at the upper carved into a head, with a double face, and eye-balls of obsidian were inserted.

From the scarcity of wood, no canoes now exist; if we except a few worn-out ones in a cave near Mataverí. In 1852, several were seen; they were made of small pieces of wood very adroitly sewn together, the prow and stern much raised, and they had an outrigger. As well as canoes, they used swimming pillows, much like a very large elephant's tusk, made of sedge, rushes, &c. They resembled much the "caballitos" which are used on the Peruvian coast; but I saw none at this visit. The people are very good swimmers.

They did not offer any fishing lines for sale, and the only hooks we saw were the large ones called "rou," made of stone, and which were of some age, and scarce, about three inches across the head. They are not in use now. The nets were made with small (half-inch) meshes, and from their size used for the small fry.

The houses are low and long, like a canoe upset; we find a good account of them in Cook; Delano saw them, in 1808, fully 200 feet long; in 1852, the *Portland* saw some fully 120 feet long, generally 60 or 70; in 1868, the *Topaze* found them about 30 feet long (and smaller), 12 to 14 feet broad, in height $5\frac{1}{2}$ feet. The big houses were assembly halls, and were raised on low stone walls, on which a thatched roof was placed.

The ordinary house is made of a framework of sticks, on which grass is thatched. It is windowless, no hearth nor fire; an aperture in the side, about 18 or 20 inches square. This is closed by a net to exclude the fowls, and, as the natives pack pretty closely in these, the heat and noisome smell are indescribable.

There were some massive square buildings, built of unmortared stones, some 20 or 30 feet square, and 6 feet high, with little square apertures of a foot in size, here and there, at the ground level. These, we were told, were hen-houses, and fowls were in them; but it seems unlikely they were made originally for this purpose, as some very similar, but with white-washed tops, were used, we were told, for sepulture.

There were three principal feasts, or occasions of rejoicing, during the year:—

In spring (September), there was a great gathering at Mataveri. The people dressed themselves in their best, and remained there for two months. Athletic sports, running races, &c., were the order of the day. In summer (December), the feast of Paina took place. It is specially noted that each brought his own provisions. The ceremony ended by the erection of a column of boughs; this was the Paina. In the winter (June, July), the large houses were built, and the people met for dancing, and held choral meetings, chanting songs, in which the same couplet was often repeated. These meetings were called Arcauti.

Their monarchy was elective; after the death of the sovereign, all the High Chiefs met together near the Terano Kau, and the candidates, with the view to prove their capability, descended the cliff there, swam to the islets, and, having got sea-fowls' eggs, returned with them. The successor was chosen by superior dexterity. The son of the last king, Roto-pito, was alive four years since. M. Bornier, the French settler, told us

that on one occasion, being storm-bound in his boat on the islet, his crew swam to the island for food, with which they returned; so that this narration may not be fable.

The earlier voyagers thought that idols were worshipped by these people. Roggewin gives the names of their gods as *Tau-pi-co* and *Dago*; that fires were lighted before the idols at sunrise, and that the priests who ministered were shorn. But we found that the *Moai* or Platform images were not worshipped, and that the people believed in one God—a spirit—sexless, whom they called *Make-Make*, the Creator—and that mankind, his children, but not by reproduction, were made by him from the earth; not by plastic agency, but by growth, like plants, &c. They repudiated the idea of a female deity. The Jesuit Father Eugène, 1863-65, noticed, in his letter to the Superior of his Order, that although they had “household gods” suspended to the roof of their dwellings, they did not worship them. The priests uttered the wishes of the god, oracularly; also his requirement of human sacrifice, and subsistence—by which they lived.

The taboo and *rakui* were here in full force, as in the other islands. By taboo, I mean that prohibition as regards man; by *rahui*, as regards property and crops. The symbol of the *rahui* was a cairn of three or four stones, piled on one another; the upper one very frequently white-washed. If a man planted ground, he immediately dotted the place with these cairns.

