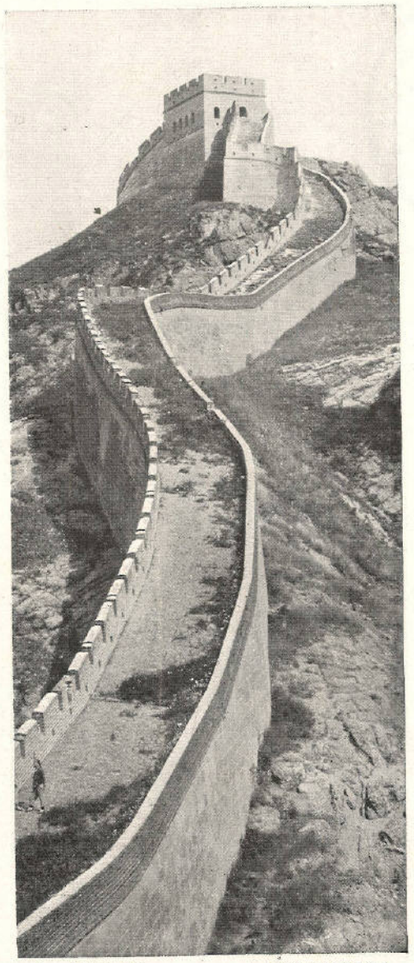
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THE GREAT WALL OF CHINA

A POPULAR AND AUTHENTIC ACCOUNT OF THE MARVELS OF NATURE AND OF MAN AS THEY EXIST TO-DAY

BY
EMINENT TRAVELLERS
INCLUDING
SIR HARRY JOHNSTON
G.C.M.G., K.C.B.
ALAN H. BURGOYNE
M.P., F.R.G.S.
PERCEVAL LANDON
J. THOMSON
F.R.G.S.
AND MANY OTHERS

EDITED BY
WALTER HUTCHINSON, B.A., F.R.G.S F.R.A.I.

VOL. I.

ILLUSTRATED

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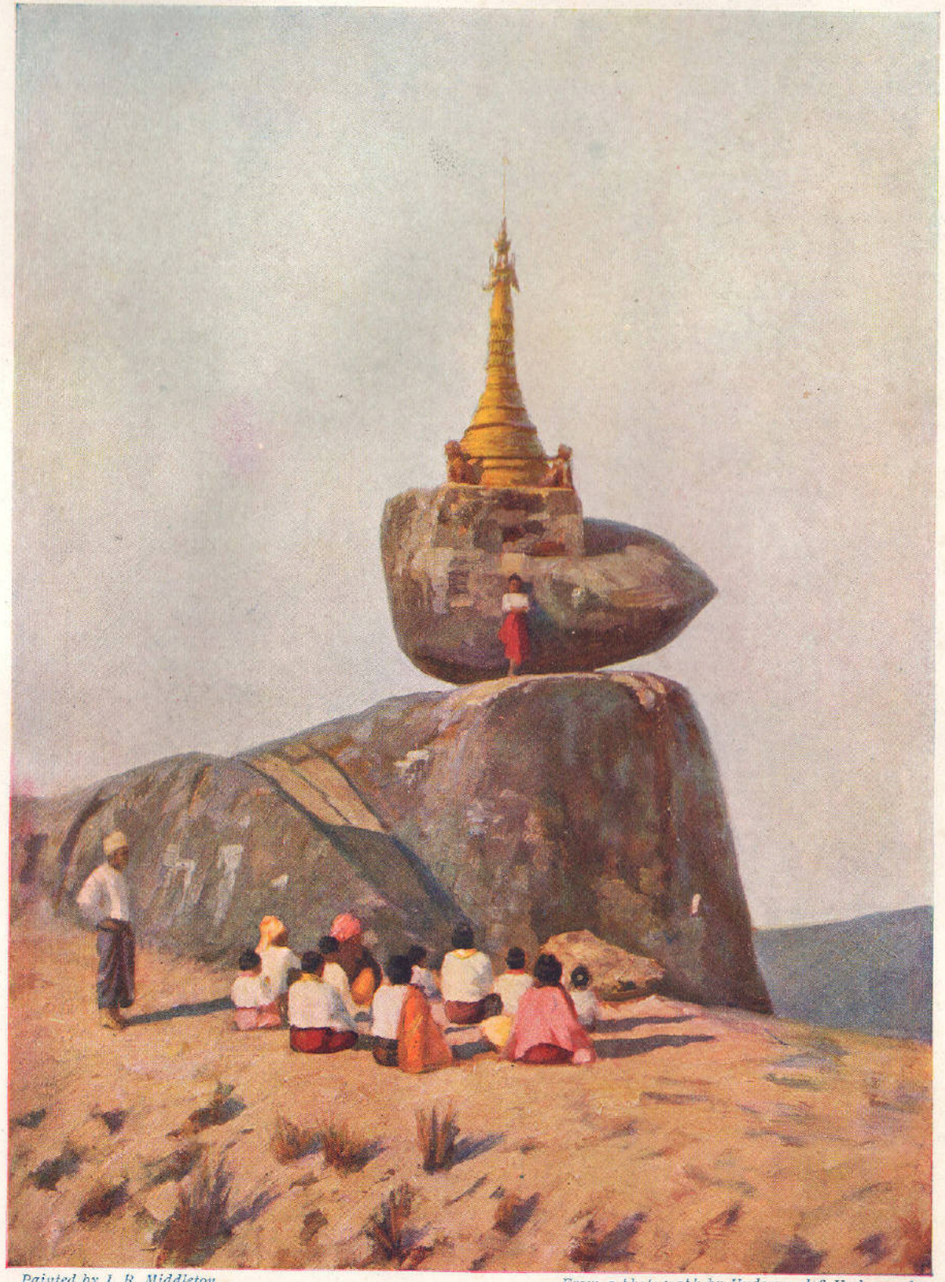
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Painted by J. R. Middleton. *From a photograph by Underwood & Underwood.*

A PAGODA THAT ROCKS WITH THE WIND.

This boulder stands on the very backbone of the lofty Kelasa Hills, Burma. The temple is called Sampan, or Boat Pagoda, on account of the shape of the rocking-stone upon which it is built.



Photo by the] *[Photochrom Co., London*

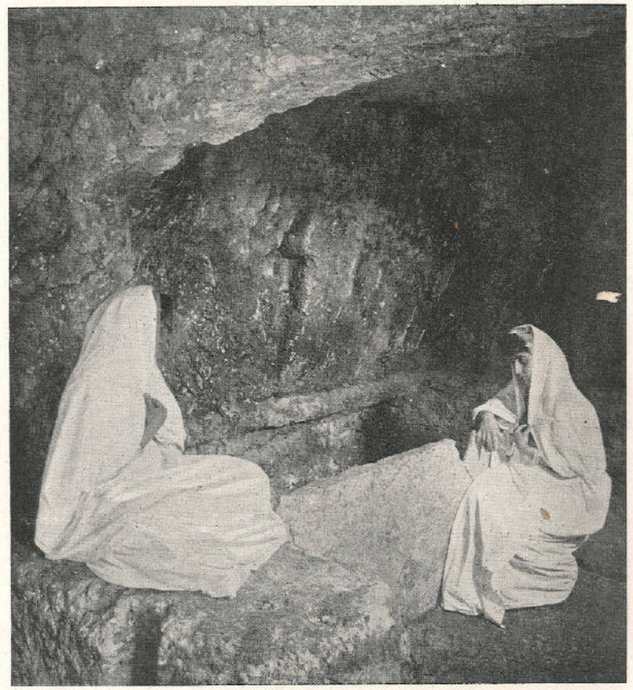
THE MIDNIGHT SUN.

In Polar regions, within the arctic and antarctic circles, the sun never sinks below the horizon from about the middle of May to the end of July. Of course, against these weeks of perpetual daylight must be set the six weeks' sunless skies of the dead of winter. The above photo was taken at midnight in Tromsö, Norway.

INTRODUCTION

By Sir HARRY JOHNSTON, G.C.M.G.

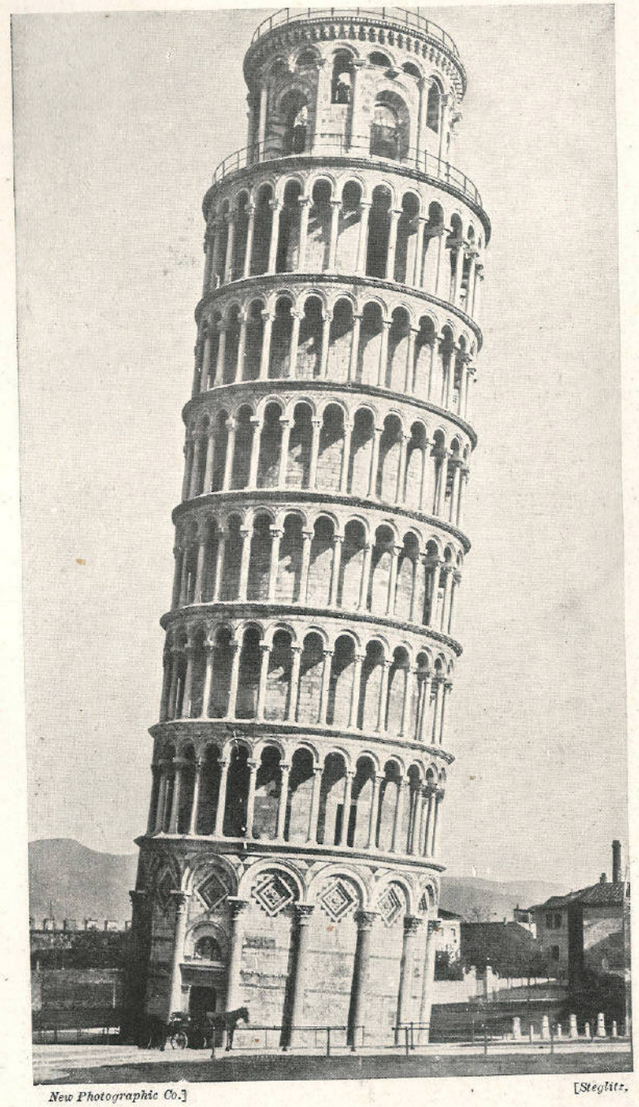
THE feeling of wonder at stupendous or curious natural objects or the phenomena of the skies is certainly coeval with the birth of the human species. Even our nearest relations among the anthropoid apes are said to be agitated at the rising of the full moon with its disc of gold mottled with grey. Apes and monkeys are only less inquisitive than humans, and are readily attracted by bright colours and strange objects. Amongst the lowliest races of mankind existing at the present day Nature seems full of wonderment, and perhaps inspires more awe to their amazed and ignorant contemplation than she does to the sophisticated white men and women of later intellectual growth. The savage, moreover, is not impressed by mere bulk; he respects the intricate and can marvel at perfection of structure.



From Stereo copyright] *[Underwood & Underwood.*

TRADITIONAL TOMB OF CHRIST.

This sepulchre was discovered outside Jerusalem, and it is traditionally supposed to be the actual tomb given by Joseph of Arimathea for the burial of Christ.



New Photographic Co.] [*Steglitz.*

THE LEANING TOWER OF PISA

The tower, which is constructed entirely of white marble, is 180 feet high, and has eight stories divided by rows of columns, the last, which contains the bells, being smaller in diameter than the others. It was built in 1174 and succeeding years, and slants 14 feet from the perpendicular.

Hottentots and Bushmen worshipped the Mantis, or "praying-insect," on account of its strange attitudes and colouration. The Forest Negroes all over Tropical Africa think the Spider one of the World's wonders, and endow this highly specialized arthropod with human attributes in their folk-lore. The pre-historic savages of Pleistocene Europe collected and valued strangely-marked pebbles or odd-shaped bones. Their analogues of the present day, the peoples of primitive culture in Africa, Asia, Australasia, and South America admire or worship upright or prostrate stones, mountain peaks, volcanoes, lakes, trees, flowers, shells, waterfalls, whirlpools, rivers, fish, crocodiles, snakes, lizards, birds, beasts, the sun or the moon, certain constellations, thunder, lightning, sand-storms and waterspouts.

As Man waxed in intelligence and himself created wonders with his hands and by the instruments of his own making, he more often reserved his awe and admiration for great human achievements, rather than for the phenomena of Nature. The first enumeration of world-wonders—known as the "Seven Wonders of the World"—dealt entirely with the works of man. The list (probably compiled by Pliny the Elder or some other Roman writer at the beginning of the Christian Era) comprised (1) the Pyramids of Egypt; (2) the Walls and Hanging Gardens of Babylon; (3) the Temple of Diana of Ephesus; (4) the Statue of the Olympian Jupiter by Phidias (at Olympia); (5) the Mausoleum raised by Artemisia at Halicarnassus; (6) the Colossus of Rhodes; and (7) the Pharos or Lighthouse of Alexandria.



Photo by Muir & Moodie,] [*Dunedin.*

WAIMANGU GEYZER, NEW ZEALAND.

The explosion of Waimangu Geyzer, the largest geyzer in the World, is at times terrific, boiling water and mud being thrown up to a height of 1,500 feet When this photo was taken the height reached was over 1,000 feet



Photo by] [*N. P. Edwards.*

AN INSECT "SKYSCRAPER." TERMITE ANT-HILL IN CENTRAL AFRICA.

These, so called, ant-hills are very common in tropical Africa, and are built of mud by the "white ants" for their home The height frequently reaches 40 feet . Termites are not really ants, but insects of a totally different order.

In the Eighteenth century writers in France and England were wont to add to this enumeration a series of "modern" world-wonders: (1) the Coliseum (or Colosseum) at Rome; (2) the Catacombs of Alexandria; (3) the Great Wall of China; (4) the Druidical Temple of Stonehenge; (5) the Leaning Tower of Pisa; (6) the Porcelain Tower of Nanking in China; and (7) the Great Mosque (once a Christian Church) of Saint Sophia, at Constantinople.

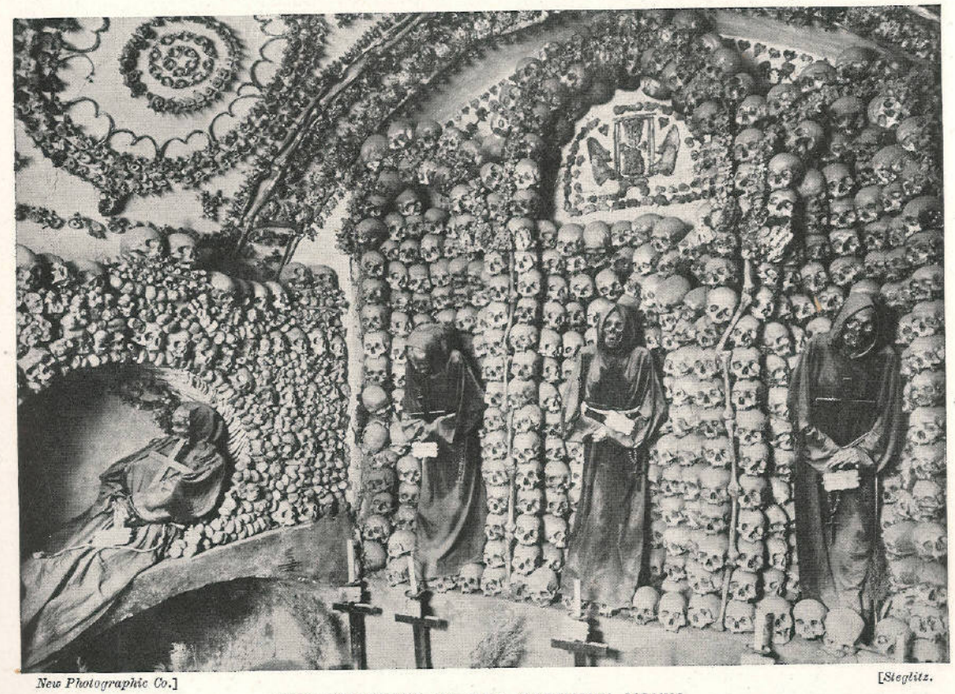
The Pyramids are familiar to us all, though they are still legitimately reckoned among the Wonders of the World. The name we give to this structure seems to be derived through the Greek *Pyramis* (pl. *Pyramides*), from an Egyptian word, *piremus*, meaning "a vertical height." The Pyramids are probably evolved from a sudden exaggeration of the "mastaba," or oblong tomb-cover, the roof of an underground dwelling hewn in the rock, which contained a chapel or place for votive offerings and worship immediately over the grave. On to the basal slab of this (originally stone) cover or roof of the tomb were placed other slabs of lessening size, so that when finished the "mastaba" had sloping sides in steps, and a flat top. It needed only to continue in lessening gradation of size this apposition of one stone slab on another to arrive at last at an oblong-shaped pyramid. When these "mastabas" or pyramids increased in bulk beyond a mere grave cover the layers of single stone slabs were imitated by level courses of brick or masonry.

The Pyramids were never a burial-place or monument of a family; each was invariably the tomb of one person. In their gigantic development and typical form they were probably first constructed for the Kings of the IVth Dynasty, beginning at about 3700 B.C., or five thousand six hundred years ago. But the earliest type of the colossal pyramidal tomb known to us (and still existing) was the

Step Pyramid at Sakkara, supposed to date back to about 3900 B.C., and to have been built by Tcheser, a king of the IIIrd Dynasty.

The Walls and Hanging Gardens of Babylon—a city which in its prime, some two thousand five hundred years ago, had an area of about 100 square miles—were computed to be in places 335 feet high and 85 feet wide. They were pierced with one hundred gates of brass which had brass posts and lintels. The Hanging Gardens, grouped with these colossal Walls as forming the second in the list of the World's marvels, were plantations of trees and flowers growing in soil placed in immense brick receptacles and raised to a height of seventy-five feet above the ground on arches. Apparently these "roof" gardens (an adjunct of the monarch's palace) formed a hollow square, each side of which measured four hundred feet. The vegetation in these immense elevated troughs was irrigated by water raised from the Euphrates by means of a revolving screw.

The Temple of Diana of Ephesus—destroyed by the Goths in 262 A.D.—was a building designed by Greek architects, constructed during the lifetime of Alexander the Great, and finished about 330 B.C. It was calculated by the late Mr. J. T. Wood (who explored it for the British Museum in 1863-4) that this building measured 418 feet long by 239 feet broad. It became a magnificent repository and museum of the finest specimens of Greek art in sculpture and painting. There have been three or more temples on this spot, each erected on the ruins of its predecessor. According to tradition, a Greek colony of Ionians under an Athenian leader landed at Ephesus in about 1100 B.C. They found here an already important city grouped round the temple of a goddess of many breasts,



New Photographic Co.] [*Stieglitz.*

THE CEMETERY OF THE CAPUCHIN MONKS.

It is a custom of these Capuchin Monks to remove, from time to time, the mummified remains of the Friars from their place of burial to this vault, where they are clad in the habits they were accustomed to wear when alive, and labelled with their names. When in the course of time their bodies fall into decay, the bones are collected, classified and utilized for decorating the walls of the vault.

whom they identified with their own female deity, Artemis (Diana) : a goddess who typified fertility and the fruits of the Earth. Ephesus, situated near the mouth of the river Cayster, in south-west Asia Minor, fell into utter ruin after the Temple was destroyed by the Goths, and did not revive under the blighting rule of the Turks. It is now known as Ayasuluk, a corruption of Hagios Theologos, a name applied to St. John and given to the city in Byzantine times.

The Statue of the Olympian Jupiter was erected at Olympia in Elis (South-west Greece) by the great sculptor Phidias, in about 450 B.C. It was forty feet high, and represented Jupiter seated and robed, and holding forth in his right hand a figure of Victory, while his left hand rested on a sceptre on which an eagle was perched. It may be that the whole Statue was of wood in its main substance, but in its outer aspects the face, bust and arms were of ivory, and the robes were of gold, enamelled with flowers and figures.

Mausolus, a Persian, became about the year 380 B.C. the satrap, or ruler, of the important town and district of Halicarnassus (nowadays known by the Turkish name Budrun), which, like Ephesus, was situated on the south-west coast of Asia Minor. His wife Artemisia was ardently attached to



Photo by] [*J. W. McLellan.*

THE PARTHENON AT THE ACROPOLIS, ATHENS.

This Doric Temple, dedicated to the goddess Athena, is the finest example extant of Greek architecture at its perfection. The building is of marble, 228 feet in length and 64 feet to the top of the pediment.

him, and after his death resolved to erect in his memory a superb monument. She employed Greek architects to design, and Greek sculptors to decorate, this first "Mausoleum," portions of which are now in the British Museum

The Colossus of Rhodes was a bronze statue of Helios, the Sun-god, about 120 feet high, erected, in 280 B.C. at the entrance to the harbour of Rhodes (in the island of that name). Chares, a Greek, was the designer. The statue did not, however (as popularly believed), bestride the entrance to the harbour, but was placed on one side of the entrance. It fell down in an earthquake about 224 B.C. The fragments remained *in situ* for hundreds of years ; in fact, until after Rhodes was taken by the Arabs in 656 A.D. Soon after that date the pieces of bronze were sold to a Jewish merchant, who employed a thousand camels to remove them.



