

EASTER ISLAND, THE MYSTERY OF THE PACIFIC

by HARRY O. SANDBERG



STONE IMAGE IN THE NATIONAL MUSEUM

ONCE again the luminous rays of the explorer are centered in the direction of Easter Island, the unsolved mystery of the Pacific. For another time the attention of archaeologists and students of antiquity is focused on this little spot, the most easterly of the Polynesian group of islands. Here, in the vast south Pacific ocean, lies this island, volcanic in character, only 42 square miles in area, a mere speck of land, about one-fourth the size of Barbados, and yet surrounded by a charm of mystery possessed by few places in the world.

The island merged into the clear light of history early in the eighteenth century, when it was discovered by the Dutch captain, Jacob Roggeveen, in 1722. He gave to the island its present name in commemoration of the day on which land was sighted. Some 50 years later it was "rediscovered" by some Spanish sailors. From that time to the present day Easter Island has been visited, explored, and studied by noted travelers, scientists, and investigators from all lands, and it promises to afford these opportunities for expeditions for years to come.

Geographically considered, it lies 27 degrees 30 minutes south of the equator, so that it is not actually within the tropics. Its position is about 2,000 miles from the mainland of South America, and 1,400 miles distant from its nearest neighbor, the Pitcairn Islands. Within its limited area, triangular in shape, there are three craters of extinct volcanoes, one of them nearly 2,000 feet high. Some of the soil is fertile, and the island appears to have been wooded at one time, for decayed trunks of considerable size are still found; now, however, there thrive only a few bushes from 10 to 12 feet high. The natives grow many sorts of tropical fruits, including bananas, sugar cane, and sweet potatoes. Goats, fowl, sheep and a fair number of cattle are reared by the few hundred inhabitants, the sole dwellers of today in that mystic land. The climate is not unlike that of Madeira, with one wet and one dry season. The water supply consists of some brackish springs by the seashore and pools inside the craters of the volcanoes. All in all, however, the island is considered salubrious and healthful.

The chief interest of the island is to be found in the wonderful statues and other amazing archaeological remains. In its narrow and confined expanse it encompasses a mystery of vast proportions—an enigma that has taxed the ingenuity of scientists quite as much as did of old the far-famed riddle of the Sphinx. In this tiny island is a remarkable display of hundreds of sculptured statues, colossal in size, and erected upon Cyclopean masonry; stone houses over 100 feet in length with walls six feet in thickness built like forts; and tablets curiously inscribed with hieroglyphics in no way resembling anything else in the world, doubtless the written language of the ancient inhabitants, but one to which the key has been lost.

Remarkable as all of these ruins are from the strangeness of their appearance, the greatest interest and the greatest problem which they present to us is the story that they might tell of the vanished civilization which erected them. That they are of prehistoric origin can not be questioned, but who were the builders of these wonderful specimens? What race of men or giants carved and placed in their present position the titanic stone heads that stand out in lonely majesty amid the barren wastes of this lonely little isle? Whence came these ancient workers in stone, and whither have they gone? What tools did they use to execute these singular statues and buildings, and in what epoch did they perform these curiosities?

Such fascinating questions and many others equally pertinent present themselves to the student, but alas, the answer is yet to be had. Archaeologists must continue for a while longer to delve among the unshrouded mysteries of these ruins before they can reveal the true story of this world's wonderland. At present the chapters which have been written on the subject are comparatively few in number, and not conspicuously definite in context. Conjectures are as many as there are explorers, and the number of opinions ventured varies in the same ratio. Progress, as in all matters of science, is necessarily slow. But let us stop for a moment to examine these statues, and platforms, and relics, which have excited the student world, and to see what



PRESENT DAY INHABITANTS OF EASTER ISLAND



SOME OF THE MONUMENTS ON EASTER ISLAND



EASTER ISLAND

they are made of and how they were wrought.