We did not find out whether there was any belief in a future state, yet it seems probable. After death the corpse was wrapt up in a bale of sedge and grass, and laid on the *papakoo*, or cemetery-terrace, the head pointing seawards. There was also another way by wrapping the corpse in *tappa* (native cloth), and lowering it into the cleft of a rock, or some inaccessible place. Some were seen by our people in such a position at *Anakena*, *La Pérouse Bay*. There were also burying-places inland. The small image *Hoa Hava* was the genius, so to say, of a cemetery at *Mataveri*. “Plenty, plenty dead here,” said the guides; but we saw no platform, so that the corpses must have been buried. Yet so great is their aversion to promiscuous interment, as in Christian burial, that just before our visit a woman (whose child died shortly after birth, and had been so interred), rose in the night, and, after digging up the corpse, carried it two or three leagues to the *papakoo* of her tribe. Since the Peruvian raid, all the survivors have been massed together at *Angaroa*. That burnt sacrifices were offered, we found, by there being pillars here and there, on which were marks of fire, and in some instances charred bones near them. We were told these were of *Heaka*—*victimes* (French translation).

The papakoo, or cemetery, is a terrace or platform, generally near the sea, made of rolled sea stones, and faced seawards by a strong wall of large irregularly square stones, fitted together without cement. The ends of the terrace were whitened; they were usually about 100 yards long. One or two had no facing wall, being probably unfinished. There were a few inland, but I have no notes of them, except that on the flank of the Terano Kau, near Winipoo, there was a moated enclosure, on one side of which was a raised terrace overgrown with grass. This, we were told, was a papakoo. Near it a small trunk image—Libi Hoahava; where there was a small image we were led to infer a papakoo had existed.

Some square tombs, but for what class of individuals I could not learn, have been adverted to.

No images were placed on the papakoo terrace in the same way as the structures now to be described. These are to be seen on nearly every headland, as a rule pretty close to the sea, and being built on sloping ground, the sea-front is always the taller. They vary much in size. I will describe a pretty perfect one, which I have called the Fifteen-image Platform.

Seawards, just where the ground becomes broken as it nears the cliffs, is built a very stout wall. Its height is much obscured by fallen rubbish, broken images which have toppled over, and rank vegetable growth, reeds, &c.; but it seems to have been about seven or eight yards high. The stones of which it is made are large and irregular, both in size and shape, though more or less four-sided. Some are fully six feet in length. They are fitted together very exactly, without any cement. This wall is built flat and level at the top, about 30 feet broad, by 100 paces long, squared at each end, and parallel to the shore in its long direction. This constituted, in fact, the platform, on which were the slabs which served as pedestals for the images.

Landwards it seemed to be not much more than a yard high, and on that side also was much ruined, especially at about the centre. Before it, in the same direction, was a smooth space, or terrace, of the same length as the platform, but at least four times as broad, and this terminated in front by a low façade, or step, built of stone, and about as high as that of the platform seemed to be from the same point of view. The terrace sloped gently to this step, and the sides were built square and raised above the adjoining ground, so as to join the ends of the platform. The image platform was strewn with bones in all directions. They were old and weatherworn, but bore no marks of fire on them. The images had been thrown down in all directions, and were all more or less mutilated. The debris prevented my seeing if there was any crypt under the image pedestals, or

in the platform, as at Winipoo, and the openings must have been at the ends of the platform, or at its sea-front, I think, if any existed.

At the south-west end of the island, at the sea edge of the Terano Kau Crater, are a number, say eighty or more, of houses of great age, now unused, mostly in good preservation, which are built in irregular lines as the ground permits, their doors facing the sea. Each house is oblong-oval, built of layers of irregular flat pieces of stone, the walls about $5\frac{1}{2}$ feet high. The doors are in the side, as in the present grass huts, and of about the same size. The walls are very thick, 5 feet at least, which makes the entrance quite a passage. On entering, the walls are found to be lined with upright slabs, say 4 feet high, but not so broad. Above these, small thin slabs are ranged like tiles, overlapping and so gradually arching till the roof-opening is able to be bridged over by long thin slabs of some $5\frac{1}{2}$ or 5 feet, which are not more than 6 inches in thickness and 2 feet in width. The inner dimensions of the "hall" are about 16 paces long by 5 paces wide, and the roof is fully $6\frac{1}{2}$ feet high inside, under the centre slabs. The passage leading to it is paved with slabs, under which is a kind of crypt, or blind drain, which extends to the distance of about 6 feet outside, where also it is covered with flat slabs and is of the same dimensions as the passage. It is carefully built of stone, squared and dressed; it ends abruptly and squarely.