By permission of] [*The Agent-General for New South Wales.*

THE MINARET, JENOLAN CAVES, NEW SOUTH WALES.

This beautiful stalagmite in one of the caves is caused by the constant dripping of lime-water on one particular spot. The water evaporates, and the lime deposits are alone left to accumulate by slow degrees in these fantastic forms.



From the collection of [*Mrs. Alec Tweedie.*

THE BIGGEST TREE IN THE WORLD

This tree is a cypress and measures 154 feet in circumference. It will give a better idea of its enormous size to say that it would require 30 men with outstretched arms to span its girth. It is situated at Tule, in the State of Oaxaca, Mexico.

The Pharos or Lighthouse of Alexandria—pattern of the world's lighthouses—was built on the eastern extremity of the isle (now peninsula) of Pharos by Ptolemy Soter, King of Egypt, in about 300 B.C. It was 400 feet high.

The Colosseum or Coliseum at Rome was built by the Emperors Vespasian and Titus as an amphitheatre, in which games, gladiatorial displays, and shows of wild beasts, sham fights of soldiers and ships, chariot and horse-races took place. Also, during the times of persecution many Christians were killed or tortured here. During the early centuries of the Christian era, down to about 550, it continued in use for public spectacles and remained intact as late as the ninth century. From that time onwards it was partially destroyed by the medieval barons and architects of Rome as a handy quarry of building stones required for the palaces and churches of Papal Rome. Benedict XIV., however, put a stop to this in 1750, and announced the Papal intention to preserve this relic of Imperial Rome, formerly the scene of so much Christian suffering and fortitude. It therefore remains to the present day the most remarkable existing vestige of Rome's ancient monuments.

The Catacombs of Alexandria were vast burial places for the dead, excavated in the calcareous rock to the south-west of the modern city of Alexandria. This is the same limestone rock as that of Southern Tunis and Western Tripoli, in which the modern "cave-dwellers" have their homes. From a remote antiquity there have been cave-dwellers—"troglodytes"—throughout North Africa, from Morocco to Egypt; people who found it easy to carve dwellings in the soft limestone rock, the surface of which when exposed to the air hardens, and does not crumble. The underground catacombs of Alexandria where the dead were buried in Ptolemaic and Roman times were of great extent, and were remarkable for their spacious dimensions and beautiful carvings.

The Great Wall of China—made known to Europe first by the travels of Marco Polo, and further described by the Roman Catholic missionaries of the seventeenth and eighteenth centuries—was

commenced in about 214 B.C. by the great Emperor Che Hwang Te. It was, of course, intended as a defence work to keep out the Tatar and Mongol cavalry, and when completed, about the beginning of the Christian era, extended from Shan-hai-kwang on the Gulf of Pe-chi-li to the westernmost corner of the province of Kan-suh, where the Wall finished on the slopes of the lofty Nan Shan mountains. The Wall was an instance of Chinese futility, for it did little to prevent the constant invasion of China by Tatar and Mongol conquerors between 200 B.C. and 1644 A.D.

England was considered in the later eighteenth century to possess a world-wonder in the remarkable pre-historic monument of Stonehenge, perhaps 2,600 years old. This "Wonder of the World" will be fully described in a later number.

The Leaning Tower of Pisa was the Campanile or bell-tower of the cathedral of that city. It was designed by two Tyrolese architects (of Innsbruck) and commenced in 1174. Through some



From Stereo copyright] [*Underwood & Underwood.*

THE MIGHTIEST STONE EVER HEWN, BAALBEK, SYRIA

This stone is 71 feet in length, 14 feet wide, and 13 feet high, and it weighs over 3,000,000 lbs. It is in one solid piece, and there are other stones nearly as large in the ruins of the Temple of the Sun at Baalbek, which can be seen in the distance.

accidental settlement in the foundations the Tower leans on one side, so that the cornice of its summit is fourteen feet out of the perpendicular. The Tower is round, and constructed entirely of marble. The walls are thirteen feet thick at the base and six feet thick at the top; but it is now ascertained that the foundations are "miserably narrow" in their reach, are shallow, and rest on a bed of clay through which water percolates. Some additional earth tremor perhaps has occurred to weaken the Tower's stability, and whilst these lines are being penned urgent measures are being taken to save this world-wonder from the collapse which a few years ago laid low another great marvel of Mediæval Italy—the Campanile of St. Mark at Venice. Indeed, it is quite possible that those who look on the last photograph (here given) taken of the Leaning Tower of Pisa may never look upon its exact likeness again, as regards the angle of inclination and the details of the surroundings.

The wonderful Porcelain Tower of Nanking, a great Chinese city, on the south bank of the Yang-tse-kiang river, is now no longer in existence. It was destroyed between 1853 and 1864 by the



Photo by the] [*Photochrom Co., London.*

FISH HOT-POT SPRING, YELLOWSTONE LAKE, U.S.A.

The spring is in the middle of this little island, which is a cone of a geyzer. Fish from the lake can be caught and cooked immediately by placing them in the hot spring.

Tai-ping rebels. This wonderful achievement of Chinese fantasy was constructed by the Emperor Yung-lo in 1413 to commemorate the virtues of his mother, and was called the "Token-of-Gratitude Pagoda." The Tower was about 260 feet in height, was an octagon in shape, and divided into nine storeys. The outer surface of the building was cased with the finest white porcelain bricks and the roofs of each storey were covered with green glazed tiles. Bells were hung on the eaves of each storey, totalling in numbers one hundred and fifty-two; and in like manner were suspended lanterns for illumination at night. The summit was surmounted by an iron rod encircled by nine iron rings and crowned with a gilded ball. Five chains were stretched from this golden apex to the eaves of the roof below, and on each chain was strung a "pearl of good augury," devoted to the welfare of the city. One pearl stood for protection against dust-storms, another availed to avert fire, a third allayed tempests, a fourth prevented floods of the river, while the fifth pearl guarded the city from riots.

The Great Mosque of Constantinople, which was once the Cathedral Church of "Holy Wisdom,"



By permission of] [*The One and All Association.*

A CYCLONE IN OKLAHOMA, U.S.A.

This extraordinary effect is produced by a circular storm of great force, which, extending over a large area, and revolving round a calm centre, travels at a rate of from 17 to 30 miles an hour, carrying with it sand, and in fact anything light and easily collected.

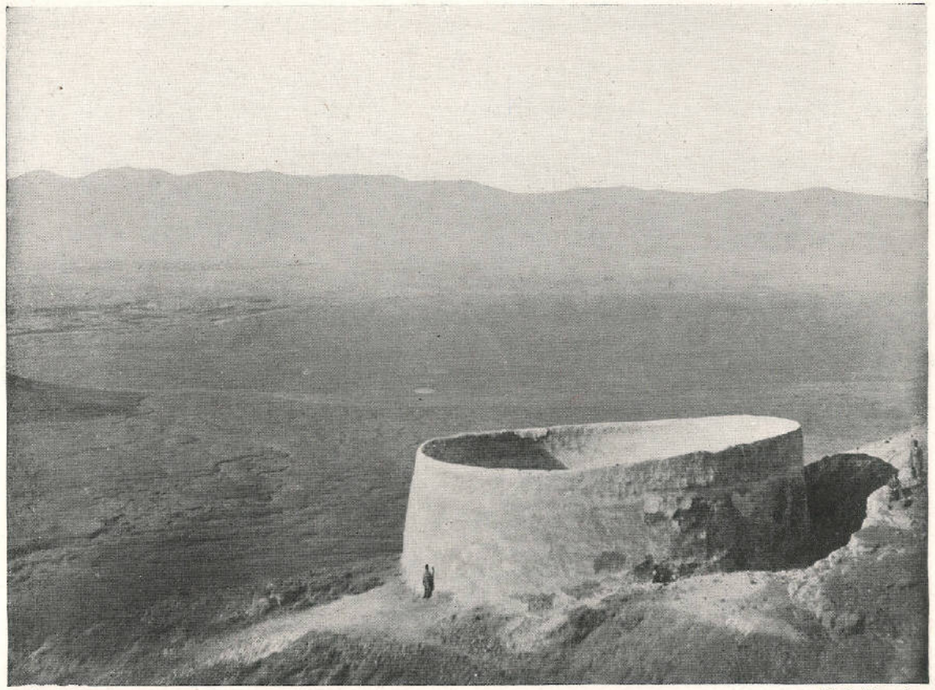


Photo by] *[N. P. Edwards.*

THE TOWER OF SILENCE, PERSIA

The Parsis regarding earth, water and fire as sacred, have to dispose of their dead by other methods. The corpses being considered unclean, are carried up to these towers of silence and placed on tiers. Vultures eat the flesh off the bones, which are then placed in the centre of the tower, where they remain until they crumble away

or Saint Sophia, is called by the Turks " Aya Sofia Jamisi." (The word " Aya " prefixed to so many buildings and place-names in Turkey is a corruption of the Greek *Hagia*=Saint, Holy.) It was commenced in the year 532 A.D. by the orders of the Emperor Justinian, on the site of the first Christian Church erected in Constantinople by Constantine the Great. The interior effect of the great, shallow dome, and the bold span of the arches, together with the splendid colours of the pillars and mosaics, are captivating to the eye, though one feels oneself to be in the very antithesis to a Christian Church. In 1847 the dome showed signs of collapsing, as the walls had ceased to be strong enough to support it. The great Mosque was then taken in hand by two Christian architects (Fossati and Salzenburg), who executed the most able and ingenious repairs which have greatly added to the stability of a building reputed to be the seventh modern wonder of the world, before the nineteenth century increased our scope of amazement.

Before the wonderful nineteenth century (an era in which the advance of man's mind, imagination, conceptions, and knowledge of the universe, was out of all proportion in rapidity and extent to the progress of the preceding ages), natural marvels, both large and imposing and minute yet powerful attracted less attention and admiration than at the present day. Niagara has been known to the civilized world since the first report of the existence of these Falls by Samuel Champlain in 1613, and the careful description of Father Hennepin in 1678. Yet this splendid display of a vast river plunging into a chasm met with no enthusiastic appreciation till the middle of the nineteenth

century. The Alps were styled " horrid," like most other lofty mountains, by the writers of classical times, and even of the Renaissance. Natural phenomena, where they were dangerous to man's life or even comfort, inspired terror and disgust, but very rarely excited æsthetic admiration, such as we of the New Age would feel for the ruthless Tidal Wave; for the Simum of the Desert rising like a gigantic Jinn of the Air to overwhelm and suffocate man and beast; the Midnight Sun—low in the heavens, yet never setting during the height of a Polar summer; the Iceberg; the Columns of Steam and Ashes shooting up from a volcano; the Geyzer; the Glacier; the Tornado and the Forest Fire.

Nor, until the period of the Romantics began in France and Walter Scott published his novels in England, until Millet, Daubigny, Turner and David Cox originated new schools of landscape painting, was there any real love of the wonderful, weird, mystic and subtle in landscapes, seascapes and skyscapes; any feeling for atmospheric height, dim glory, shimmering sunshine through stained glass and incense fumes in vast cathedrals; any gratification at the sight of some Alpine giant peak, carrying unruffled snow and blue-green glacier edge into a sky of deep ultramarine, or half veiled by a thin drapery of clouds. All previous renderings of landscapes had been hard and matter-of-fact. Such of these pictures as are worth looking at at all in the present day are merely interesting to us from an archæological point of view, if they picture faithfully the life of town and country.

A false idea of religion checked the development of the right sense of wonder—awe combined with admiration—which fills nowadays all thinking men and women when they contemplate the achievements of the human mind and hand, or the infinitely varied manifestations of natural forces. From the twelfth century onwards the human intellect of the European world began to revive,

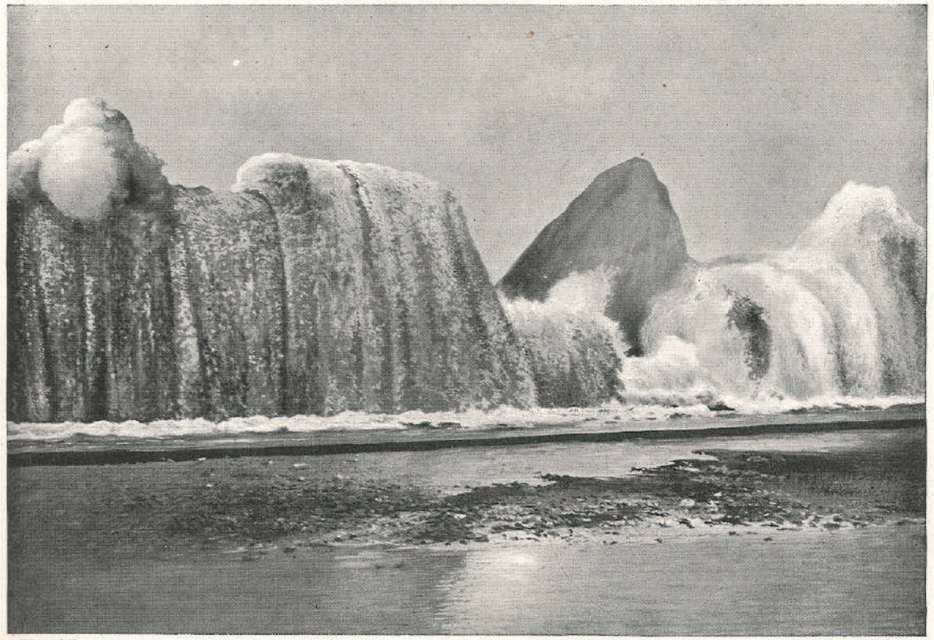
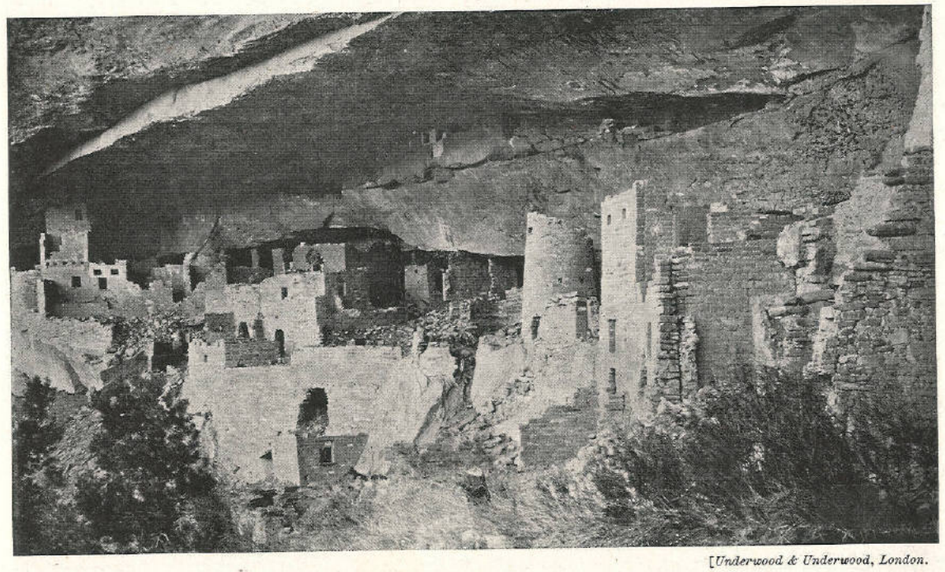


Photo by] *[Putnams' Sons.*

TIDAL WAVE AT RIO DE JANEIRO.

Tidal waves are almost invariably the result of a submarine earthquake. Immediately before the approach of the actual wave, the sea flows back a long distance from the shore. Then comes the tidal wave (one of which is recorded to have reached 210 feet), and the onslaught of water carries everything before it, causing destruction to anything within its reach.

expand, and shake itself free from the fetters of bigotry and false religion. The Persia of Omar Khayyâm, the Spain of Averroës, the Provence of the Troubadours, Italy of the Renaissance, France of Villon, and England of Chaucer, are full of a slowly growing, tremulous, delicious wonderment at the marvels of the world; at the contrast between the lofty peak and the smiling valley, the springing fountain in the wilderness, the pale green gloom of the beech-woods, the stalactite miracles of limestone caverns, the growth of the plant, the migration of the birds; and the existence beyond the confines of Romanized Europe of strange wild beasts, naked, dark-skinned savages, birds of paradise, gigantic birds of Madagascar, mountains of lode-stone, unicorns and phœnixes, sheep drawing their fat tails on little sledges, elephants carrying castles, volcanic craters revealing the Earth's fire; and the thousand and one stories obtained from the Arabs and Chinese by Crusaders, Venetian traders and Papal envoys of the Crusades, and of the



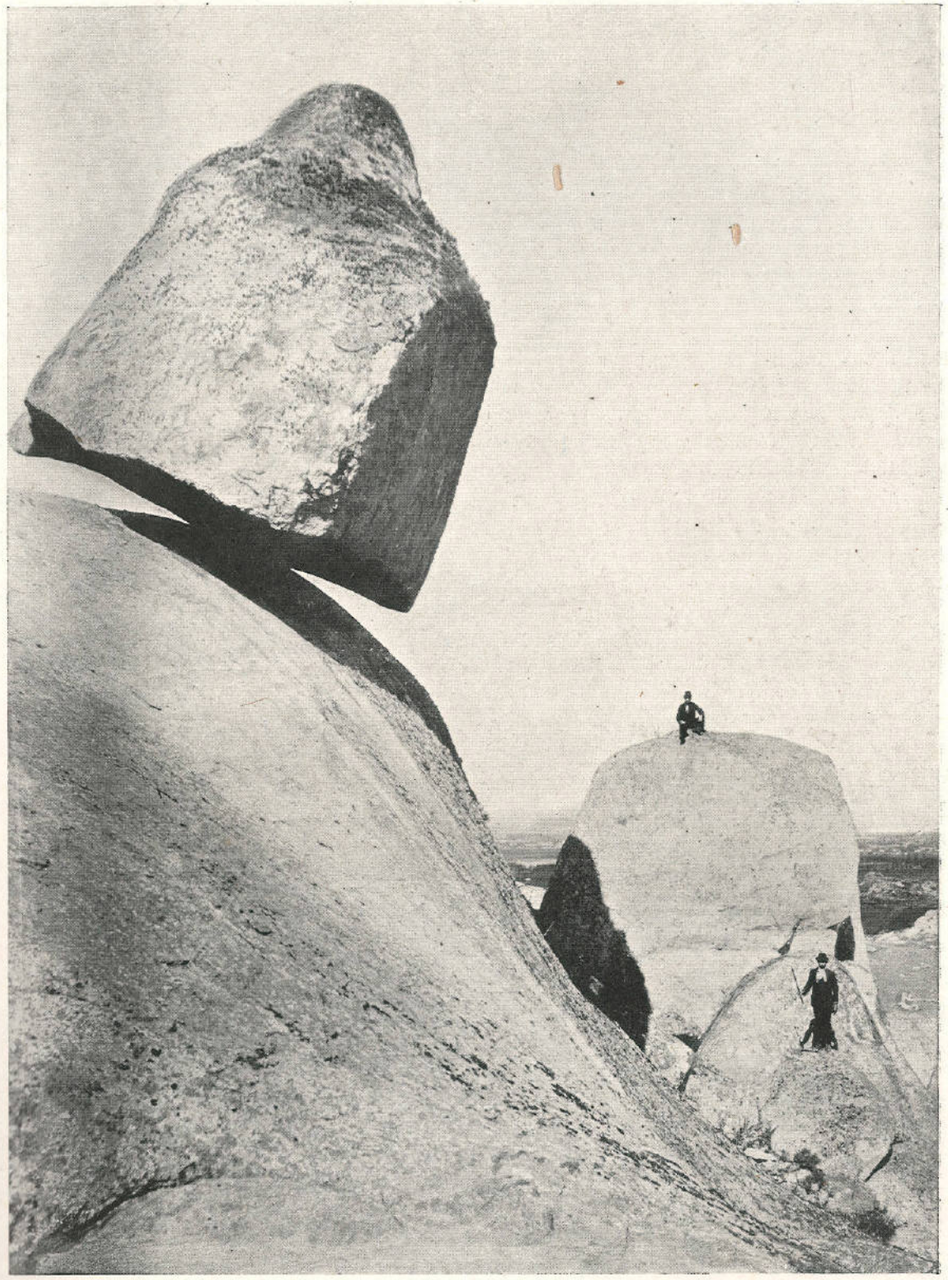
[Underwood & Underwood, London.

THE CLIFF DWELLINGS OF MANCOS CAÑON, COLORADO, U.S.A.