By actual count there have been found no less than 550 of these images, most of which are cut out of gray trachytic lava. Of this number, 40 are standing inside the crater of one of the volcanoes, and as many more outside, at the foot of the slope, where they were placed ready for removal to the different platforms. These statues, moreover, represent various stages of formation—some of them finished, others nearly completed, and still others barely commenced. In size they range from 3 or 4 feet to nearly 80 feet in length. The largest image, found in an unfinished state, measures 70 feet in length; the smallest is little short of 3 feet in length. Although these figures range in size from the colossal of 70 feet down to the pigmy of 3 feet, they clearly are all of the same type and general characteristics. The head is long and the eyes close under the heavy brows; the nose large, low bridged, and very broad at the nostrils; the upper lip short, and the lips pointing. The head is nearly always tilted backward. The lower part of the face is broad and heavy, but imperfectly formed, the ears are long and pendant. The forms generally ended at the shoulders or at the waist, very little work being done below these points. One of the lesser statues has been brought to the National Museum at Washington, D. C., while another is on exhibition at the British Museum in London.

The striking feature about these figures is the strange facial expressions described as "profoundly solemn," "disdainful," and with "look of supercilious scorn." The head was in all cases cut flat on top to accommodate an immense crown of red volcanic tuff, many of which were found at a crater eight miles distant from the cone, where the statues themselves were formed. Subsequent discoveries on the island have brought to light headresses of real feathers, made up as crowns, coronets, and other shapes. The finding of these feather decorations which were used for ceremonial purposes has given strength to the belief that the immense stone crowns which were superimposed on the heads of the statues were intended to represent these feathered ornaments.

How these immense statues were cut out of their position inside the crater of the volcano and transported several miles to their respective platforms is one of the mysteries left for us to puzzle over. As for tools, a rude form of stone chisel is the only kind of ancient implement thus far found.

It is also remarkable that of the many hundreds of images scattered throughout the island there is but one that stands in its original position upon a platform, while the others are heedlessly strewn about. To some this fact seems conclusive proof that work on these huge productions ceased suddenly. But what caused the work to be so suddenly arrested? Did some volcanic eruption overtake the island? Such a conjecture is, indeed, not unreasonable, for closer investigation shows that some of the largest statues are buried to the neck in ash and scoria. But who can say with certainty? Viewing the relics on the island in their en-

tirely, however, one is impressed with the fact that when they were carried out a large population of skilled men must have concentrated upon the task. But where did this large population come from? Were Easter Island a continental land with ease of access, such an ample labor supply might have been available. But its geographic position precludes this possibility. Therefore another explanation must be sought. Now, nearly all students agree upon one point, and that is that the present territorial limitations of the place could not have harbored a very large number of inhabitants. First, there is no adequate water supply; and, secondly, there is not the area from which to win a sufficient food supply. This, then, suggests the theory, and one that is open to reasonable refutation, that Easter Island is the sole remnant of a greater land which was overwhelmed by the sea after a serious seismic disturbance.

Another speculation offered by a noted traveler is of particular interest because of the connection which he endeavors to point out between these ruins and those found in the highlands of Peru and Bolivia. This archaeologist develops the theory that the ancient peoples of Easter Island were the same race that centuries afterwards laid the foundations of the empires of the Incas and the Aztecs. These people, he continues, reached Easter Island from the Asian coast by traveling from one island to another across the intervening ocean and finally found their way to the American continent over land that has since disappeared beneath the waters of the Pacific. This theory, important if true, is, however, subject to objections. In a careful study of the Malayo-Polynesian archaeology and languages, embracing a period of nearly 30 years, the noted botanist and ethnologist, Prof. W. E. Safford, of the United States department of agriculture, makes the unqualified assertion that in all his attempts to trace a connection between the ancient relics of the Incas and Aztecs with those of the Polynesians, he has failed to find sufficient points of similarity to justify even such a possible relation. So the mystery continues and the origin and workers of Easter Island are yet to be learned.

Wooden tablets have also been discovered incised with hieroglyphics. These are of especial interest because of the remarkable skill with which they were executed. The writings read from left to right; then it is necessary to turn the tablet upside down and continue reading from left to right, repeating this process until the inscription is concluded. Figures of men, animals, geometric designs, constitute the alphabet. Though these incised tablets have not been deciphered, there is a general belief that they contain the ancient myths of the race which inhabited the land. Some assert that it is not so very long ago that there were those on the island who might have been able to read them. It should be recalled that up to 1864 there were several thousand inhabitants on Easter Island, but large numbers of them were taken from there and put to work in the guano diggings on the Chinese Islands. Among those it is thought there were many who knew the written language as appearing on the tablets. But the present inhabitants, less than 200 in number, know nothing of them except in a vague way.