In these drains, I was informed, the dead men heated were kept till required for the feasts. Outside the hall, and at right angles to it, are smaller chambers which do not communicate with it, and each of which has a separate door from the outside. We were told that these were generally the women's apartments. The upright slabs which lined the hall, and those of the roof, were painted, in red, black, and white, with all kinds of devices and figures, some like the geometric figures of the Mexicans, some birds, rapas, faces, Eronié (a curious mythic animal like a monkey with a bird's head); M'hanus, or double-headed penguins. Symbolic figures of Phallic nature (Hiki-Näü), rude tracings of horses, sheep, and ships with rigging were found in a few. These were very new, and misled some to the idea all were equally recent, and the houses also, which we were told was not the case. There was no appearance of pavement in the hall, and in many of them enormous quantities of a univalve—a maritime Neritina—which had been used for food. It was in one of these houses the statue Hoa-haka-nana-Ia was found. It was the only one there, we are told.

Near these houses are some remains apparently of very great age—the sculptured stones on the brink of the sea cliffs at the

Terano Kau. They are at the place where the last lava-flow issued, and quite overlook the sea, which is directly under them. The blocks are of various sizes, carved *in situ* into rude tortoise-form, or have odd faces shaped on them. The nowain bushes and grass much obscure them, and had my visit been at any other time than mid-day, I should have sketched a good many, but I was very pressed for time. I could not learn their significance. These are very numerous, even to hundreds. I began to count them, but found them to be so plentiful as to make it lost time. They are almost always on platforms, but now all have been thrown down; except in the crater at Otuiti, and outside it, where they are in the earth only, and in groups, not in rows, and here even very many are prostrate. They are made of but one material, a grey, compact, trachytic lava, found at Otuiti, where there is a distinct *slide* for them to be removed by, and where there are still imperfect ones to be found. They are trunks, terminating at the hips—the arms close to the side, the hands sculptured in very low relief on the haunches. They are flatter than the natural body. The longest I measured was 37 feet; the usual size, 15 or 18; the small ones, as Hoa Hava, 5 or $4\frac{1}{2}$ feet. These were more boulder-shaped. The head is very flat; the top of the forehead cut off level so as to allow a crown (hau) to be put on. This was not done till the image was on its pedestal on the platform. In the giant images at Otuiti, outside the crater, the head seemed to project before the line of the trunk, which we did not notice in the others. The face and neck of these measured full 20 feet to the collar-bone. They were in the best preservation. Those inside the crater were of large size, but weatherworn, apparently the oldest in the island, and also many were prostrate. They differed a little in profile from those in the other parts of the island. The face is square, massive, and sternly disdainful in expression; the aspect always upward. The peculiar feature is the extreme shortness of the upper lip, or the upthrust of the lower one, which would produce the same appearance. This gesture is sometimes seen now among the natives. The eye-sockets are deep, close under the brows, and, as far as we could make out, eye-balls of obsidian were inserted in them; but we were not fortunate enough to find any. The nose broad, nostrils expanded, the profile varying somewhat in different images. The ears were always sculptured with very long pnedant lobes.

The beautifully-perfect one Hoa-haka-nana-Ia (each image has its own name), now in the British Museum, was found in the stone house called Tau-ra-re-n'ga, at the Terano Kau. It is elaborately traced over the back and head with rapas and birds, two of which much resemble the apteryx. It was coloured red

and white when found, but the pigment was washed off in its transit to the *Topaze*. Its height is 8 feet, weight 4 tons. It was buried waist deep in the ground, and had no crown. Its face, like those of the rest, turned from the sea. It was the only one under cover, although it was reported that there were some in a cave on the sea-shore. This arose from the misconception of some mural paintings found there. The house in which it was found was a small circular one (20 feet across) into which two small dark chambers opened.

The crowns were always made of the same red, vesicular tuff found in the Terano Hau, down the outside slope of which as many as thirty were waiting for removal to their several platforms. The largest I measured was $10\frac{1}{2}$ feet in diameter, but they varied very much in size, at Anakena to only 2 feet across. In shape they were short, truncated cones, or nearly cylindrical. Some of the very large images have such small tops to the head that it would seem difficult to fit them with a crown.