These are the most wonderful buildings that have yet been found of the prehistoric cliff dwellers. Some of the houses are built at a height of 800 feet above the valley level. To reach many of the rooms in these buildings a man would have to enter an aperture only 22 inches high and 30 inches wide, and crawl through a tube-like passage 20 feet in length.

period of commercial and religious expansion which followed. The revival of interest in Greek literature gave to men's minds in the Europe of the Renaissance the myths (with a sub-stratum of fact) of the Greek heroes. But it was perhaps the Crusades most of all which implanted in the European mind the desire of adventures for the mere sake of feeding the imagination with wonder-ment. The Crusading voyages of the Christians swarming out from Western Europe to attack the Muhammadans in the Mediterranean, carried men in ships to the coasts of Portugal and Morocco, as well as to Asia Minor and Syria (and thence to Persia, Tartary, India and China). More and more attention was concentrated on the mysteries that lay beyond the Atlantic Ocean. Italian monks and Italian explorers as early as the thirteenth and fourteenth centuries had reached the coast of the Pacific and had realized the existence of the Malay Archipelago. The desire to behold new wonders, as much as any inducement to spread Christianity or obtain gold and slaves, sent men across the unknown Atlantic to discover the islands and continents of the New World.

Perhaps at the present day it is amazing scenery that attracts our eyes and minds more



From the collection of] *[J. H. Dauber, Esq., F.R.G.S.*

THE ROCKING STONE, TANDIL, ARGENTINA.

This is a perfectly balanced boulder of immense size, as can be seen by comparing it with the men standing near. It has probably been formed by the action of wind and rain in triturating and removing by degrees the more friable parts of the parent rock, leaving behind the harder-gritted core. It is so perfectly lodged that it can be rocked without fear of its falling.

completely than any other wonders. Later we shall be expending our money and our attention on the publications which give us without a hiatus or a guess every stage in the unfolding development of the germ into the perfect animal or plant; which illustrate the life-cycle of the parasitic worm, the changes in the grey matter of the brain, the formation of crystals, the development and arrest of disease.

New wonders will arise of new species in animals and plants created by means of the application of natural laws. An extended study of chemistry and an application of mathematics will immensely increase the scope of our admiration and awe, in the revelation of new wonders which will have become possible to man as a scientific creator.

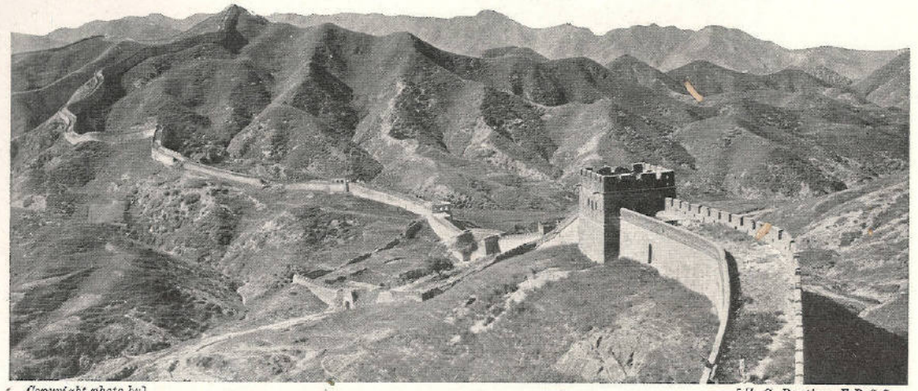
Meantime, there can be no more liberal education than to pass in review what are commonly reputed as world's wonders at the present day. It should tend not only to delightful recreation, but to an enlargement of our sympathies. Many of us, not only in the United Kingdom and the British Colonies, but throughout the world, have not the privilege of travel; are retained within the narrow limits of a town or village by force of circumstances, by indifferent health, or lack of sufficient means. To all such, a book dealing with the Wonders of the World as seen with accuracy by the photographic lens, and described often by eye-witnesses, should come as a delightful compensation for home-staying.



By permission of] [*The British South Africa Co.*

THE VICTORIA FALLS, SOUTH AFRICA.

At some period in the geologic history of Africa a crack occurred across the bed of the Zambesi River, creating a big chasm into which the river rushed in a sheer descent; thus forming these famous falls, by far the largest in the world. The Niagara Falls are only half as wide and half as deep.



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE GREAT WALL OF CHINA.

This picture, which includes the Pataling Gate of the Great Wall, gives a good idea both of the construction and course of the barrier, built over two thousand years ago by the first Chinese Emperor, Che-Hwang-te.

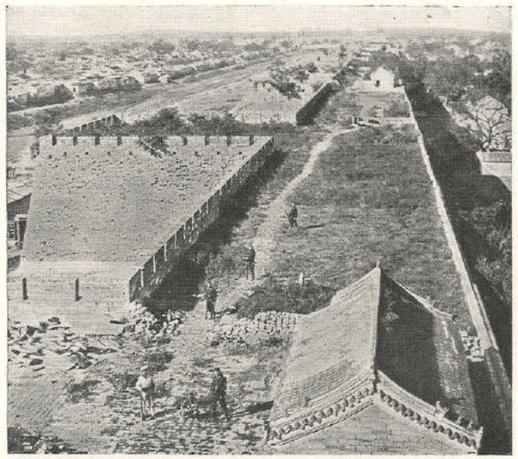
THE WONDERS OF THE WORLD.

BOOK I. ASIA.

CHAPTER I.

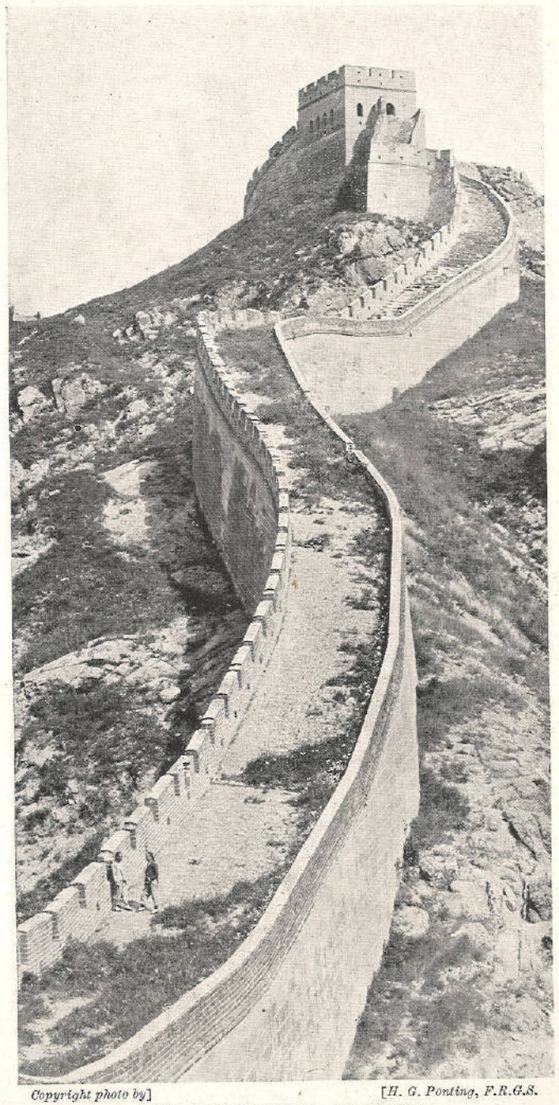
By PERCEVAL LANDON.

The Great Wall of China.—Best known by repute of all the wonders of the world, the Great Wall of China has remained for twenty-one centuries the most amazing construction of human hands. Ruined and broken as it is, it is clear at first sight that the amount of human labour required to build this majestic barrier is without parallel on earth. Fifteen hundred miles long, with additional loops that add another thousand miles, there were originally twenty-five thousand watch-towers upon it. The Wall was built at the end of the third century before Christ by the first, and perhaps the greatest, of all Chinese Emperors. Yin Cheng, Prince of Tsin, better known as Che-Hwang-te, succeeded as a boy to the throne of a comparatively small kingdom, and at once began to put into a state of order and defence a territory that had long been allowed to degenerate into a mere prey to annual northern invaders. After a few years the young king assumed the style of Emperor, and organized the forces of what for the first time in history was China. For he at once gave to the whole of this new empire the



From Stereo copyright] [*Underwood & Underwood.*

A view along the top of the Tartar Wall.



Copyright photo by [*H. G. Ponting, F.R.G.S.*

THE GREAT WALL OF CHINA.

A characteristic and picturesque view taken near Nankow Pass.

name of his own small state. He then marched out against the Tatars —or as the English prefer to spell the name, Tartars—his hereditary and perennial enemies in the north. After routing these marauding pests, he was recalled for the usual oriental need of crushing out the seeds of rebellion at home. It was probably in order that he should not again find himself thus between two enemies, that he conceived the gigantic defence of which the larger part remains to this day. Undeterred by the magnitude of the task and the terrible loss of life that its construction must involve, Che-Hwang-te, like Khufu before him, gave the word, and the huge structure slowly forged its way from many centres at once along the entire northern boundary of what was then the Chinese Empire. Che-Hwang-te enlisted the workers in many ways and from many quarters. Some of his press-gang work was hardly creditable, for it is on record that the mere possession of a book condemned the wretched owner to four years' hard labour on the Wall. But, as the Chinese proverb has it: "The annihilation of one generation has proved the salvation of others," and for many centuries the Great Wall served its purpose well.

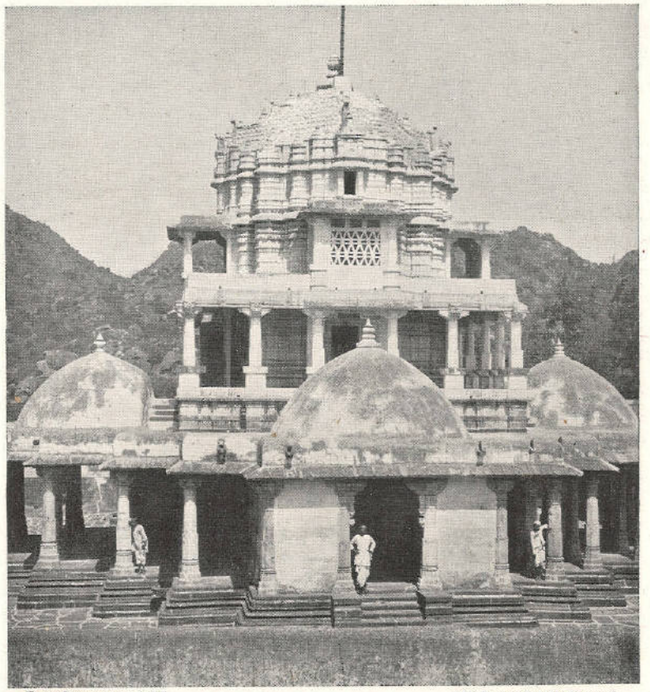
The nature of its construction can be well seen in the accompanying photographs. The height and size of the Wall diminish somewhat as it progresses westward, but to the end it maintains its high quality of workmanship. Starting from Shan-hai Kwan, the "Wall of Ten Thousand Miles" runs west across the mountains until Kalgan is reached, where it is pierced by the main north-western road from Peking; thence it takes its way over the plains and lesser ranges of the Hwang-ho basin, crossing the river at Pien Kwan. From that point the existing boundary between the provinces of Mongolia and China proper is faithfully followed by this huge fence, until Kiayu Kwan beyond Su-chow is reached, where the Wall comes to a sudden end. Modern investigation has demonstrated the fact that the Great Wall branches off into two distinct loops near Chunwei, and that another loop enclosed a large tract of land



Copyright photo by [*H. G. Ponting, F.R.G.S.*

MOUNT KANGCHENJUNGA FROM DARJILING.

Third among the greatest mountains of the world, Kangchenjunga's 28,156 feet are infinitely more impressive than either Mount Everest or K 2 in the Karakoram range. It has often been said that this view, in its entirety, is by far the most beautiful on earth.



From Stereo copyright] *[Underwood & Underwood.*

JAIN TEMPLES AT MOUNT ABU.

These exquisitely finished Dilwarra Temples at the summer capital of Rajputana were built respectively by Prince Vimala Sah, in 1030 A.D., and by the brothers Tejahpala and Vastupala, about the year 1200 A.D. The records that remain of their nominal cost in those days mean little now, but it is clear that it would be represented by not less than two-and-a-half millions sterling to-day.

west of the capital. Excluding these loops, in length the Great Wall is somewhat greater than the Grand Trunk Road from Calcutta to Peshawar in India, or, to take a more easily accessible simile, it may be said that it would stretch from Berlin to Tiflis in the Caucasus.

A recent writer, Mr. Geil, writes of it thus: "Disappointment generally awaits the mortal who has heard much about some celebrated object, and does visit it; so seldom does the reality come up to expectation. But the Great Wall is not overrated. Behold it by starlight or moonlight, gaze on it in twilight or in sunlight; view it through the haze of a dust fog, or the spindrift of a rain-shower, or between the flakes of a snowstorm, ever is the Wall one great, grey, gaunt, still spectre of the past, cresting the mountain peak or reposing in the shady valley. So vast is it that perhaps alone of all man's handiwork it could be discerned from the moon. So vast is it that were its materials disposed around the world at the equator, they would provide a wall eight feet high and three feet thick. When we reflect on the labour needed to erect it, we slowly divine the toil exacted from countless thousands, the sweat and tears and blood that must have been shed; and we are prepared to hear that after two millennia the name of Chi is cursed all along the Wall by the descendants of those who were driven to the hateful task, who laboured in deathly fear lest when flesh and blood failed to respond to the taskmaster's scourge, that flesh and blood should be hurled into the mass of concrete to provide more material for the all-devouring monster. It is a Wall of Blood!"

Kangchenjunga, from Darjiling.—That which has been described by many travellers as the most beautiful view on the face of the globe lies before the reader. There is, of course, room for only a small part of the panorama in the plate. The mountain wall stretches interminably to right and left and snowy mountain peaks of lesser height rise as far as the eye can reach from the darker masses of moraine and naked rock below. But Kangchenjunga is the centre and focus of the whole great picture. From among the tropical vegetation of the hill side the eye falls to the trimly cultivated plains that thrust themselves between the mountain ridges. At this distance the carefully levelled shelves where paddy is grown look like the stairs of a doll's house, and the rare buildings no bigger than those that might crowd a shelf in a London toy-shop. Beyond them

the barren mountain spurs thrust themselves forward from the main mass of the Himalayas, and behind them again the sombre curtains of eternal rock rise nobly and indistinctly in deeper and deeper tones of ash-blue till twenty miles away the glaciers mark here and there the irregular fortress wall of mountain scarp and battlement, untrodden, remote and lifeless. Five hundred feet higher still, and all warmth is gone. Above this waste of ice and moraine there is a lavender haze for most days throughout the year, but if you are lucky—if the haze by some happy chance is dispersed while you wait—you will see something that will repay you for all your impatience, something that you will hardly believe for its very magnificence even as you look at it. Up above that lavender haze that crowns the glaciers, up in mid-heaven, up where by rights there should be nothing but the night-riding stars—there, separate, detached, unconnected with anything on earth, there rise the rose-pink ice peaks and saddles of Kangchenjunga. Fifty miles away, yet clearer than the glacier plinth below them, the crannies and caves, the towers and pinnacles of the mighty mountain stand out in pale crimson glory upon the cold ash-blue sky, more like some heavenly vision of an old painter than anything that can possibly be real in this world. Motionless, silent, ethereal, those untrodden peaks hold the colour as a great shell from a South Sea beach glows with twenty shades of pink. Long after the sun has set upon Darjiling you may watch from your mountain coign that wonderful set scene, immovably fixed for all the interplay of fading rose. Then Kangchenjunga dies out again, and only the dark starless patch in the patined sky will tell you all night long that what you saw was no mere vision or delusion of your senses.

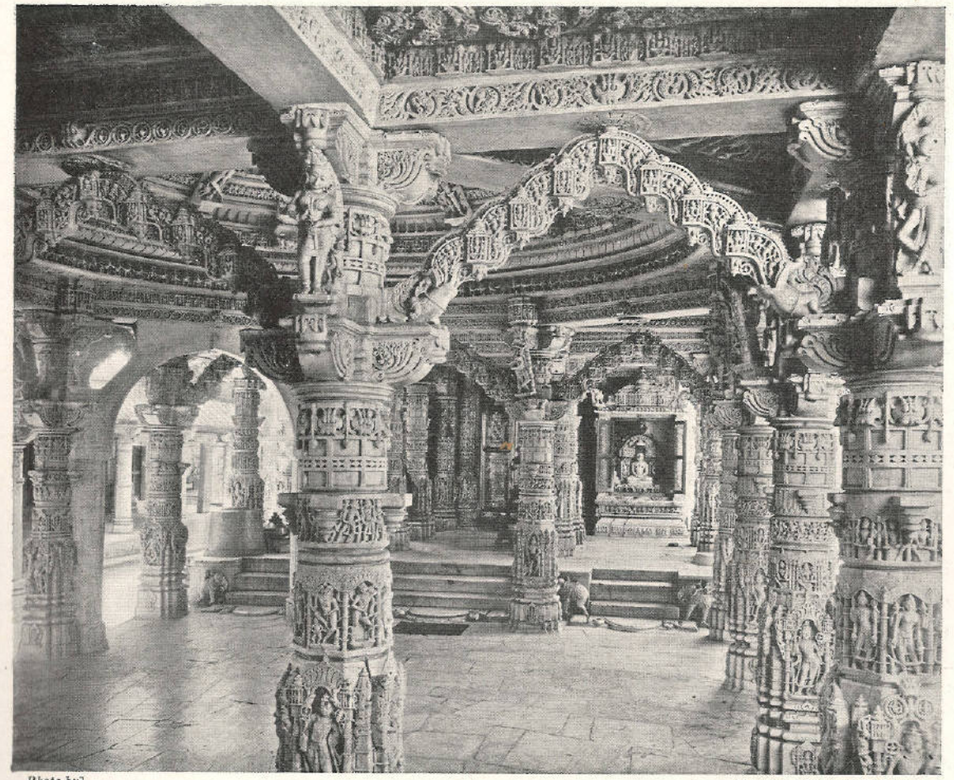


Photo by] *[Messrs. Johnson & Hoffmann.*

The exquisite finish of the ornamentation of these Jain Temples is well shown in this photograph

Jain Temples at Mount Abu.—Since Mount Abu was selected as the hot-weather station of the Rajputana Agency, it has become one of the best-known places in North-Western India. There is here a natural plateau two or three miles long stretching among the mountain peaks, level, fertile and well watered. The rich vegetation of the mountain-side jungle and the flat barley field of vivid green refresh the eye of the traveller and form a rich setting for some of the most extraordinary buildings that man has ever constructed in the world.

The two Jain Temples of which illustrations are given are built of the purest white marble and are decorated as no other buildings in the world have ever been or ever will be decorated. A glance at the second illustration will give an idea of this supreme wealth of ornament better than the most elaborate of descriptions. Originally built by the piety of Jain devotees of the eleventh and twelfth centuries, the temples were allowed to fall into a state of disrepair that, in the middle of the nineteenth century, threatened their speedy ruin. But energetic and skilful underpinning staved off immediate danger, and for the last twenty years



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE ANANDA PAGODA, PAGAN.

This Temple is the most conspicuous and beautiful object still remaining among the deserted ruins of Pagan, at one time the capital of Burma.

the work of restoration has been steadily going on. Leaf by leaf, flower by flower, curve by curve, the new work challenges detection amid the old, and though to occidental tastes the buildings are terribly over-encrusted with ornament the sight of these Dilwarra temples at Mount Abu silences the most *blasé* and the most critical of their visitors. They seem rather the miraculous creation of some Aladdin than the work of human hands. We are accustomed to think of Roslin chapel as exquisitely and perhaps over decorated, but the most intricate adornment of the Prentice's pillar is mere hatchet work beside the lace-like decoration of these temples.