One particular feature was emphasized by Professor Safford in an interview which the writer had with him on the subject of the language of the island. He declared that a careful study of the language of the modern natives shows it to be essentially Polynesian without any vestige of foreign domination, but the most remarkable thing is its very close similarity to the language of the Hawaiians. Nearly all of the words, by certain fixed laws or changes, could be converted from the Easter Island language to that of Hawaii with similar meanings; even some of the ancient gods of Easter Island bear the same names as Hawaiian gods. And yet there has been no connection between these two islands, at least not in historic times, and what is stranger still, these two groups are separated from each other by an interval of 2,000 miles. This unusual constancy in the language of both is probably due to the fact that they had no near neighbors and no intrusions of people speaking a language different from their own. He also expressed the opinion that the carvers of the images were the ancestors of the modern inhabitants, and that all the elements of the archaeology of the islands except the wonderful hieroglyphics are characteristically Polynesian.

MEN WHO FACE MANY PERILS

Surveyors for the U. S. Are Often Called Upon to Endanger Their Lives.

Washington.—Government surveyors who make maps out in the regions where rock walls go straight up and sometimes overhang, often have to get into positions requiring steady nerves. Once in a while some one in the party gets a photograph which illustrates the idea, although usually the performance is recorded briefly in the surveyor's notebook. In one instance the present chief geographer of the United States geological survey had to be tied on to the extreme apex of a sharp mountain peak in northern California, together with his instruments, in order to obtain a long sight in establishing a triangulation station.

In another case R. B. Chapman, now the superintendent of the New Glacier National park, had to do some plane-table mapping from the top of Mount Baptiste, sitting on a bank of



Robert B. Chapman Map Making From Summit of Mt. Baptiste.

snow and ice which overhung the mountain and which if it had slid off would have precipitated him downward half a mile or so. In another case a topographic engineer climbed out on a gnarled tree in order to get a sight past a jutting rock and set up his plane-table on its forked limbs. With all the chances that have been taken by the men of the geological survey during the past 30 years in every state in the Union and Alaska—in mountains, in canyons and in swamps, no member of the survey has ever been killed and few seriously injured, though there has been some narrow escapes.

BANNER YEAR FOR BABIES

Statistics Show That While Number of Births Increased 1,081, Deaths Were 884 Lower in New York.

New York.—Whatever other vicissitudes it may have passed through during the last year, New York found 1912 a banner year for babies. Not only were more infants born during the last twelve months, but a smaller percentage of them died than ever before. Indeed, the figures covering infant mortality constitute the most remarkable feature of the city's record health year.

While the general death rate was reduced during the year from 15.13 per cent to 14.11 per cent, or a little more than 1 per cent, the rate for infants under one year was reduced 6 per cent. There were during the year 14,289 deaths of babies under one year of age from all causes in the city of New York, as compared with 15,063 deaths during 1911. At the same time the number of births in the city increased by 1,081. In this ratio, the figures show a saving of 884 babies and an actual saving of 764.

An analysis of the report containing these figures indicates that the improvement in the saving of baby life was not due to luck or weather conditions, but to the campaign which has been carried on against baby diseases.

HANDBAGS FOR LONDON MEN

Paris Dandies Hear Leather Creation Contained Cigarette Case and Oxford Bible.

Paris, France.—The world of Parisian dandies, whose existence is occupied with caricaturing the English and American masculine fashions, has been greatly agitated by the news that a few days ago a well known "elegant" was seen in Piccadilly, not with a poppy or a lily, but a leather handbag hanging from his left arm, and was further seen to enter a store and stow away his trifling purchases in his reticule, which contained, as permanent fittings, a cigarette case, matches, a purse, a knife and an Oxford Bible.

The latest whim of feminine eccentricity, as a counterpoise to the masculine handbag, is the introduction of diamond studded shoe heels. A well known dancer is responsible for this idea. Her dream, it appears, is to abandon shoes for sandals, so that she may be able to adorn her feet with rings in the classical manner, but as this seems impracticable in the muddy Paris streets she is considering a compromise in the shape of bediamond heels. Her suggestion, which is believed to have had a transatlantic inspiration, has been welcomed with a chorus of approval in the theatrical circles.

Found! An Honest Conductor.

Pittsburg, Pa.—A former street car conductor returned \$100 to the company which he said was "conscience money."