The principal track of the images from Otuiti is by the Coast Road, on either side of which they are found, face downwards. On the Mid Path of the island I found but two or three. Many were found also from Anakena; but there was a great part of the island untraversed. All accounts go to the same point, that it is on the coast these images are most abundant.

The implement used for carving these statues was a long boulder-pebble from the shore, like a rolling-pin or huge incisor. The chisel edge was produced by chipping it, and rubbing it down afterwards on obsidian. We saw but one. This was presented to Commodore Powell, and is now in the British Museum. It was called Tingi-tingi. It was noticed that on many of the statues little projections were left; these were portions harder than the chisels.

The number of images on the platforms is very variable, and also their size is by no means uniform. They always faced landwards. At the fifteen-image platform five of them are quite dwarfs in comparison with the rest.

In La Pérouse's voyages it is said that the image platforms were used as Morais, and Cook says that they were the sleeping-places (*i.e.* tombs) of the chiefs. We found that the word Morai was never used in reference to any papakoo or cemetery of the tribe. Each image, and some of the stone houses also, had their proper name. Beechey surmises that these are relics of a past age, as in some now desolate islands he visited he saw similar terraces and images. In Maldon Island I was informed by a visitor that under the guano similar platforms existed, without images. In the Marquesas the images were made of wood, and there is no doubt, from signs on Easter Island, that

sufficient wood existed to have made wooden images long since the fabrication of these trachyte statues, which as material would hardly have been chosen for ease or rapidity in working. And besides, only one chisel has been found; nor could any others be procured.

At a little distance from this terrace, and about the centre point, was a short pillar or cylinder of red tuff (vesicular lava), standing in an area paved with large, smooth, sea-worn stones. It stood on a low slab, which was of the same material, and which served as a pedestal. It was about 6 feet high, and as much in diameter; the top was flat, and cut away on each side, so as to make a step or shelf. On it I found two skulls, very much perished, which, from the dentition, I judged to be those of youths of twelve or fourteen years old. The faces of the skulls were directed towards the platforms. At Winipoo there is one similar. The upper part is paved with smooth sea-stones of the size of a dinner plate. The measurement of the pillar, which is oval, is 7 feet by 5, and it was $4\frac{1}{2}$ feet high. It stood also in a paved area.

Cremation Stone.—Again, in a direct line from this, landwards, at about 80 or 100 yards from the platform, is one of the low-slanting saddle-topped pillars used for cremation (burnt sacrifice). It is also of red tuff, but was not more than $4\frac{1}{2}$ or 5 feet high. The finest I saw was at Winipoo, of which I append a description. In a paved area, similar to that of the last-described pillar, is a pillar of red tuff, $3\frac{1}{2}$ feet squared and $8\frac{1}{2}$ or $8\frac{3}{4}$ feet high. The top projects *forwards*, and ends in two horns, with deep saddle-shaped notch between them; each horn had a face traced on it, in low relief—face surmounted with a crown (hau), but that to the north-west had crumbled away (from the action of fire?). The projecting part is terminated at the breast, and lower down a round projecting navel is marked. Just above, where the pillar joins the area, the fingers are sculptured, in low relief, flat, and clasping the hips, as in the images.

We were told heaka (victims) were burnt here, and at the foot of one of these pillars at Winipoo we found many burnt bones. The pillars were in number at least one for every image-platform.

With respect to the former of these two pillars. In the most excellent description by M. de Bovis, Lieutenant de Vaisseau and Surveyor of Poumotie group, published in the *Government Annuaire de Taïti*, p. 292, he says: “Il y avait sur le parvis une sorte de parvis dallé en pierres plates devant l'autel (before the Morai), une enorme pierre plate, un peu plus élevée que les autres; le prince s'y plaçait tout nu pendant la consecration.” It was here the maro-ura (red maro or breech-cloth) was put on

the new prince by the priest, as a symbol of royalty, in the sight of all people. It was at the great Morai of Opoa this was done in grandest pomp. If, as has been surmised, and it seems warranted, that these flat forms were over the chiefs' tombs or family vault, the images being, as on the Bustum of the Romans, an effigy of the departed, this stone may be the place of hereditary succession, and the Cremation stone the place where slaves or prisoners of war were burnt at the death of the chief, to attend on him in the spirit-world.