Of the Jain religion, which reared these jewels of alabaster, it is enough to say that it claims—and probably with truth—an antiquity equal to that of Buddhism, with which faith, indeed, it is closely associated both in history and in symbolism. The Jains carry the doctrine of the transmigration of souls to an extremity. The life even of a microscopic insect of the Indian roadside is respected by them, and a devout Jain will always brush the ground he is to sit on before allowing himself to rest. In many ways Jainism is now fast approximating to Hinduism. Caste

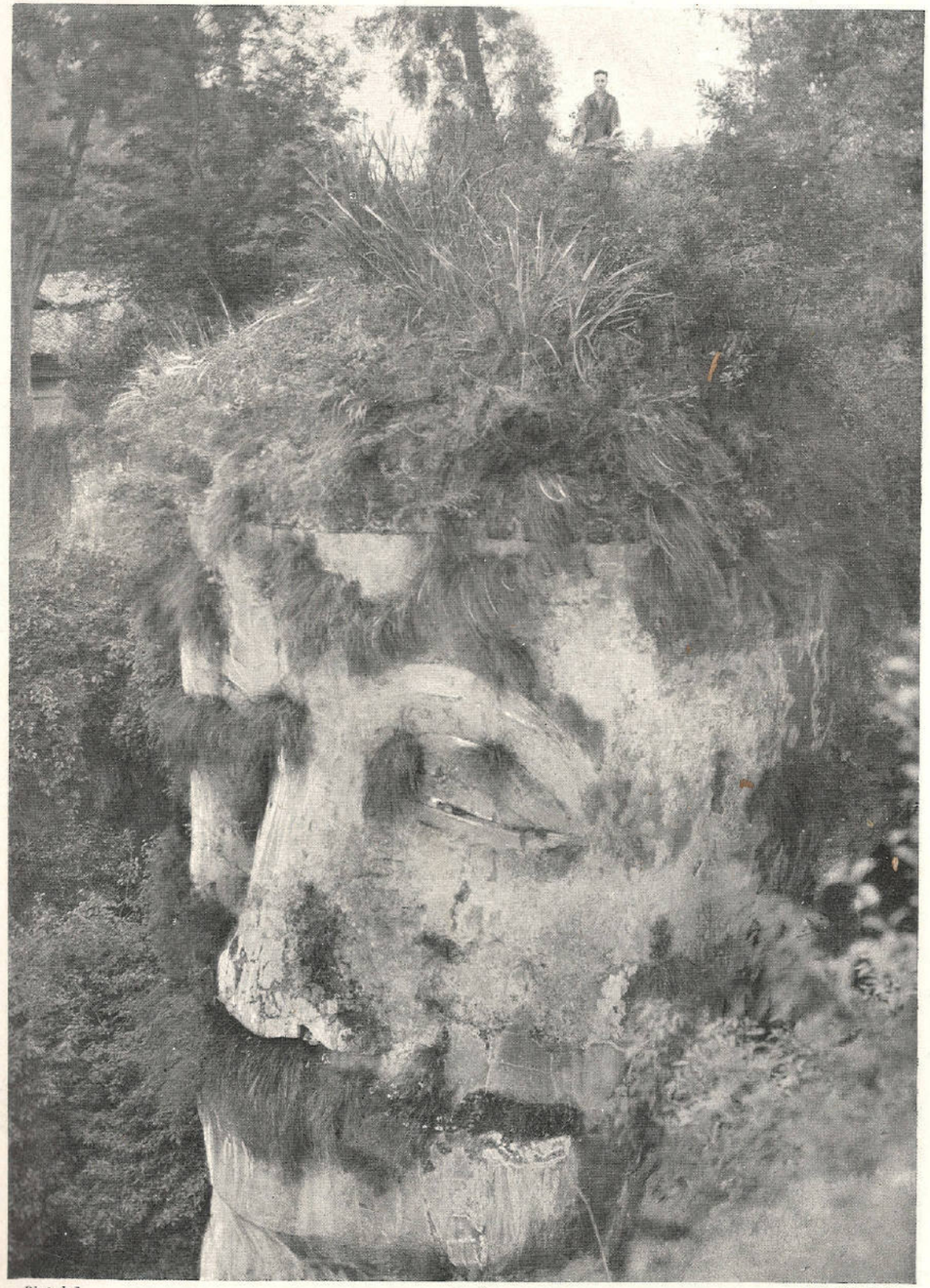


Photo by] [*Rev. Olin Cady.*

GIANT BUDDHA AT KIATANG, CHINA.

The full figure is about one hundred and fifty feet in height and is perhaps the most remarkable of these gigantic cliff-hewn representations of Buddha.



Photo by] *[Messrs. Johnson & Hoffmann.*

FROZEN WATERFALL IN THE CHUMBI VALLEY, TIBET.

This annual phenomenon takes place a few miles south-west of Phari, the famous fort at the head of the valley.

restrictions are strictly enforced, the cow is worshipped and Hindu rules of inheritance are observed. Except in the externals the kinship with Buddhism is now small. But it is with the utmost difficulty and uncertainty that the existing relics of Jainism are distinguished from those of Buddhism.

The Jains are divided between the Digambaras, or "sky-clad" sect, who eat—and in extreme cases entirely live—naked, and deny that women can attain salvation; the Svetambaras, who wear clothes and have hopes for the salvation of their womenkind; and the Dhondiyas, who wear white clothes, filter the air they breathe and worship their Gurus, or spiritual teachers. A recent writer has denied the present usefulness of a sect that merely "denies God, worships man, and nourishes vermin." But the Dilwarra temples stand as a lasting proof that there were years in which the Jains as builders, designers and carvers of marble could challenge the world.

The Ananda Pagoda, Pagan.—In the strictest sense of the word, this exquisite structure by the side of the Irrawadi is no more a pagoda than the so-called Arakan Pagoda near Mandalay is a pagoda, if by that word it is intended to signify a development of the original stupa, or tope, which was the earliest form of commemorative structure in the Buddhist religion. For the distinguishing characteristic of the stupa is that it has no rooms or corridors within it. It is in its essence a simple mound of earth. The Shwé Dagon in Rangoon offers the latest and the most highly decorated example of the stupa pure and simple. Such buildings as the Arakan Pagoda and this in the deserted riverside capital of Burma should rather be called temples, though in many cases the conventional form of the stupa may still be traced buried beneath a wealth of masonry and ornament. This Ananda Pagoda at Pagan is pierced interiorly by a network of major and minor corridors enmeshing a central solid square, into which four deeply-set chapels are sunk, each containing a large statue of Buddha. These four statues represent four reincarnations

of the Buddha; they returned to the world in different ages for the edification and regeneration of mankind.

This is the most majestic temple that still exists in Pagan of over a thousand pagodas of different sizes, shapes, and degrees of repair. Ruined or semi-ruined for the most part, they crowd in upon the river Irrawadi, where the remains of Burma's ancient capital can still be traced for more than five miles along the river.

Mr. Scott O'Connor well describes the general effect of Pagan even in its present dilapidated and depopulated state: "As we near Yenan Gyat there become visible for the first time countless pyramids and spires of Pagan, the most stately capital Burma has ever known. The nearer ones are cut in dark outlines against the sky, but the most distinct are so faint that they seem like the unreal fabrics of a city of dreams. Yet there is nothing in this superb picture, in all these hosts of pinnacles and domes and spires, to hint that before one lies a city of the dead. Instead, it looks, hung here between the drowsy clouds and the mirror-like calm of the mighty river, like some new evidence of the East destined to play an immortal part in the history of the world."

The temple takes its name from Ananda, the beloved disciple of the *master*, who, with Upali, the St. Paul of Buddhism, was largely instrumental after Gautama's death in casting into a permanent tradition and canon the life and teaching of the Buddha.

Great Buddha of Ktatang.—This strange cliff-Buddha is described by Mrs. Little as about one hundred and fifty feet in height. It is full length, and the feet are washed by a foaming mountain torrent. It was, indeed, she writes, to guard against the dangers of the rapids here that the figure was cut in the cliff-side by the life-long labour of a single priest. The rock is somewhat soft, and, as can be seen, there is much earth in the crevices. This has been ingeniously utilized for a monstrous growth of hair, eyebrows and moustache, which adds



Photo by] *[Sarrafian Bros., Beyrout.*

NATURAL BRIDGE AT MOUNT LEBANON.

A good illustration of natural architecture The proportions of it can be imagined by noticing the size of the men on horseback upon it.



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

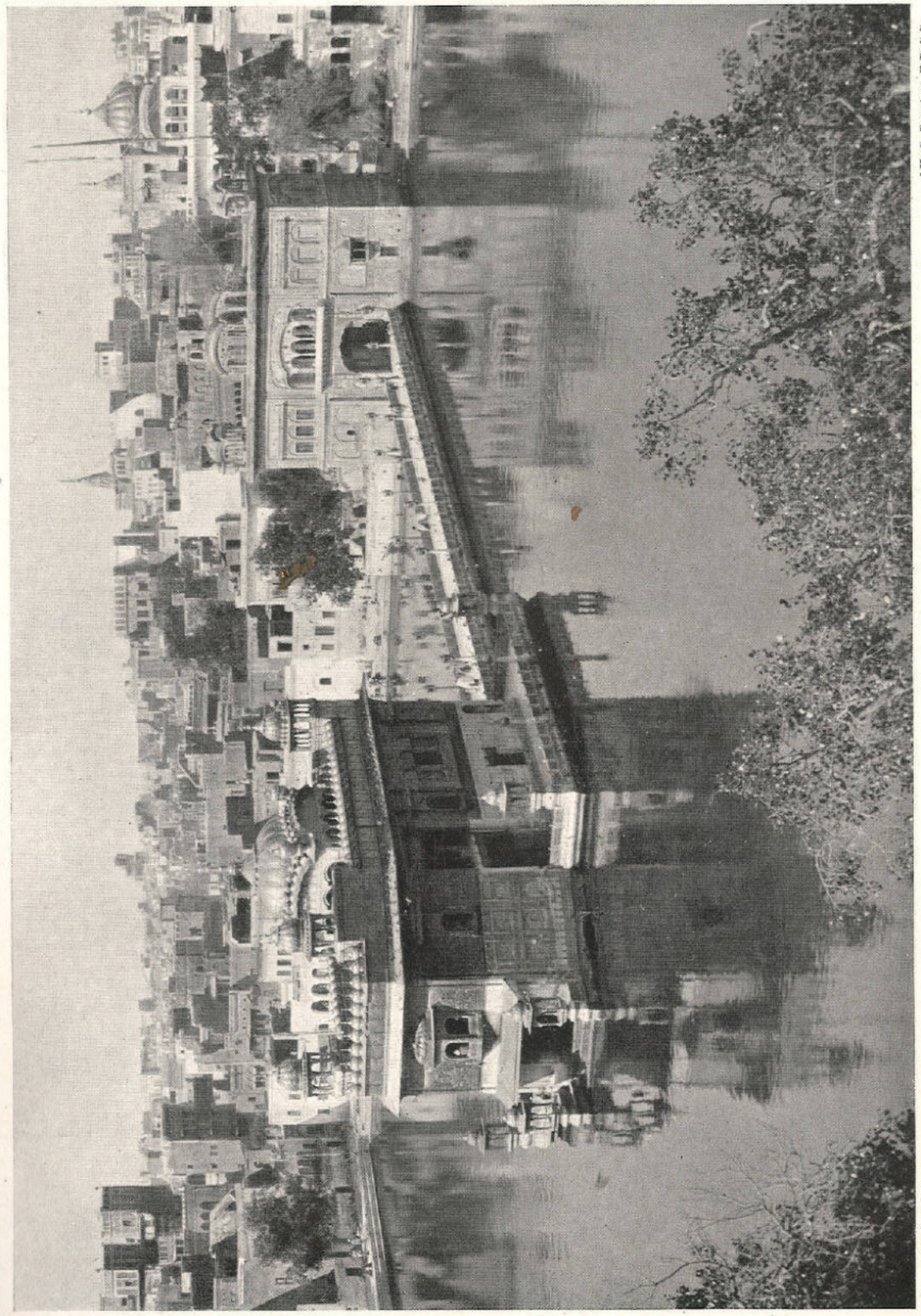
THE GOLDEN TEMPLE, AMRITSAR.

A characteristic view about noon of the approach to the Golden Temple and the crowds that frequent it.

considerably to the appearance. There are other rock-cut Buddhas in the neighbourhood. Mrs. Little mentions one near Yung-Hsien. In this case an entire hill has been carved into the shape of the head and shoulders of Buddha and heavy gilding has been applied.

Frozen Waterfall.—Until the recent expedition of Sir Francis Younghusband to Lhasa no white man had ever seen this curious natural wonder which every winter falls like a veil of lace from the top of the hills that shut in the Chumbi Valley on the east. It is to be seen about ten miles south-west of Phari. One can climb up on to the frozen mass below and find a clear way behind, between the wall of rock and the pillar of fluted ice, through which the afternoon sun glows as through a gigantic aquamarine. From the outside, however, there is no suggestion of colour in this strange white pillar which begins to be formed in the latter days of October, and remains in ever-increasing beauty until the first warm breath of the south wind thaws again the little stream—for it is only a little stream—of which the ceaseless dripping causes this gargantuan work. The total height of the fall is about ninety feet, and in 1904 it was about thirty feet wide at its base. The waterfall has no attendant beauties of vegetation, for it is not less than fourteen thousand feet above the sea level, where little but dwarfed rhododendron and brief-lived alpine flowers flourish during the short summer months.

Natura. Bridge. Mount Lebanon, Palestine.—This natural arch is perhaps as good a representation as could be found of a not infrequent effect in nature. It is a curious illustration of how often the work of man, even in the application of technical principles, seems to have been anticipated by nature. For though at first sight it would appear that the beam, rather than the arch, was here exemplified, the natural shape assumed by the rock gives it



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE GOLDEN TEMPLE, AMRITSAR.

This picture presents an excellent idea of the appearance of the "Darbar Sahib" or sacred home of the Sikh religion at Amritsar The upper part of the buildins is covered with gilded plates of copper, the lower part is of white marble.

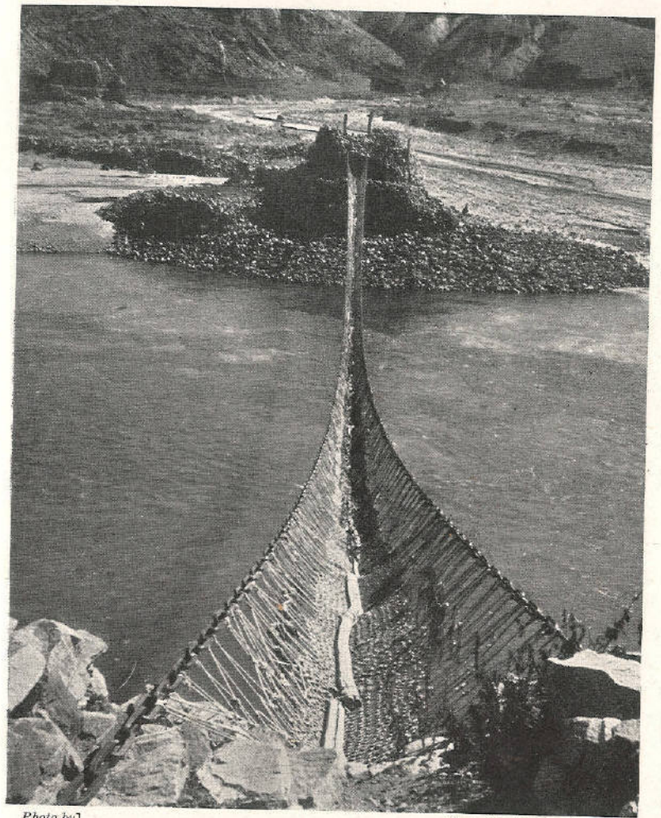


Photo by] *[Capt. C. G. Rawling, C.I.E.*

A WONDERFUL BRIDGE ACROSS THE TSANG-PO IN TIBET.

Readers will notice the curious way in which the scanty gang-planks are bound by ropes to the iron chains.

all the stability of a constructed arch, and it may confidently be said that this gigantic span is fixed over the narrow gorge below as permanently and in as workmanlike a form as any construction of man could be.

The Golden Temple, Amritsar.—The golden temple of Amritsar is by repute one of the best known buildings in Asia. It is to the Sikhs what St. Peter's is to the Roman Catholics and the Ka'abah is to the Mohammedans. In it, as the object of limitless devotion and service, lies the "Granth," or Holy Book. This most sacred volume is set upon an altar, and is worshipped with offerings of flowers and the continual waving of fans and chauris, or fly-whisks. In front of it is stretched a sheet, upon which the offerings of the faithful are cast in silver or nickel, or cowrie-shells, while the recitation of the droning priests fills the ear with the drowsy spirit of religious ecstasy.

The temple is reached by a causeway running from the western side of the tank. The door of the temple that faces this causeway may not, however, be used by non-Sikhs. The "feringhi,"* whatever his rank and importance, is obliged to use the side door on the north. Once inside, he is welcome to go where he pleases, and he will be doubly welcome if after he has passed beneath the glittering gold walls and domes of the Darbar Sahib he presents the customary offering to the memory of the great soldier saints who founded this most militant of all creeds. For the Sikh does not believe much in the efficacy of prayer. But he does believe most mightily in the virtue of breaking the heads of heretic enemies. They are fighters by birth and training and trade. When we snatched from the hands of Ranjit Singh the dangerous dominion that he had acquired over the Punjab, they shrugged their shoulders and turned as readily to the work of war under British officers as they ever have beneath those of their own blood. This clan of fighters was founded about four hundred years ago. Caste prejudice and the worship of idols were denounced, and the unity of God enjoined. Completely sundered as they at first were from

* This word, which in one form or another is almost universally used in Central and Southern Asia to denote Europeans, is an attempt to pronounce the word "français," the French or Franks having stood from early times for all white-skinned foreigners.

their Hindu brethren, the austerity of the Sikh rule is now much relaxed, and caste distinctions are creeping back among them.

It will be noticed in the illustration that only the upper part of the temple—that which shows a darker tint—is of gold. Plates of copper are coated heavily with the precious metal, and their effectiveness for decorative purposes could hardly be better exemplified than by this building.

A Wonderful Bridge Across the Tsang-po.—This is an excellent illustration of a kind of bridge very popular among Tibetans. The footway of the bridge is supported by a coarse, interwoven net of ropes, which bind it to the iron chains on either side. These chains are in many cases of great age; in fact, it would probably be impossible for the Tibetans to repeat to-day the prowess of their ancestors in the art of welding iron.

The finest example of these suspension chains that remains to-day may be found forty miles



Photo by] *[The Keystone View Co.*

THE GREAT CRATER OF ASO-SAN, JAPAN.

Perhaps among the many extinct volcanoes of the world this portion of Aso-san retains best the features and plan of the active crater.

south-west of Lhasa, where the main road to the Gyantse crosses the Tsang-po, at a place called Chak-sam (*i.e.*, iron bridge). The huge quadruple chains still swing out across the stream as strong and unrusted as when Tang-Tong drew them taut from bank to bank in the fifteenth century. As may be imagined, it is almost impossible to get beasts of any kind to cross these bridges, and, probably in consequence of this, large ferry-boats have entirely displaced the older method of transit at Chak-sam.

The Crater of Aso-san. Japan.—If geologists may be believed, there was a time when craters existed on this planet no less in size than those of which the remains may still be traced almost with the naked eye upon the surface of the moon. But though this no doubt is the case, these craters have, as a rule, lost to a great extent their original structure, and the picture that we give of the extinct portion of the crater of Aso-san, in Japan, presents a good idea of what is probably the largest existing crater in the world, of which the precipitous and almost circular hill-sides and the flat bed are still clearly visible. It requires little imagination to reconstruct the terror of the scene when in remote geological ages this mighty blow-hole of the earth's interior incandescent activity was in full blast, and, moreover, it should be mentioned that even at the present day a portion of Aso-san is still in activity.

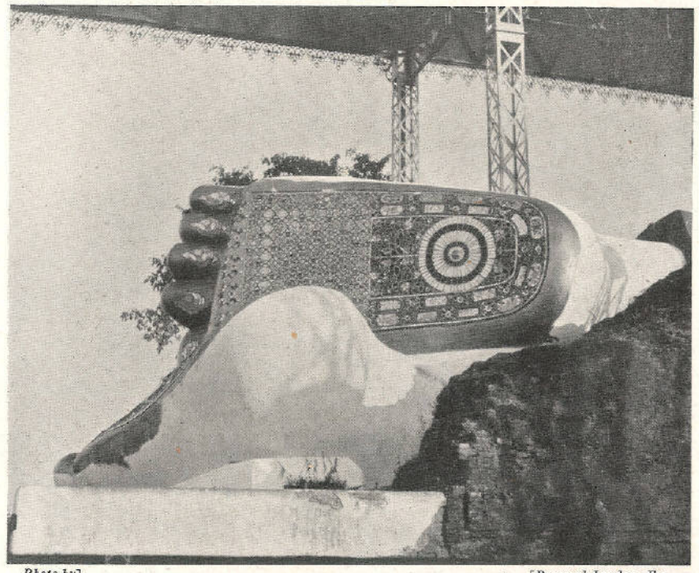


Photo by] [*Perceval Landon, Esq.*

GREAT BUDDHA AT PEGU.

This photograph of the mosaic decoration upon the soles of the feet will give a good idea of the vast sums now being spent upon the decoration of this huge recumbent statue. The dark mass of rock to the right will indicate the state in which it was when found.

The grim thought comes over a visitor that, after all, this crater may not be as totally extinct as its trim and well irrigated fields and copses suggest. The Vesuvian crater of Monte Somma was notoriously extinct and filled with vegetation in the year 79 A.D., and we can imagine that the horror and confusion in Pompeii and Herculaneum was increased tenfold by the complete unexpectedness of the eruption which without warning blew one half of the whole crater of Monte Somma into thin air, and deluged the sides of what is now known as Vesuvius with the lava that still lies heavily over Herculaneum.

The Great Buddha of Pegu.—It is a curious fact that of the marvellous structures of man dealt with in this section of this work two were discovered by the merest accident. As will be seen elsewhere, the temple of Boro-bodoer, in Java, was brought to light only by the chance prospecting of an Englishman. This statue, which without fear of contradiction may be said to be by far the largest representation of the human form that exists in the world, was exposed to the light by an even more extraordinary stroke of luck. The railway runs north-east from Rangoon to Mandalay, and twenty or thirty miles out from the former city Pegu is reached. It was the construction of this railway that occasioned the discovery of the statue. In 1881, while



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GREAT BUDDHA AT PEGU.

The accidental discovery of this huge figure is one of the romances of the East. We have preferred to give an early photograph of it, as the construction of an iron shelter over has made it now difficult to realize from any standpoint the gigantic proportions of the statue, which is 180 feet in length and 47 feet high.