Aged Couple Are Wedded.

Los Angeles.—A marriage license has been issued to Mrs. Marcellina Elisaida, 105, and Pleasanto Leon, eighty.

TO STUDY PROBLEM

BUREAU OF SOCIAL HYGIENE IS EXPLAINED BY JOHN D. ROCKEFELLER, JR.

WAS FOUNDED TWO YEARS AGO

Son of Retired Oil Magnate Describes the Origin, Work and Proposed Plans for the Investigation of Vice Conditions.

New York, Jan. 27.—In order that the public might better understand the Bureau of Social Hygiene, John D. Rockefeller, Jr., on Monday gave out a statement explaining the origin, work and plans of that institution. The bureau, he said, came into existence about two years ago as a result of the work of a special grand jury appointed to investigate the white slave traffic in New York city. This jury recommended that a public commission be appointed to study the social evil.

Mr. Rockefeller was foreman of that grand jury and he thereafter gave the subject deep thought and conferred with a large number of leading men and women. "These conferences," says Mr. Rockefeller, "developed the feeling that a public commission would labor under a number of disadvantages, such as the fact that it would be short lived; that its work would be done publicly; that at best it could hardly do more than present recommendations. So the conviction grew that in order to make a real and lasting improvement in conditions, a permanent organization should be created, the continuation of which would not be dependent upon a temporary wave of reform, nor upon the life of any man or group of men, but which would go on, generation after generation, continuously making warfare against the forces of evil. It also appeared that a private organization would have, among other advantages, a certain freedom from publicity and from political bias, which a publicly appointed commission could not so easily avoid.

"Therefore, as the initial step, in the winter of 1911 the Bureau of Social Hygiene was formed. Its present members are Miss Katharine Bement Davis, superintendent of the New York state reformatory for women at Bedford Hills, N. Y.; Paul M. Warburg, of the firm of Kuhn, Loeb & Co.; Starr J. Murphy, of the New York bar, and John D. Rockefeller, Jr. As the work develops new members may be added.

"One of the first things undertaken by the bureau was the establishment at Bedford Hills, adjacent to the reformatory, of a laboratory of social hygiene, under Miss Davis' direction. In this laboratory it is proposed to study from the physical, mental, social and moral side each person committed to the reformatory. This study will be carried on by experts and each case will be kept under observation for from three weeks to three months, as may be required. When the diagnosis is completed, it is hoped that the laboratory will be in position to recommend the treatment most likely to reform the individual, or, if reformation is impossible, to recommend permanent custodial care. Furthermore, reaching out beyond the individuals involved, it is believed that thus important contributions may be made to a fuller knowledge of the conditions ultimately responsible for vice. If this experiment is successful the principle may prove applicable to all classes of criminals and the conditions precedent to crime, and lead to lines of action not only more scientific and humane but also less wasteful than those at present followed."

That its work might be done intelligently the bureau employed George J. Kneeland to make a comprehensive survey of vice conditions in New York, and Abraham Flexner to study the social evil in Europe, and their reports are now being prepared. These studies will be followed by others in various American cities, and it is the hope of the bureau that, based upon all of them, may be devised a practical plan for dealing with the social evil.

In conclusion Mr. Rockefeller's statement says: "It cannot be too strongly emphasized that the spirit which dominates the work of the bureau is not sensational or sentimental or hysterical; that it is not a spirit of criticism of public officials; but that it is essentially a spirit of constructive suggestion and of deep scientific as well as humane interest in a great world problem."

Fifteen Hurt in I. C. Wreck.

Kankakee, Ill., Jan. 27.—Fifteen persons were injured on the Daylight special of the Illinois Central, a mile and a half north of Melvin, Friday afternoon, when the entire train, except the engine, left the track at 4 p. m. No one was fatally injured. Speaker Shurtleff and Representative Ryan of the Thirtieth district were on the train.

Congressman Smith Dead.

Los Angeles, Cal., Jan. 28.—Congressman Sylvester Clark Smith of the Eighth district of California, died here late Sunday afternoon. Heart failure was the immediate cause of the statesman's death.

Confesses to Bank Theft.

Denver, Colo., Jan. 28.—Amos W. Grant, receiving teller of the Pioneer State bank and son of a director of the institution, confessed Sunday that he stole \$1,910 in cash from the vaults of the bank.