M. de Bovis says the missionaries carried away the sacred stone of Opoa to another place, in order that the kings might be consecrated, without idol-worship; so to say so great was the idea of the natives of its value.

Lares or Household Gods, 'Domestic Idols' of Pere Eugène.—These are generally male figures, about a foot in length, made of solid dark wood ('I'oro miro or *Edwardsia*), a little bowed forwards, and suggesting the idea that they represent flayed carcases. The profile, differing from the images, is strongly aquiline—the mouth grinning, the ears with long lobes, and eye-balls of obsidian are inserted. There is a small tuft on the chin; the arms by the side, the hands on the thighs, but not clasping them. These figures are very well carved.

The female figures are much ruder in execution, flatter and larger—a small tuft on the chin also; the attitude that of a pancake Venus de' Medici.

Besides these, there were a quantity of very odd figures carved, representing lizards, sharks, fowls, nondescripts. Some of these are in the possession of the Rev. Mr. Dearden.

On the heads of the male images are carved in very low relief the most peculiar figures, evidently mythic—double-headed birds, fishes, monkeys, lizards; some figures too in which no likeness to anything can be traced. These are on the male figures. I saw but one female figure thus adorned.

These lares were not worshipped, and though the present people still carve them, we could not find that they were aware of the significance of the mythic emblems which they copy.

Traditions.—We could learn very little of their antecedent history, and but little of their traditions. It is a current belief that many generations since a large migration hitherwards took place from Oparo or Rapaiti, the leader of the swarm being Tu-ku-i-u, who, after arrival, abode for some time near Otuiti, where he caused the images to be made. That subsequently he went to reside at the Terano Kau, in the stone houses. That the images followed him by night, walking of their own accord, and that that accounts for the places where they are found face downwards about the island (see parallel destruction of giants,

at sunrise in the Eddaia Myths). That at his death he vanished from earth in the shape of a butterfly (Puru puru), and this insect is shouted at now by small children, as Tu-ku-i-u, Tu-ku-i-u. There is no hint at his reappearance. The distance due west nearly from Easter Island to Oparo, Rapa or Rapaiti, is about 1900 miles. The last successor of Tu-ku-i-u was named Ro-to-pi-to, and his son died about 1864.

IV.—*Notes on the Runn of Cutch and neighbouring Region*. By
SIR H. BARTLE E. FRERE, K.C.B.

Read, Feb. 14, 1870.

THE tract of country to which these remarks refer forms a considerable portion of the great basin of the Indus, which is bounded on the north by the barrier of the Himalayas, west by Suleiman, and Hubb ranges, south by the sea and the hills of Cutch and Kattywar, and east by the Aravulli mountains and their offshoots. But the portion to which I wish now more particularly to draw attention, can hardly be said to form an integral part of the basin, inasmuch as it is in no part watered by the Indus or its tributaries.

It may be more clearly defined as the tract which intervenes between the basin proper of the Indus on the west, and on the east the basin of the Ganges, and the plains of Rajpootana, which are watered by streams from the Aravulli mountains. The length of this tract, measured in a slightly curved line from the hills of Cutch to the northern borders of the Thurr, or what is called the Sandy Desert, is nearly 600 miles. The breadth between the permanently watered and fertile plains which bound it east and west, varies from about 100 to sometimes more than 150 miles. Its limits are well defined. To the south the hills of Cutch bound the flat plain of the Runn. The Runn itself is, in general, clearly distinguished from the plains east and west of it by its lower level, and by the total absence of vegetation.

North of the Runn the east and west limits of the Thurr are in general equally sharply defined as low sand hills which rise abruptly from the level plains. To the north the transition is less abrupt. From the southern slopes of the sub-Himalayan ranges, between the Jumna and the Sutlej, the country sinks very gently to the south-west. The fertile plains gradually become more and more sandy, till south of the direct road from Delhi to the Sutlej *via* Sirsa, the country assumes the aspect of a constant succession of sandhills, which continue with very