Photo by] *[N. P. Edwards.*

THE GREAT BANYAN TREE IN CALCUTTA.

The Banyan is remarkable for its rooting branches which soon become new stems, and in this manner the tree spreads over a great surface.

the permanent way was being banked up to protect the lines from occasional floods, the engineer in charge required for the solidity of his work a harder ballast than the alluvial deposit over which the line was running could give him. It was a little difficult to find anything to suit. Jungles stretched five or six miles westward from the river to the foot of the hills. Here and there, however, they were diversified by a fold of laterite half concealed beneath the luxuriant vegetation that clothed its side. This kind of rock had been used by the contractor before and had been found entirely satisfactory for his purpose, and he therefore sent a small body of men to prospect in the jungle. Less than a mile away a tree-clad mound raised itself conspicuously from the vegetation. The work of clearing away some of the trees took but an hour or so, and then shafts were sunk to find the needed stone. Before the diggers had gone down more than a yard they struck a solid formation which promised at first to provide the necessary material. But a cursory examination showed that the material thus discovered was of hard burnt brick, and the curiosity of the contractor's agent, who was superintending operations, was aroused. He determined to dismantle a portion of this unknown ruin, and was almost immediately rewarded by the discovery that the long, low hill upon which he was engaged was no other than an enormous and fairly well preserved figure of Gautama. Perhaps the figure of the man sitting upon the left hand of the recumbent statue will give the best standard of dimension for the purpose of estimating the actual size of the Shwetha-Yaung, as the figure is known in the neighbourhood. In actual length the statue is one hundred and eighty feet, and it is forty-seven feet high to the point of the shoulder. The Government has contributed to the work the overhanging shade which, indeed, protects it, but which sadly disfigures the general effect of the statue, and makes it almost impossible to obtain any comprehensive sight of the image. Private enthusiasm has done, and is still doing, all that is needed to turn the plainly moulded brick figure that was originally found into an almost resplendent witness to the faith of the land. For example, the soles of the feet have recently been adorned, at a very large cost, with Burmese glass-mosaic, as may be seen in the accompanying photograph.

The history of it is known to no one. Judging by the severity of the type this figure cannot be less than five hundred years old; but no record, no tradition, not even the scantiest legend exists

to tell us when or by what reverent hands this strange figure was first constructed. It has, however, appealed very strongly to the imaginations of the modern Burmese, and already it has taken rank with the Shwé Dagon and the Arakan Pagoda as a building of such holiness that merit is acquired by the pious restorer.

The Great Banyan, Calcutta.—Probably there is no better known characteristic of the East than the banyan tree. In "Paradise Lost" Milton thus describes it in a well-known passage:—

> "The fig-tree at this day to Indians known
> In Malabar or Deccan spreads her arms
> Branching so broad and long that in the ground
> The bended twigs take root, and daughters grow
> About the mother tree, a pillared shade
> High over-arched and echoing walks between."

The great banyan tree in the Botanical Gardens of Calcutta is famous. That it deserves its fame will be apparent on the merest glance at the photograph opposite. It is with some difficulty that a visitor brings himself to believe that the huge mound of vegetation in front of him is actually the product of one single tree, for it covers some two and a half acres of ground.

The utmost care is taken of this mighty tree. Every tender succulent young root, as it begins to fall like a stalactite from the branch overhead, is encased and protected from harm in a bamboo. Along the Grand Trunk Road a visitor will repeatedly notice that the roots of the banyan are cropped by passing animals to as regular a height above the ground as the trees in an English park. Rarely before has it been possible to test the limit of growth of the banyan tree, and the size ultimately attained by the banyan in Calcutta will, therefore, be watched with interest. It is not improbable that the original trunks will vanish altogether and leave the still expanding outer growths as a ring of vegetation round an empty circle. Of course, this Calcutta specimen is quite exceptional. The natural enemies of the banyan generally confine its size to something scarcely larger than a well-grown horse-chestnut tree at home. It is not impossible, however,



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BANYAN TREE.

This picture illustrates at close quarters the manner in which the daughter trunks form under the branches of the mother tree.

that under careful treatment the Calcutta banyan may be encouraged to cover some fifteen or twenty acres in the course of the next fifty years.

This Calcutta specimen is supposed to have fifteen hundred aerial roots, a number from which it is probable that a cypher has been accidentally omitted. The mother trunk is an almost shapeless mass by this time, and contributes very little to the sustenance of its multitudinous progeny.

The Kutab Minar.—Eleven miles south of Delhi the Kutab Minar marks the southern extremity of the broad tract of plain over which the capital of India has slowly travelled northwards for a thousand years. The tall, perfect tower stands alone and unrivalled, the only perfect building within the horizon. It is a monument of victory—the victory of a slave Emperor. This splendid minaret, which rises two hundred and forty feet above the plain, was begun by Kutab-ud-din after the capture of Delhi in the end of the twelfth century and was completed by Altamsh forty years later. As is clearly seen in the photographs, the shaft is divided into five separate storeys, of which the varied fluting deserves careful attention, and the use of texts from the Koran, ringing the pillar at intervals of twenty or thirty feet, is perhaps the best existing illustration of the wonderfully decorative effect of mere lettering.

The interest of the spot is by no means exhausted when the visitor has inspected the Minar itself. A few yards away outside the enclosure rises the stump of a tower planned while yet the red sandstone of the Kutab Minar was raw from the mason's chisel. This gigantic shaft was intended to be over five hundred feet in height, and, had it been completed, it would have eclipsed every human structure on earth, except the Eiffel Tower. But this Indian Tower of Babel was abandoned after it had been raised to a height of about ninety feet.



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THE BASE OF THE KUTAB MINAR.

This illustration presents an excellent idea of the manner in which lettering has been introduced as an ornament to this great tower.

Rameswaram. — Third in holiness among the shrines of India is Rameswaram. Indeed, only Benares and Puri surpass it in spiritual efficacy. But compared with the other two shrines it cannot boast anything like as large an annual attendance of pilgrims. The cause is simple enough. It is not every Hindu who can afford the cost of the long journey that must be taken before the temple is reached; for it stands on an island between India and Ceylon, and not one in ten thousand of even the wealthy Europeans who visit India takes the trouble to visit it. Other temples in Southern India may surpass it in sheer majesty; but no one who has

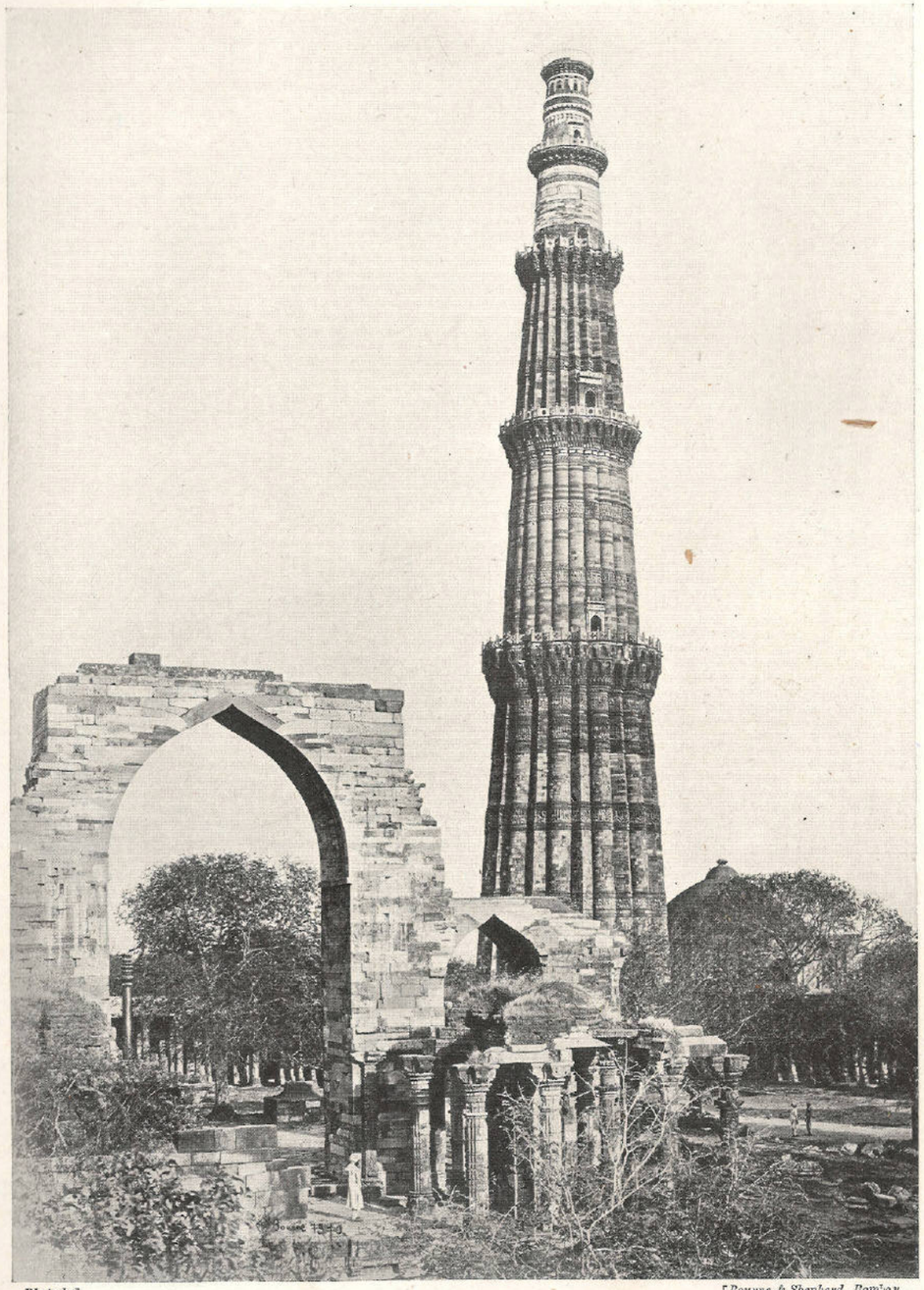


Photo by [*Bourne & Shepherd, Bombay.*

THE KUTAB MINAR.

This splendid shaft rises eleven miles south of the present city, and marks the southern edge of the ruins of bygone Delhi. It was begun about the year 1200 as a Tower of Victory, and is now 238 feet in height.

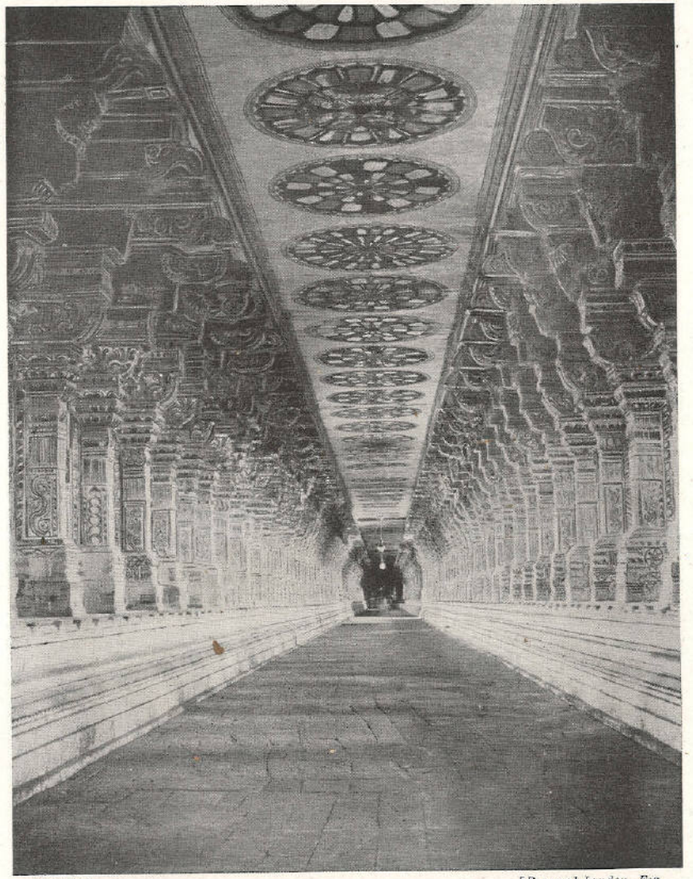


Photo by] [*Perceval Landon, Esq.*

RAMESWARAM.

A fair idea is here given of one of the many corridors for which the Temple of Rameswaram is famous. The Temple, which is of vast size, occupies the southern end of a small island in the sea between India and Ceylon. It is dedicated to Rama, the conqueror of Ceylon, a popular reincarnation of Vishnu.

once lost himself among the maze of mile-long corridors that shut in the central shrine will ever forget the beauty of Rameswaram's architecture. The illustration shows fairly well its character, but a sense of the warm tropical sunlight, masked and filtered as it is before it reaches these long arched tunnels, is needed to give the charm of this thrice holy spot.

Rameswaram is holy ground because of the famous warfare between Rama and Ravana, king of Ceylon. The latter had carried off Sita, Rama's beloved wife, and the bereaved husband called upon all Nature to help him in his quest of recovery and revenge.

It was Hanuman, the monkey god, who saved the situation. The straits we now know by the name of Palk were bridged by the monkey battalion holding each other's tails, and over this living road Rama marched to victory against the hydra-headed ravisher. There is no more favourite scene in modern Hindu art than this assault by Rama upon Ravana's stronghold. It may be seen in every material and size from rock-sculptures at Mahabalipuram to cheap German oleographs in the shops of Delhi or Muttra in the north. This story is not entirely complete without a reference to one of the commonest and prettiest of Indian legends. The monkeys could not succeed in wholly bridging the vast chasm. A six-inch gap still existed between the utmost stretch of the outermost monkeys of India and Ceylon. Apparently Rama, for all his strength, was unable to stride across this tiny space, and all the work and loyalty of the monkeys would have gone for nothing had not a grey squirrel suddenly appeared and volunteered to fill it. He laid himself down in the gap and all was well; but in gratitude for the invaluable service thus rendered him, Rama, as he crossed the bridge, stooped down and drew his fingers caressingly along the grey squirrel's back. And that is why the Indian squirrel has two black marks down his back to this very day.

Buddhist Cave near Moulmein.—There are many curious things near "the old Moulmein Pagoda," but few of them are as curious as that of the cave of Kogun.

These strange accumulations of images are found in almost every country in which Buddhism is now or has ever been flourishing. The underlying principle is that virtue can be acquired by limitless repetitions of prayer or of any act of homage. To add to this strange medley of useless and fast-disintegrating statuary is to acquire merit, and the poor man is as anxious to justify himself in this way as his richer brother is to save himself from further reincarnations by the more ostentatious means of constructing pagodas or by the endowing of monasteries.

Mr. O'Connor quotes the words of a bygone traveller:—

"It is of vast size, chiefly in one apartment, which needs no human art to render it sublime. The eye is confused, and the heart appalled. . . . Everywhere, on the floor, overhead, on the jutting points, and on the stalactite festoons of the roof, are crowded together images of Gautama—the offerings of successive ages. Some are perfectly gilded; others encrusted with calcareous matter; some fallen, yet sound; others mouldered; others just erected. Some of these are of stupendous size; some not larger than one's finger; and some of all the intermediate sizes—marble, stone, wood, brick and clay. Some, even of marble, are so timeworn, though sheltered from change of temperature, that the face and fingers are obliterated. Here and there are models of temples, kyoungs, etc., some not larger than half a bushel, and some ten or fifteen feet square, absolutely filled with small idols, heaped promiscuously one on the other. As we followed the path, which wound among the groups of figures and models, every new aspect of the cave presented new multitudes of images. A ship of five hundred tons could not carry away the half of them."

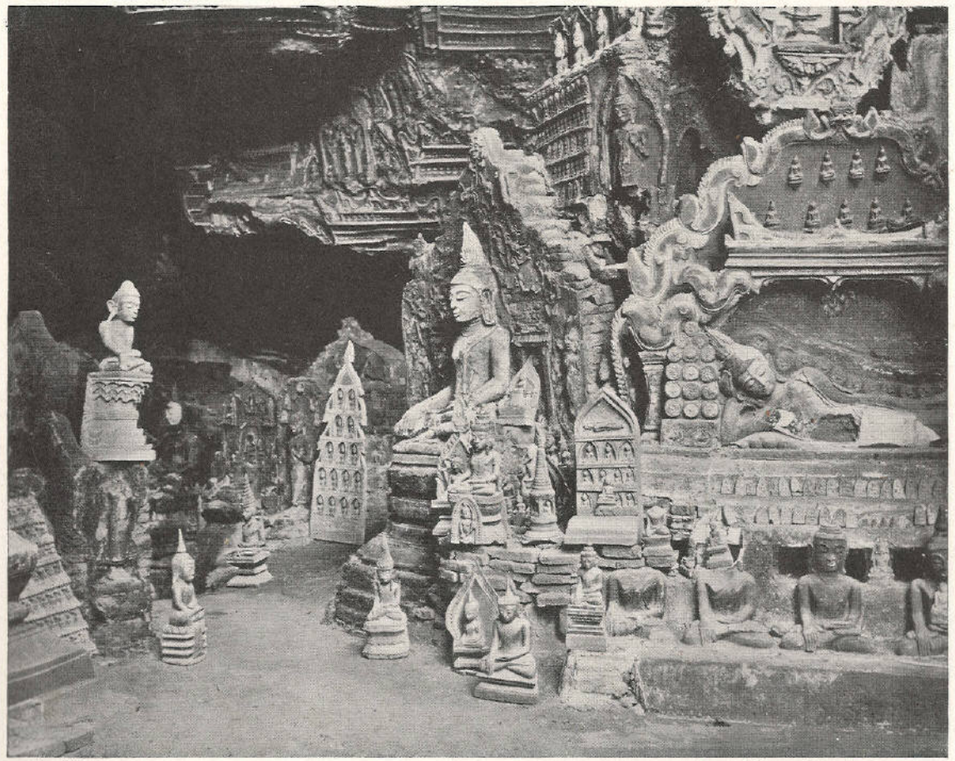
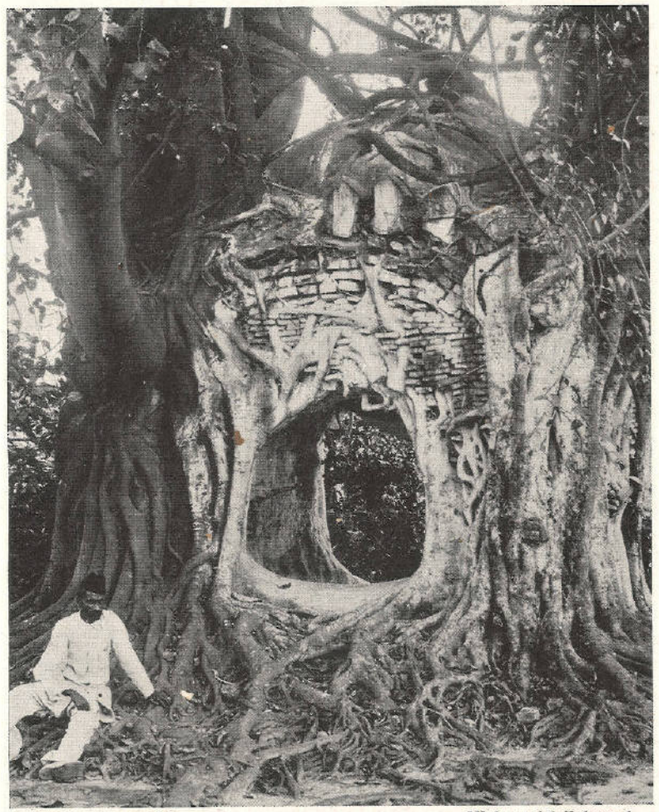


Photo by] [*Bourne & Shepherd, Bombay.*

BUDDHIST CAVE NEAR MOULMEIN.

This plate gives a characteristic view of the cave at Kogun, on the Salwin. Multiplication of representations of the Buddha is everywhere regarded by Buddhists as a holy duty.

Strange Mohammedan Mosque.—These quaintly built-up shrines are not infrequent beside the road in India. In the majority of cases they have been long abandoned, and the tree roots that originally supported them have, in turn, slowly thrust the flimsy masonry apart. But here and there one may still be found used as a place of retirement for some holy man. This is, so to speak, his private oratory. Services in the true sense of the word are never held in these curious little shrines, though informal prayer of course takes place wherever two or three Mohammedans are gathered together at the office hours of their creed. It is a far cry from this little bricked up tree-temple to the imperial splendour of the Jumma Musjid at Delhi, but the faith that prompted the construction of both the one and the other is of cast iron unchangeability, and at sunset the same quiet service of prayer and praise-giving, the same in word, in deed, and in spirit, goes up wherever the simplest and strongest of faiths makes once more declaration of the eternal oneness of God and the everlasting service of His great prophet, the camel-driver of Mecca.



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MOHAMMEDAN SHRINE.

A curiously constructed oratory built in the hollow of a great tree trunk.

Asama-yama, Japan.—The active volcano of Asama-yama is situated in the district of Shinano, seventy miles north-west of Yokohama, and is still liable to sudden eruption. This vent-hole of the interior ebullitions of the planet is of very uncertain activity. From the earliest days, however, it has been recognized as a volcano; and in 1650 a severe eruption enabled Europeans resident in the island to place it among the powerful active volcanoes of the world. Little, however, was known about its activity till the year 1783, when one of the historic eruptions of the world, an event which may be compared with the explosions of Mont Pelée or of Krakatoa, took place. As is well known to those who live in seismic districts, it is a difficult thing to obtain a photograph of a volcano in eruption. The usual lurid pictures of flames and fire and trickling lava are, of course, nonsense. Geologists doubt whether flames have ever issued from any volcano. What is mistaken for them is merely the reflection of the heated lava below upon the thick ascending column of cloud and ash which, of course, is the most marked feature. Here the column of cloud is clearly seen ascending far above the cloud-line, and just beginning to assume the mushroom shape which has always been observed in connection with these phenomena. The pillar of ashes which at the moment of the

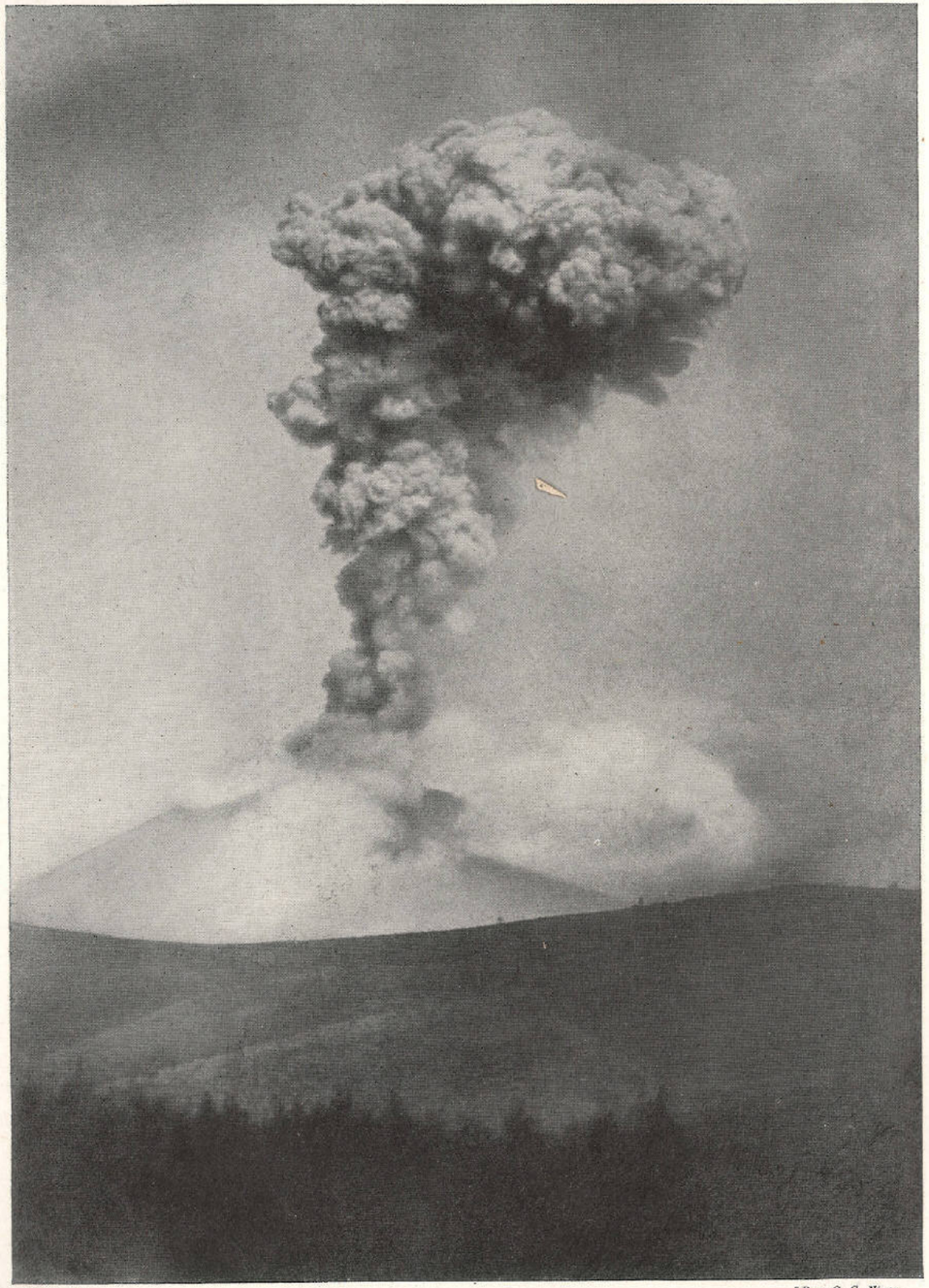


Photo by] [*Rev. G. C. Niven*

ASAMA-YAMA IN ERUPTION.

A good view of the greatest active volcano in Japan, in the district of Shinano, seventy miles N.W. of Yokohama.



Photo by] [*Perceval London, Esq.*

THE TEMPLE OF BORO-BODOER IN JAVA.

The story of the discovery of this huge Temple reads like a romance. It was entirely overgrown with the jungle and long grass, and was known even to the neighbouring villagers only as a hill. Three miles of the most exquisite carving in deep relief encircles this building. A specimen may be seen on page 26.



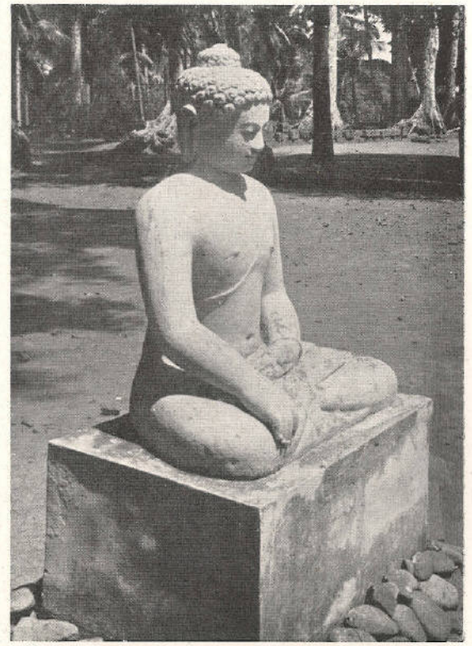
From Stereo copyright] [*Underwood & Underwood.*

Two of the Dagobas on the summit of Boro-Bodoer. The covering of soil and jungle has, as will be seen, helped to preserve almost every detail of the work.

photograph was probably between a mile and a mile and a half high, has taken a very characteristic shape, and a close study of its convolutions will readily explain to the student of human nature why it is that the Oriental detects the actual faces of terrible underground spirits of evil upon this slowly mounting and unnatural mass. Asama-yama is about 8,500 feet above the sea, and owes much of its impressiveness to the fact that of this about 6,000 feet rise directly from the surrounding country. The crater is of unusual precipitousness and depth. Though only a quarter of a mile in diameter, the normal height of the lava bed within it is a thousand feet below the lip, a fact which perhaps explains the comparative perpendicularity with which the ash is discharged. The volcano is regarded as one of the regular sights of Japan, and is within easy access both of Yokohama and of Tokio.

The Temple of Boro-Bodoer, Java.—Just a hundred years ago Sir Stamford Raffles annexed the Island of Java to the Brit sh Empire. His heart was almost broken when, in 1815, it was re-ceded to the Dutch, in whose possession it still remains. But during the short period of his Governorship he did at least one thing for which he deserves a lasting fame. He discovered the long-lost Temple of Boro-Bodoer. The story of its finding is a strange romance. The very villagers at its feet were as ignorant as anyone of its whereabouts when Sir Stamford made inquiries. But by a happy chance a clearance made almost at random betrayed to the excavators that the hill itself on which they were at work, some hundred and fifty feet in height and six or seven hundred in width at the base, was no other than the famous temple. It is supposed that when the Mohammedan invasion of Java occurred in the thirteenth century, the Buddhist priests, rather than give up their most treasured possession to be defiled by the infidels, filled up its terraces with earth and planted the quick-growing tropical jungle upon the slopes of the hill thus formed.

Boro-Bodoer stands to-day on the top of a slight eminence about five-and-thirty miles from the ancient capital, Djok-Djokarta, and almost in the centre of the island. It is pyramidal in shape,



From Stereo copyright] [*Underwood & Underwood.*

Inside each of the Dagobas shown above sits a statue of Buddha, of which an illustration is here given.

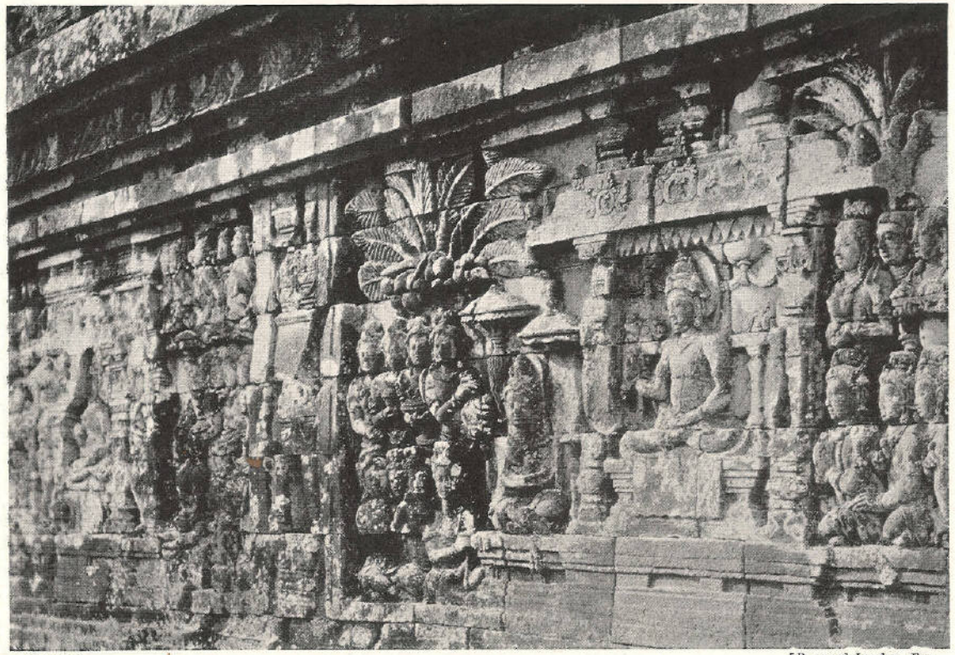


Photo by] [*Perceval Landon, Esq.*

A few yards of the famous frieze that is cut upon the terraces of Boro-Bodoer.

rising from a paved terrace. In the centre of each side there is a staircase leading from one to another of the five terraces of which it is composed. Each terrace completely surrounds the temple, following the fortification-like outline of the ground plan. On these terraces is the carving for which Boro-Bodoer is famous above all other buildings. It has been estimated that not less than three miles of this strange frieze is wrapped round and round the temple. Roughly speaking, it may be said that as the visitor ascends, the subjects illustrated by this carving signify a higher and higher grade in the ethical development of Prince Gautama. The story begins with his early life as a gay and boyish young prince, free from care and anxiety, free even from the very knowledge of sickness or sin or death, and his trials and his triumphs are recorded terrace by terrace, until the central cupola, or dagoba, is reached, in which, buried to the neck, still exists the most mysterious of all Asiatic statues. It is a mere roughly-hewn head on a shapeless body. The theory I have just been referring to interprets this with a subtlety that is scarcely Eastern. It contends that this is intended to represent the final achievement of Buddha when the divine essence and all that it created are received once more into the bosom of nothingness—if Nirvana may thus be translated. Perhaps re-absorption into the universal soul is a better phrase.

But another and prettier legend has it that Boro-Bodoer was built to win the affections of a capricious young woman who lived in the village at the bottom of the hill. She insisted that her lover, who lived at the top of the hill, should design, construct and complete the finest temple on earth as a wedding-gift to her within the space of twelve months. This the energetic youth promised to do, and, indeed, nearly succeeded in doing, for he was able to enlist the services of the entire population of the globe. But the sharp eyes of his lady-love, when at the close of the twelve months she was proudly taken over the gigantic and exquisite structure, noted that this last and highest statue alone among all the tens of thousands of figures which crowd the decorated walls, or are sitting in meditation within the latticed dagobas—that this was unfinished. Whereupon she coldly

reminded her lover that her conditions had not been fulfilled, and returned downhill to wed another and more favoured youth. They must have had some appreciation of the feminine character even in those remote ages.

But, legends apart, when was this stupendous temple built? No one will ever certainly know; but it seems likely that the beginning of the seventh century of the Christian era is the most probable period. Thanks to its long concealment, it is almost perfect. But the roots of the mountain jungle have thrust themselves between and disturbed the mortarless courses.

The actual human workmanship bestowed upon this building is so vast that even that which raised the Pyramids of Egypt pales beside it. Each side of the temple is a hundred feet longer than the Great Pyramid, and though it is but one-third of the height, the wealth of carving lavished upon every corner and corridor, every pinnacle, every stairway, every flat surface of masonry, however small, is something that defies description afterwards, just as at the moment it baffles the bewildered eye of the visitor.

Boro-Bodoer will never be a place of popular pilgrimage. It can only be seen by making a long *détour* from Singapore, and it must be admitted that there are healthier places than Java for the white globe-trotter. But Boro-Bodoer remains, and will always remain, the most gorgeous product of that religion which to this day claims more adherents than any other in the world.

Statue of Marco Polo, Canton.—Every schoolboy knows that it was the Polos of Venice, who in the thirteenth century were "the first to reveal to Christendom in a complete and accurate as well as picturesque manner the splendours and attractions, the wealth and commerce of China and Indo-China,



Photo by] [*Perceval Landon, Esq.*

MARCO POLO AS A GOD.

An ancient image of a European among the Five Hundred Deities in Canton. It is said, on the strength of an ancient Chinese tradition, to represent Marco Polo, a very probable ascription.

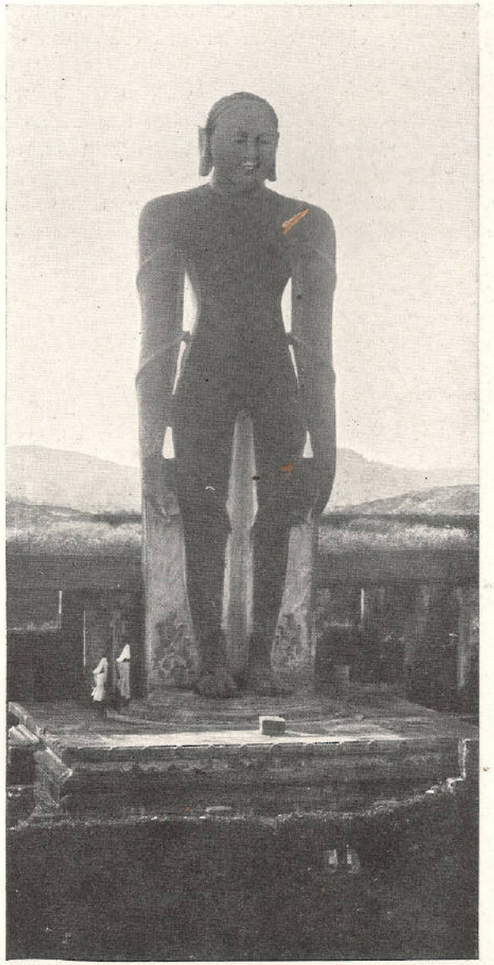


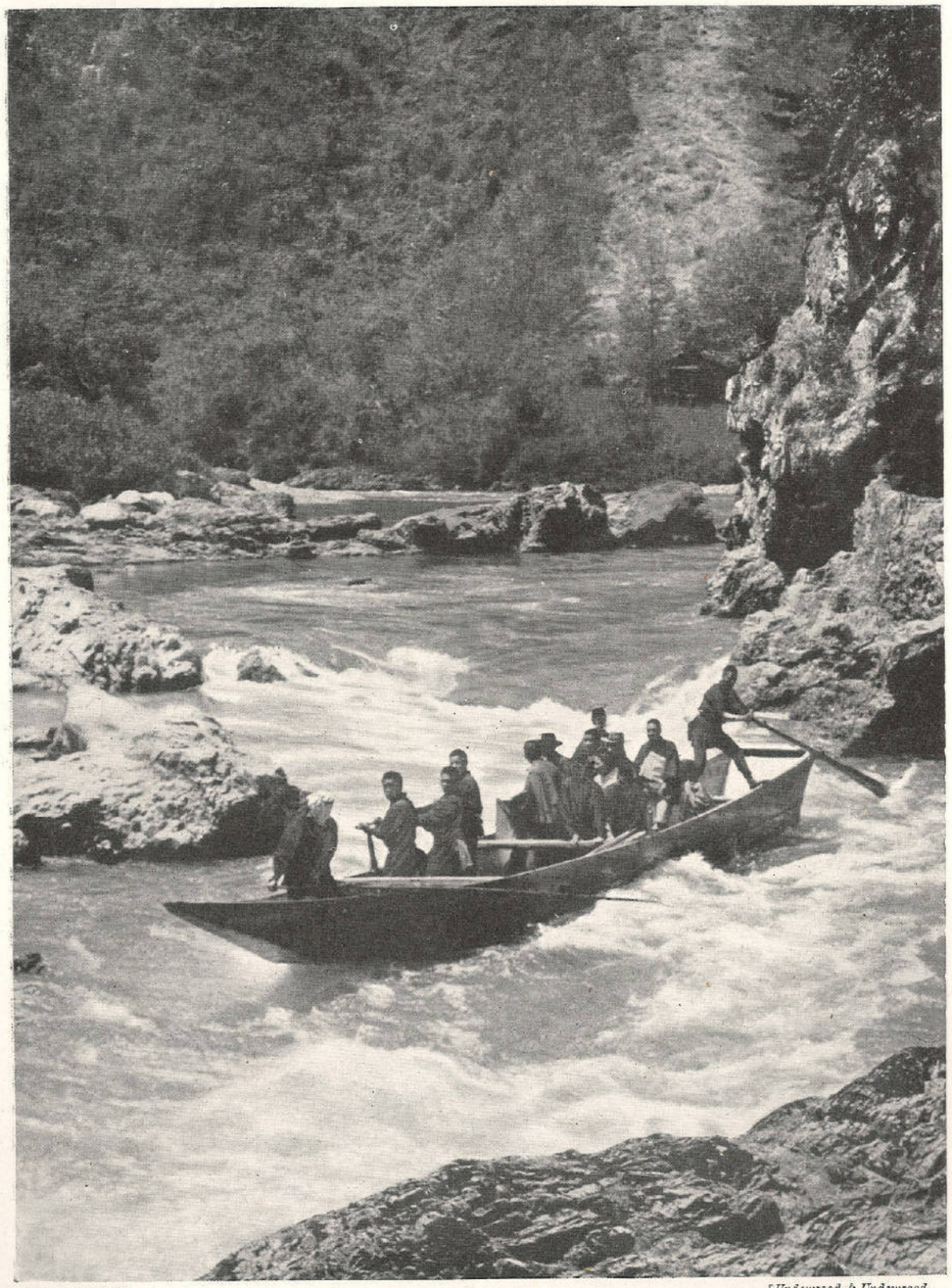
Photo by] *[E. G. Wood.*

GOMATESVARA, INDIA.

A huge monolithic statue, about fifty feet in height, carved by the Jains out of a hill-top at Sravana Belagola, in South India.

of the Deccan and the Indian Archipelago." From them Europe first learnt of Mesopotamia and Persia, Mongolia, Siam, Burma, Formosa and Japan. Of Java and Sumatra and Tibet, too, they were the first to write, and their pictures of other countries of which uncertain histories already circulated in Europe, were often the best that the world was to possess until the dawn of modern scientific exploration. The details of the life of Marco Polo are hard to collect and are often inconsistent; but one flash of nature on his death-bed tells us much about this far-travelled soul. Jacopo D'Acqui tells us that as Marco lay dying his best friends came to him and implored him, for the sake of his reputation, to revise his book of travels and cut out all that was untrue. He sturdily replied that he would do nothing of the sort, and that, as a matter of fact, he had not told one-half of all the wonders he had seen.

There exists in the Temple of the Five Hundred Deities in Canton a statue which has often been quoted as a witness to the truth of his pretensions, and as a souvenir of the greatest of all travellers, it is here included. Photography is strictly discouraged in this temple, and the picture here given was obtained by the writer more by good luck than management. Why, one wonders, was he included in this strange company? All we know for certain is that in 1277 Marco Polo was made a Privy Councillor by the Chinese Emperor Kublai Khan, and about eight years later was made Governor of the city of Yang-Chau. Unless Khanfu is identical with Canton, Marco Polo makes no mention of any stay in the city which is now the southern capital of China and in which this strange figure is to be seen. The ascription of the statue to him is based upon Chinese tradition, not, as is sometimes alleged, on mere European fancy; but the inherent probability of its truth will be clear to anyone who looks at the almost hideously un-Chinese traits of the face, the little ruff round the neck, the sailor's rough-weather cloak, and the equally foreign hat. That the sculptor must have had a European before him as he made his model is beyond question, and the writer has been assured by residents in Hong Kong that this famous image may well be as old as the early part of the fourteenth century. Where it was made, whether in Canton or elsewhere, and when it was first given its present place of honour, there is no means of knowing. But there seems little reason to doubt the tradition. To deprive the world without reason of one of the most interesting and unexpected testimonies to the restlessness and pluck of Western races would be wantonness. That the figure represents a European is obvious: that it is nearly coeval with Marco



Stereo copyright] *[Underwood & Underwood.*

SHOOTING THE RAPIDS OF THE KATSURA RIVER, KYOTO.

One of the sports of Japan that has most caught the fancy of European visitors is this exciting pastime of shooting the Katsuragawa in boats or on rafts of bamboo



Photo by] *[Bourne & Shepherd, Bombay.*

THE CAVES OF ELLORA.

Most famous of all the rock-cut temples of India, those at Ellora would repay a month's careful examination. Excepting Mohammedanism, nearly all Indian religions, past and present, have at one time contributed to this amazing series of excavations in a curving hill-side near Daulatabad. Ajanta alone competes with them in antiquity, but Ajanta cannot boast a Kailas Temple.

Polo is also clear. The tradition that it is Marco Polo himself is so universal that a copy of it was sent to the Geographical Congress held at Venice in 1881.

Gomatesvara, India.—One of the most curious statues in the world may be found by an energetic traveller in the little Jain village of Sravana Belagola, about ten miles north of the station "French Rocks" on the railway near Seringapatam. Marvellous as the work is, it is rarely visited or even referred to by travellers or writers. It is cut from the projecting crest of hard rock on the top of a hill, and has been skilfully adapted to the formation of the stone without sacrificing in any way the intention of the designer. The figure—of which the nudity betrays the Jain rather than the Buddhist origin—is nearly fifty feet in height.

It will be remembered by visitors to Gwalior that the modesty of the great Emperor Baber was outraged by the sight there of the great nude images that stand sentinel about the rock-fortress. This example, far away in the south, escaped his puritanic hand, and has a peculiar interest on account of its position. In most cases it is impossible to obtain a good view of these rock-cut figures, owing to the overpowering mass of the mountain-side behind them. The Gomatesvara statue stands out both actually and metaphorically alone in the effectiveness of its position, and well repays a visit.

The Katsura Rapids.—To the west of Kyoto the Katsura river descends through precipitous defiles to the ancient capital. The waterway is used for the transport of timber from the province

of Tamba, but the beauty of the defiles, the rushing and rapid stream, and the excitement of shooting the torrents on bamboo rafts or boats are all features to be notified. In autumn the woods are of orange and scarlet and gold, and the dark river and blue sky just seen overhead between the cliffs make up a picture that the visitor to Japan will long remember.

The Caves of Ellora, India.—First among the many groups of caves in India for variety and importance, and sharing the claims of age with that at Ajanta only, are the strange rock-cut cells and chapels and temples at Ellora, within a ride of Daulatabad in the north-western corner of the Nizam's dominions. The road from the bungalow descends over the crest and almost in the centre of the curving hill in the side of which they are cut, and the caves may be made out stretching for nearly a mile on either side to right and to left. Many of them are difficult to detect, so carefully has the entrance been masked by leaving in front of the opening a grass-grown curtain of the virgin rock of which the hill is made. These caves lie one close beside another in a half circle, and to the student of ancient India there is no more interesting or instructive a district in the whole sub-continent. In the first place, they were probably begun by Buddhist hermits, who found here both quietude, a fertile and pleasant neighbourhood, and no doubt the worship and service also of the inhabitants. From simple cells, not unlike those which still exist at Bhuvaneshwar and elsewhere, more ambitious structures were gradually designed, and an almost perfect series of the ecclesiastical buildings of Buddhism can be discovered here within the space of a few hundred yards. Of course, some of the features of Buddhist architecture were modified by the fact that everything had here to be excavated from the living rock, and not built up with individual stones in the usual way, but shrines and monasteries and council rooms are all to be found, and nearly all of them are still in a state of perfection.

But the Buddhist caves, although the oldest, are by no means the only structures here. Indeed, for most visitors the famous Kailas Temple is apt to eclipse the memory of any of the other caves. The architects of this marvellous building were not content to hew out the interior economy of the temple from the hill-side. Instead, they cut away the rock both outside and inside the temple walls. To-day there may be seen with every detail of construction and ornament a perfect temple standing in a courtyard, and surrounded by all the cells, pillars, symbols, figures and screens that the Hindu worship loves, and covered within and without with elaborate carving. Not one square inch of this temple has been laid upon another. It is all one giant monolith,



Photo by] *[Frith & Co. Ltd., Reigate.*

A relief at Ellora, representing Shiva, one of the three Divinities of the Hindu Trinity.

one stone with the mountain-side that surrounds it and frowns over it, capped with long grass and ak plants.

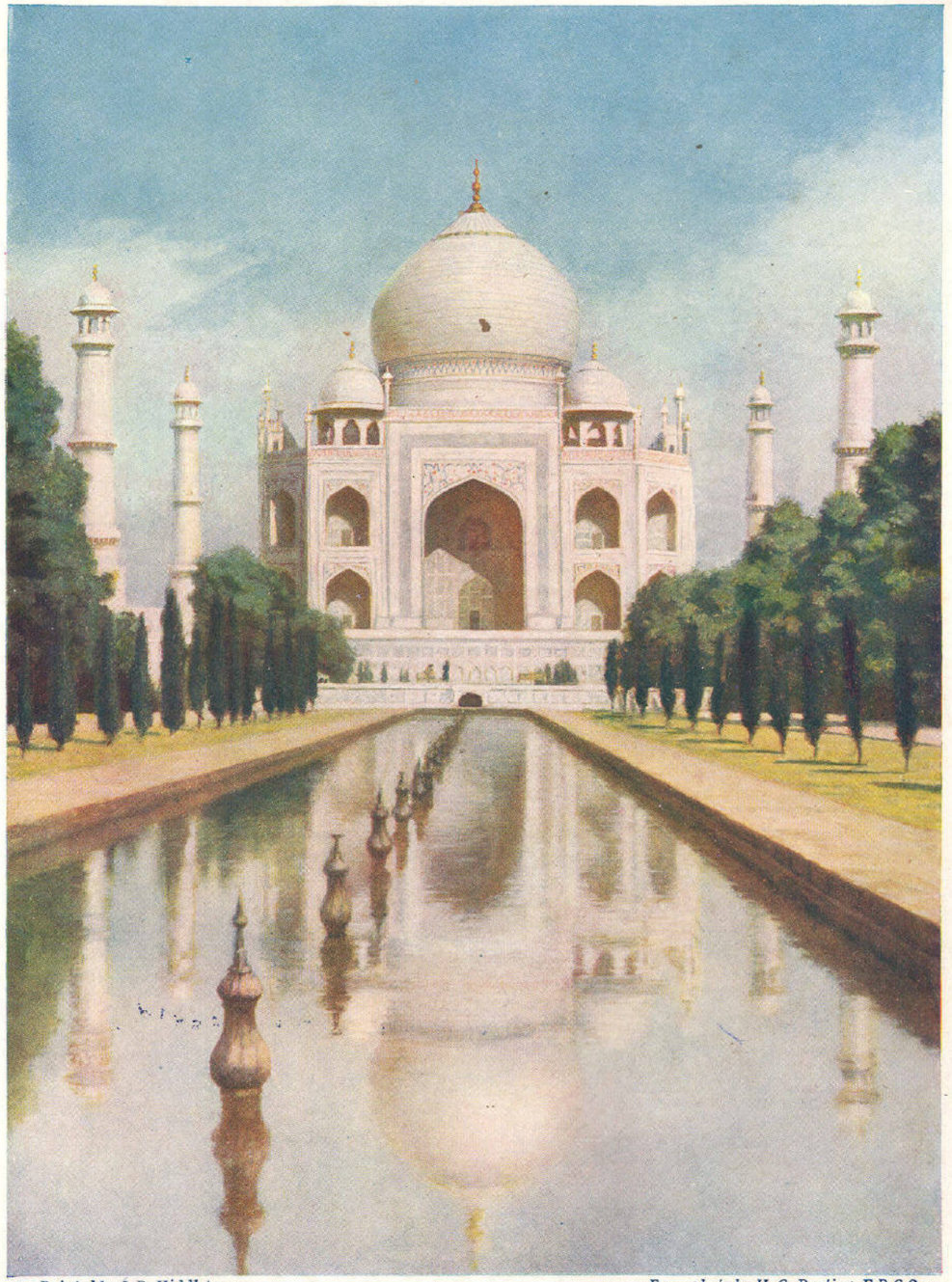
The beauty of this Kailas Temple may be guessed from the illustration. The reader will admit that he needs to have been given this explanation. Even after reading it he may still have to look closely at the plate before he entirely realizes that this exquisite building is a single mass of seamless and virgin rock. It is impossible from any point to give any idea in a photograph of the size and exquisite decoration of this temple. The illustration here given was taken from the top of an elaborately carved screen, which stands across the entrance and almost entirely hides the treasures within from the gaze of the passer-by. The reader must construct as best he can in his own imagination the courtyard that entirely surrounds the temple, the encircling walls of rock pierced and decorated with pillared corridors and cells, the carved elephants outside and the exquisite columned architecture within the temple, none of which unfortunately can be included in this, the best though a very incomplete view of the Kailas. The smaller building in the foreground of the plate contains the sculptured bull, or Nandi, the symbol of strength and reproduction, which is to be found in, or beside, all temples dedicated to Shiva from one end of India to the other. It is many ages since prayers and ceremonies have been formally offered within these walls, though a few marigolds and champaks will often be found laid reverently on the long desolate thresholds.



Photo by [*Frith & Co. Ltd., Reigate.*

THE MOST MARVELLOUS MONOLITHIC BUILDING IN THE WORLD.

It is difficult from any point of view to obtain a good view of the Kailas, the most marvellous monolithic building in the world. The entire temple and all its adjuncts are cut straight from the virgin rock of the hill-side, which may be seen above it. Inside and outside it is carved with the same minute perfection.



Painted by J. R. Middleton. *From photo by H. G. Ponting, F.R.G.S.*

THE TAJ MAHAL, AGRA

The Taj is acknowledged to be the most perfect building in the world. This last resting place of Shah Jehan and his beloved wife is constructed of white marble, and is said to have taken 20,000 men, employed incessantly, 17 years to build.



Photo by] *[W. J. Garnett, Esq.*

ENTRANCE GATE TO THE MING TOMBS.

This beautiful Pai-low forms the entrance gate to the Tombs of the Chinese Ming Dynasty, near Peking. It is of white marble, roofed with dark red tiles

CHAPTER II.

Tombs of the Kings of the Ming Dynasty.—The establishment of the Ming Dynasty upon the throne of China is one of the romances of history. The great Mongol ruler, Kublai Khan, had extended and consolidated his power by welding the states and tribes of Central Asia into one immense empire. When he died in 1294 A.D., at the age of eighty-three, after reigning eighteen years as Emperor of half Asia, his kingdom extended from the China seas and the Himalayas to the northernmost extremity of Siberia, and from the eastern shores of Asia to the frontiers of Poland and the European states.



Photo by] *[Mrs. Little.*

A Minister of State in effigy standing attentive to wait on the wishes of his departed Emperor.

The empire held together for seventy-three years after the death of Kublai, the last of his line, Shun-te, ascending the throne in 1331. This indolent, sensuous, weak monarch sat on the throne for thirty-five years, watching in feeble wrath his army deteriorating, his empire being pared down by rebellions and conquests, and his world-wide power being curtailed on every side.

Meanwhile, a youth named Choo, the son of a labouring man of the state of Nan-king, who had been found to be too delicate for manual labour, was placed by his father in a monastery with a view to his becoming a *bonze*, or priest. Choo found himself to be lacking in enthusiasm for the priesthood, but in his quest for knowledge he had gained health and strength, so, after some years spent in semi-seclusion, he left his monastery to enter the imperial army. Once enlisted in its ranks, his skill in arms secured him rapid promotion. He attained high rank and married a widow of large means, but with prosperity came also ambition. Choo could hardly have spent these years in military circles without imbibing the general feeling of dissatisfaction with Tatar rule which was rife in China; and not long afterwards he saw his opportunity and carried out a successful insurrection in Nan-king. His fame as a leader spread, and the rebel army increased in size and efficiency. The insurgents took Peking, whence the worthless Shun-te had fled, and



Copyright photo by [*H. G. Ponting, F.R.G.S.*

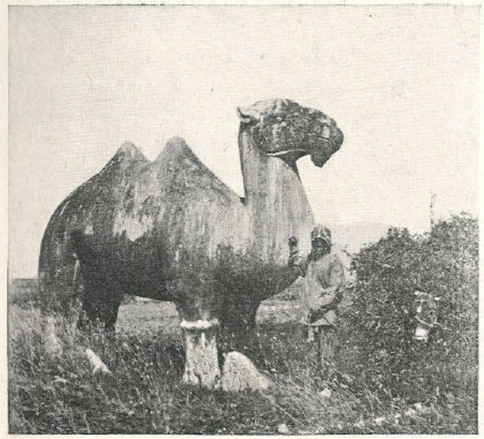
Another figure in the dromos. One of the colossal stone warriors that mount guard in the dromos, or avenue, over the spirits of departed Emperors.

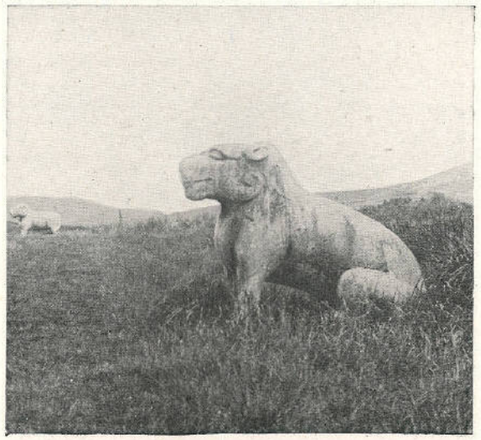
in 1366 Choo ascended the Imperial Throne under the title of Tai-Tsoo, and founded the Ming, or "Bright" Dynasty, which endured in power for three centuries.

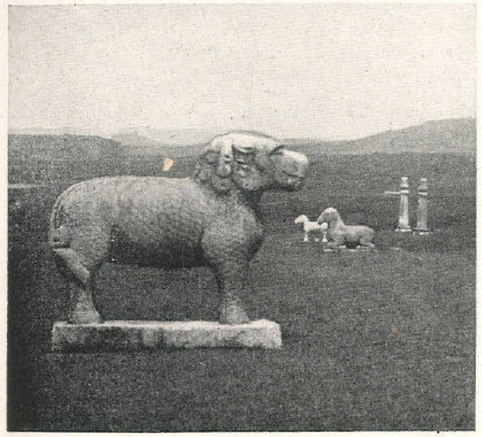
The tombs of many of the Ming Emperors are situated forty miles north of Peking, and form one of the best-known sights of China. Entering by a magnificent Pai-low of five gateways in white marble, the visitor passes through the *dromos*, nearly a mile long, where thirty-two colossal figures are ranged in pairs on either side of the roadway. Some are human, some are figures of camels, griffins, or elephants. There are thirteen tombs ranged round the base of a hill, and they extend for several miles. Each is simply a huge mound of earth about half a mile in circuit, with a crenellated retaining wall, twenty feet high, at the base. There is no entrance to the mounds, nor is there anything to mark the exact spot of burial of their occupants.

Giant Bamboos, Ceylon.—Nature has run riot in Ceylon. The island is like a vast forest rising out of the sea, and as the traveller approaches by the water it is impossible to see the earth for the lavish growth upon it.

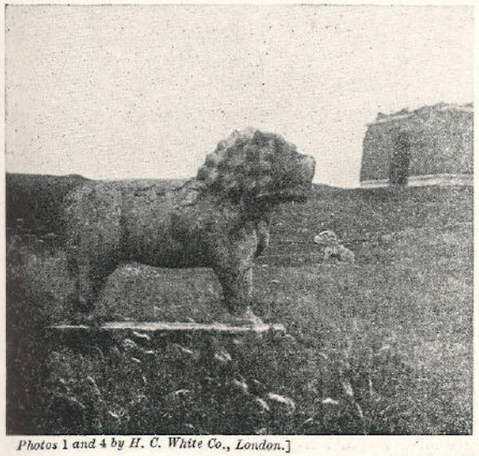
This wealth of natural beauty finds its highest expression in the Government Botanical Gardens of Peradeniya, at Kandy. The entrance is through an avenue of india-rubber trees towering one hundred feet into the air, with huge roots creeping like snakes about the earth below. The gardens swarm with squirrels and tropical birds, humming-birds flash like jewels about the flowers, as evening falls the leathern flying foxes play in the trees. M. Chevrillon, the French traveller, has written this eulogy of the beauties of the place: "One can walk for many leagues in this place, meeting no human being, yet still conscious of a certain order, lines and plan in this marvellous wild garden. There are wide lawns where tropical plants can grow freely and attain their full size: there are ferns of improbable hues, blue ferns as subtle as vapours: there are leaves as delicate as dream vegetation—green lace like a cobweb, varieties of Adiantum, the hair, not of maidens, but of very fairies. And at last I reach the triumph, the apotheosis, so to speak, of the island's vegetation. On the edge of the gardens, beside the slow-moving, yellowish waters of a stream, there is a sheaf of bamboos one hundred feet in circuit. They are crowded together, smothering each other, each one as large as a









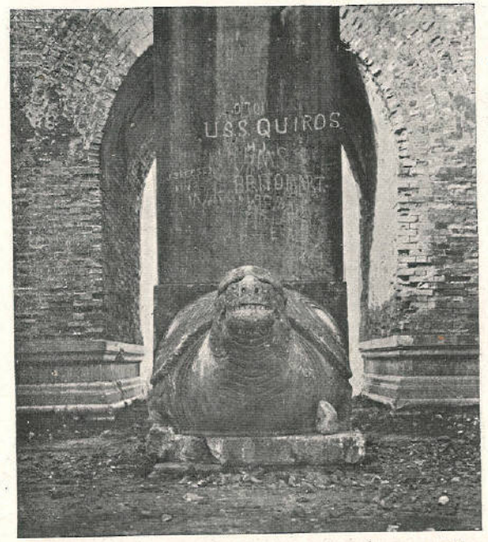




Photos 1 and 4 by H. C. White Co., London.] [*Photo 6 by J. Thomson, Esq., F.R.G.S.*

THE MING TOMBS.

There are two cemeteries of the Ming Dynasty, one at Nan-king and the other forty miles north of Peking. Each is approached by a dromos, or avenue, of colossal stone figures representing ministers of state, warriors and animals. At Peking these figures number thirty-two, ranged in pairs either side of the roadway for a distance of a mile. They vary from ten to fifteen feet in height.



STONE TURTLE BEARING MEMORIAL TABLET.

These turtles are seen at the end of the tombs at Nan-king. The Ancestral tablet of the deceased is held in great reverence through the belief that one of his released souls attaches itself to the tablet. The turtle is known as "Pi Ti," the burden bearer.

European tree. The hard stems, bluish and glossy, in joints two feet long, perfectly round, are gorged with water. They grow so crowded that only the outer stems are visible: the others, covered and repressed, spring straight up in darkness; at the height of one hundred feet they separate with a supple movement, spread apart in the form of a vase, and are lost in a great rustling mass of dark leafage."

M. Chevrillon might have said even more than he has. One specimen of the *Dendrocalamus giganteus*, which ultimately attained the height of 125 feet, was observed carefully and was proved to have grown thirty-six inches in twenty-four hours.

The Taj Mahal, Agra.—There is no traveller whose pulse does not quicken as he turns in through the dark red gateway a mile outside the modern city of Agra and at last catches sight of the famous Taj. By common consent the tomb of Shah Jehan's loved wife is the goal and centre of Indian travelling.

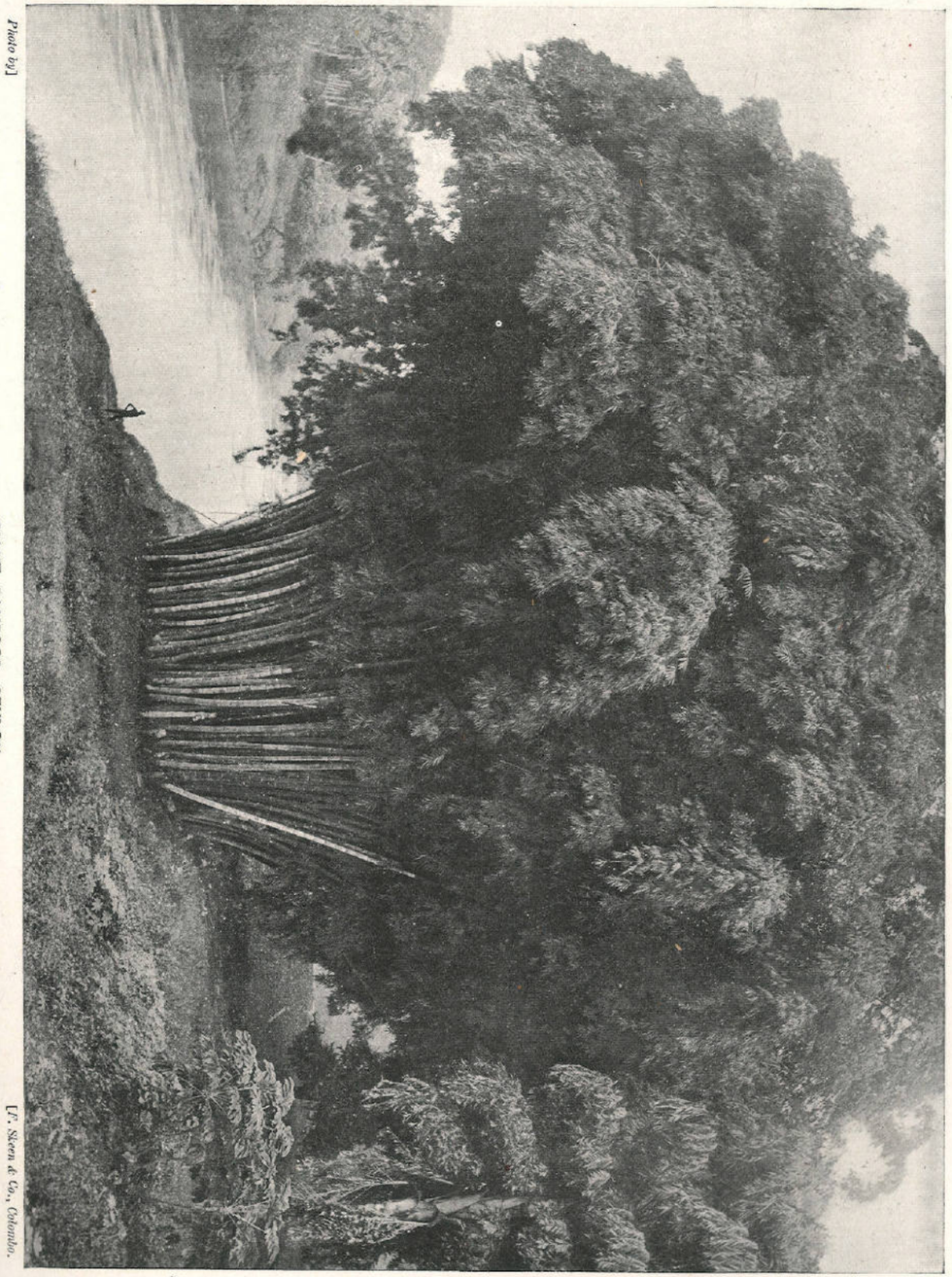
Nor is this to be wondered at; for after the last word of praise and appreciation of the Taj as a building has been said, there is something more, something greater about it still. That which perhaps weighs heaviest in our estimation and lives longest in our memories is that side of it which photographs cannot give. Surely the dullest of visitors must be impressed by the mere fact that the Taj stands, as nothing else in the world stands, for the great and lasting devotion of a man for a woman. Remember that it was erected in eternal honour of a woman at a time when women were regarded as little but the playthings of their owners, and by the disciple of a faith which to this day denies to woman the possession of a soul. The story of the love of



Photo by] [*N. P. Edwards.*

The double row of stone images at the Ming Tombs, Nan-king

Photo by]



GIANT BAMBOOS, CEYLON

This monstrous growth of bamboos is in the Government Botanical Garden at Peradeniya, near Kandy. The clump is 100 feet in circuit, and springs to a height of 100 feet before the dark mass of feathery leaves spreads out.

[*J. Skeen & Co., Colombo.*

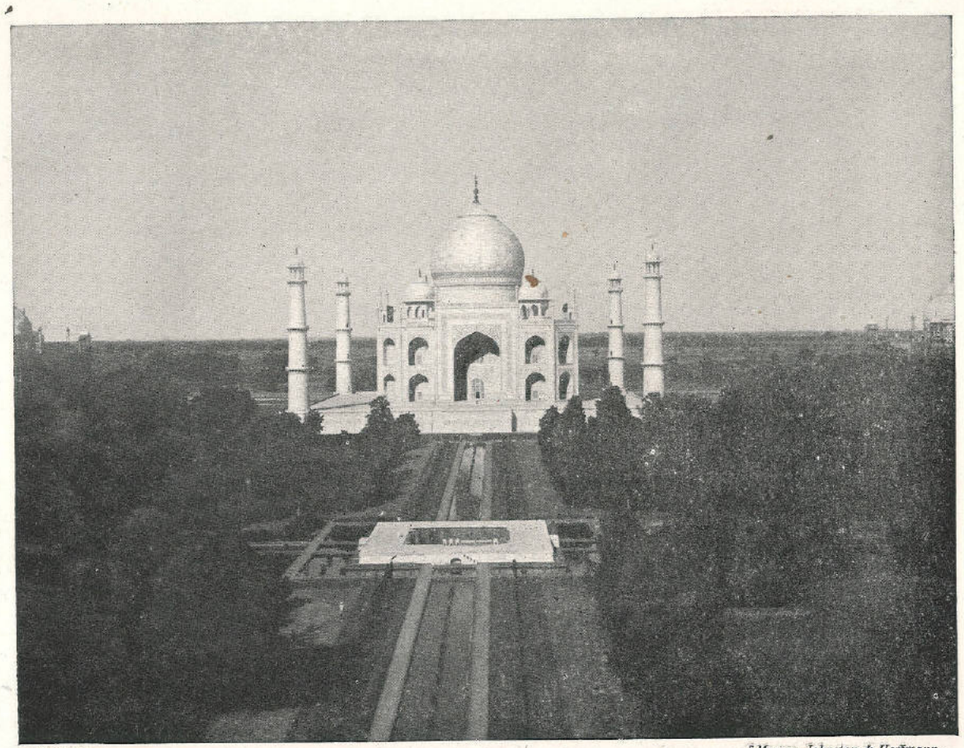


Photo by] *[Messrs. Johnston & Hoffmann.*

THE TAJ MAHAL, AGRA

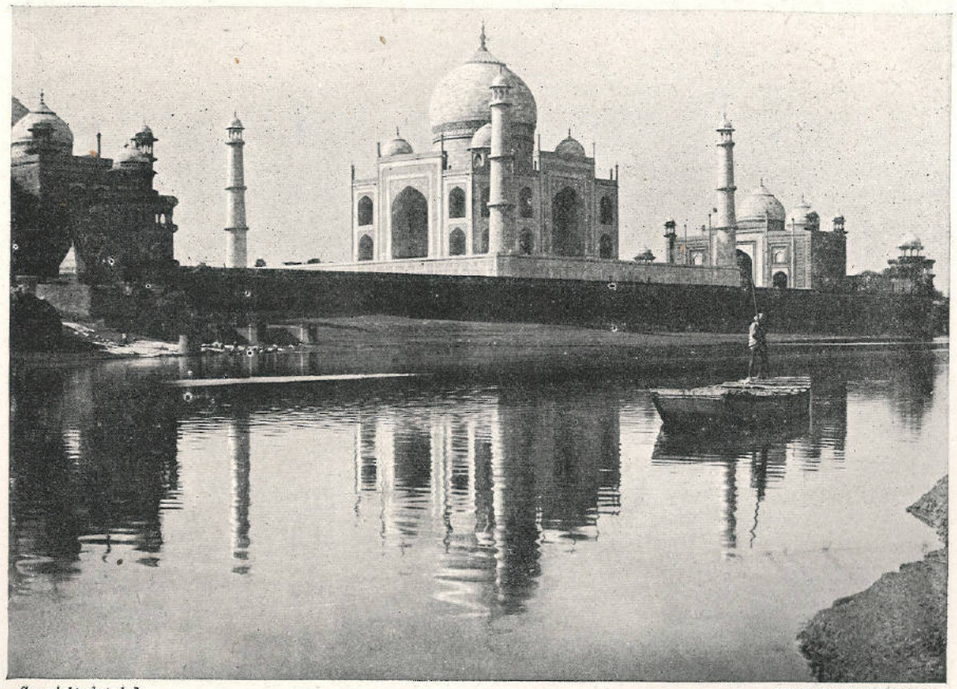
This magnificent tomb was built by Shah Jehan as a great and lasting memorial of his favourite wife Mumtaz-i-Mahal. When Shah Jehan himself died, his body was placed beside hers in the tomb.

Shah Jehan for Mumtaz-i-Mahal is one of the great romances of this world's history. We may well ask who was this Arjumand Banu, Mumtaz-i-Mahal, or the "Chosen of the Palace"?

Arjumand Banu was the daughter of Asaf Khan, and niece of the famous Nur-jehan, the wife of Jehangir. By what slight chances the course of the world's history is changed could hardly be better illustrated than by the story of the flight into India of Nur-jehan and her brother with their father, Itmad-ud-Daula, as he fled southwards from Teheran across the desert roads of Persia and Afghanistan. On one day of tormenting thirst Itmad-ud-Daula saw no help for it but to leave his dying daughter by the roadside in order that, relieved of the burden of her, the remainder might have some bare chance of reaching water before nightfall. This was done, and a few miles were covered by the silent and ashamed party. Then, struck with remorse, Itmad-ud-Daula turned back to where the infant was lying, still unhurt by the gathering vultures. Cost what it might, the father intended to live or die with his little daughter, and the miserable journey was resumed. The unexpected arrival of travellers an hour or two later enabled Itmad-ud-Daula and the children to come down safely into India. Here Nur-jehan—in all cases we are giving the later names by which these individuals were best known—entered the harem of Jehangir and made her way into imperial favour at a sham market in the palace by her famous and impertinent demand of a lakh of rupees from her master for a piece of moulded sugar-candy.

But, striking as Nur-jehan's career was, it pales into insignificance beside that of her niece. Arjumand Banu was married to Shah Jehan in 1615, twelve years before the succession of her

husband to the throne. Indeed, she knew little of the splendours of Shah Jehan's court, for in 1629 Mumtaz-i-Mahal died in childbed at Burhanpore, the capital of the Deccan Province, and with her the light went out of the life of the most splendid of all emperors. Crushed with grief, Shah Jehan determined that his lost love should have such a memorial as neither woman nor man had ever had in the history of the world before. So he called to him one Ustad-Isa, a cunning architect, and bade him prepare as noble a design as his imagination could furnish. We do not know very much about the actual building of the Taj. The minarets, which are perhaps the most criticized details in the structure, were moved away from the central building, and stand, instead, at the four corners of the marble plateau, or plinth, on which the Taj is built. We know from Tavernier that the cost of the scaffolding was as great as that of the tomb itself, because there were at that time no trees near by from which timber could be obtained for this purpose. We are told that Austin de Bordeaux, an absconding French jeweller, was called in to ornament its white marble walls with the famous "pietra dura" work. Tradition also has it that Verroneo, an Italian, had a hand in the decoration of the tomb. But of the part that Shah Jehan himself played in this colossal enterprise we know nothing. The Emperor stated that, apart from the materials, to which half Asia contributed her marbles, the masons alone were paid the sum of about six hundred thousand pounds. Seventeen years were occupied in the building. The body of Arjumand was then placed under the centre of the dome in the place of honour. Years afterwards, when Shah Jehan himself, a broken, disappointed and dethroned man, came to die as his own son's prisoner in the fort he had himself built at Agra, they laid his body beside that of his loved mistress. Not even then did they dare break the great tradition of love that the Taj was built to immortalize.



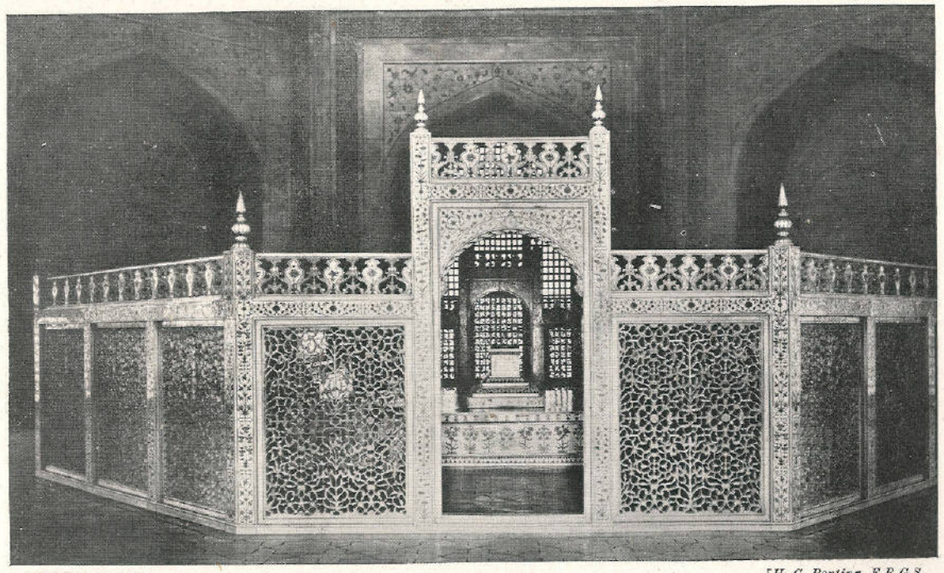
Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE TAJ REFLECTED IN THE RIVER JUMNA

Apart from materials, to which half Asia contributed her marbles, the masons alone were paid the sum of £600,000 in the building of the Taj.

Shah Jehan's tomb, though larger—as befits an emperor—is placed on one side of Arjumand's central resting-place. These tombs, in accordance with Eastern custom, are not the actual resting-places of the bodies. Arjumand and Shah Jehan lie in the crypt underneath, where the relative positions, as already noted, are faithfully maintained.

Inside, beneath the dome, there is, round the tombs of the two lovers, an exquisitely, beautiful pierced marble trellis heavily inlaid with precious and semi-precious stones. The beauty of this interior apartment cannot be better described than in the words of Mr. Fergusson: "The light is admitted only through double screens of white marble trellis-work of the most exquisite design, one on the outer and one on the inner face of the walls. In our climate this would produce nearly complete darkness; but in India, and in a building wholly composed of white marble, this was required to temper the glare that otherwise would



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE MARBLE SCREEN IN THE TAJ MAHAL.

This exquisitely beautiful marble trellis, heavily inlaid with precious and semi-precious stones, is built around the actual resting-place of Shah Jehan and Mumtaz-i-Mahal.

have been intolerable. As it is, no words could express the chastened beauty of that central chamber, seen in the soft gloom of the subdued light that reaches it through the distant and half-closed openings that surround it."

Of the essential and eternal charm of the Taj another writer has written:

"You will understand the Taj best if you will wait till the rosy fleeces have faded in the afterglow and the ripples of the Jumna run steel-grey in the waning light. A bird springs up, and the leaves of the thuia and the pepal murmur together as the darkness grows. A flying-fox with leathern wings wheels down from above, and a morrice of bats heralds the coming of the moon in the evening silence. And then you will understand that it does not matter whether you can still see the Taj or not. It is no question now of dome or gateway, silver work, or inlaid jewels. But as the dusk deepens you will come to know that the frail little body buried far down in its jewelled alabaster beside her faithful lord stands, and will always stand, for all that men hold dear or sacred in this world. However splendid or costly it may be, however renowned, however



Photo by] *[Vittorio Sella.*

MOUNT SINIOLCHU, SIKKIM.

Beyond all question Siniolchu is the most beautiful of all the known peaks of the world. Others surpass it in height, but they cannot show the clean precipitous majesty of this needle summit of Sikkim.



Stereograph by] *[H. C. White Co., London.*

STONE BUDDHAS BY THE DAIYA RIVER, NIKKO.

A Japanese legend says that these forgotten, moss-grown figures are numberless, and certainly the traveller finds great difficulty in counting them correctly. One of them once fell off his pedestal into the river and was carried down to the village of Imaichi, where he was set up with his face to Nikko and is honoured as a god by the countryside.

beautiful, the Taj itself is but an emblem and a symbol. So long as men and women love upon this earth, so long shall they go to the quiet garden beside the Jumna to lay their flowers in the honour of Mumtaz alone, not of Ustad Isa, not of Shah Jehan, nor of another. For she loved and was much beloved."

Mount Siniolchu, Sikkim.—Not very many Englishmen have ever seen Siniolchu. Its extreme summit may just be seen as one descends from the Darjiling tea-fields towards the bridge across the Tista, but it is not until Gangtok, the little-visited capital of Sikkim, is reached that the twin peaks of Siniolchu and Simvoo betray their exquisite and lonely magnificence. Beyond all question, Siniolchu is the most beautiful of all the known peaks of the world. Others surpass it in mere height, but Mount Everest is but the highest fold of an immense ice-field; Kangchenjunga's peaks are sublime, but crowded upon by the mighty rivals that stand to north and south; even K2 cannot show the clean precipitous majesty of this needle summit of Sikkim.

In shape, there is something of the Matterhorn; but the Matterhorn's highest pinnacle, four thousand feet above the Alpine line of eternal snow, would not reach up even to the base of the picture of Siniolchu that is here given. The Matterhorn has been picturesquely described as a mile-high wedge of rock and ice placed upon a plinth two miles high. Siniolchu may be said to be a wedge two miles high upon a three-mile plinth. Moreover, those extra two miles of height by which Siniolchu surpasses the Matterhorn are of such beauty that words fail utterly even to hint at their beauty. The photograph will reveal to the reader much of their perfection, but it will only be understood by remembering the delicate aquamarine of these huge suspended glacier-crevasses and the ever-changing hues of grey and ash that pass across these silver and virgin slopes as the clouds draw in all day, and by reconstituting the rosy splendour of the peak when the last rays of the vanished sun still light up this most inaccessible and most exquisite of all the hills of this earth.

Nikko.—"Call no place beautiful till you have seen Nikko." Thus runs a well-known Japanese proverb, and beyond question it is the most exquisite spot in all the land. It is the

burial place of two Shoguns, the two greatest of Japan's rulers, who were deified after their death. Their Temple-tombs are situated in a scene of such natural splendour and majestic beauty that it is impossible to give an adequate description in a few words. They lie among mountains which are capped with snow through most of the year, and clothed with dense forests. There are deep and cool ravines, dark lakes, and waterfalls like silver lace. Through a gorge of solemn grandeur the impetuous Daiya river flings itself down the mountain side from the snows to the sea.

To a spot on the slope of Hotoke Iwa—sacred ever since a Buddhist hermit made his dwelling there in 767—the first Shogun of the Tokugawa Dynasty, Iyeyasu, was brought after death, in 1617. After his deification temples were erected and decorated in his honour by the loyal and the devout.

The approach to this sacred spot is extremely impressive. There are two roads running through glorious avenues of giant cryptomeria trees, the one fifty, the other thirty miles long Many of the trees are as much as twenty-seven feet in girth, and spring to a height of fifty or sixty feet before branching. They are said to have been planted as a humble offering to the god by a man too poor to afford to place a bronze lantern before the shrine. A wide carriage road runs between them, which ends at length at the Mihashi, the sacred bridge only used by the Shoguns, built in 1636, of red lacquered timber supported on stone piers, which was swept away during a flood a few years ago. The Daiya river thunders here through its narrow gorge, and across its foaming waters are colossal flights of stone stairs leading up to Nikko—Nikko, the grand and lonely forest sepulchre, the home of cloud and mystery. Terraced roads lead through crowding cryptomerias and magnolias; shrines and figures appear at every turn. The grand approach is up a broad path with a granite torii at the top twenty-seven feet high, and with one hundred and eighteen magnificent bronze lanterns bordering the way.



From Stereo copyright] *[Underwood & Underwood.*

THE LEANING TOWER OF SOO-CHOW.

This Tower of Soo-chow, which is also named "The Tiger Hill Pagoda," has been out of the perpendicular from time immemorial. It is generally acknowledged as being well over 1,300 years old, but there are some authorities who think it was built as early as the fifth century.

Entering the temple precincts, several gorgeous buildings are found surrounding a court enclosed by a wall of bright red timber; of which one is the stable for the three sacred albino horses which were dedicated to the use of the god. A bell tower, a drum tower, a magnificent cistern for holy water, and bronze lanterns of marvellous workmanship are here too. Within, there are seemingly endless corridors, quadrangles and buildings, and to pass from court to court, from splendour to splendour, through all this profusion of ornament, gilding and colour, renders the visitor dazed by the multitude of his impressions.

From the imposing entrance, through courts, gates and temples, among shrines, pagodas, colossal bronze bells and lanterns inlaid with gold, the visitor passes through golden gates to the inner Gold Temple. Enshrined in this opulent building, instead of the image one would expect to find there, there is merely a table of black lacquer with a circular mirror of metal upon it.

The actual resting-place of the Shogun is not in the midst of this wealth of manufactured beauty. Nature herself has collaborated with Art to render the tomb of this great man a scene of dignity and

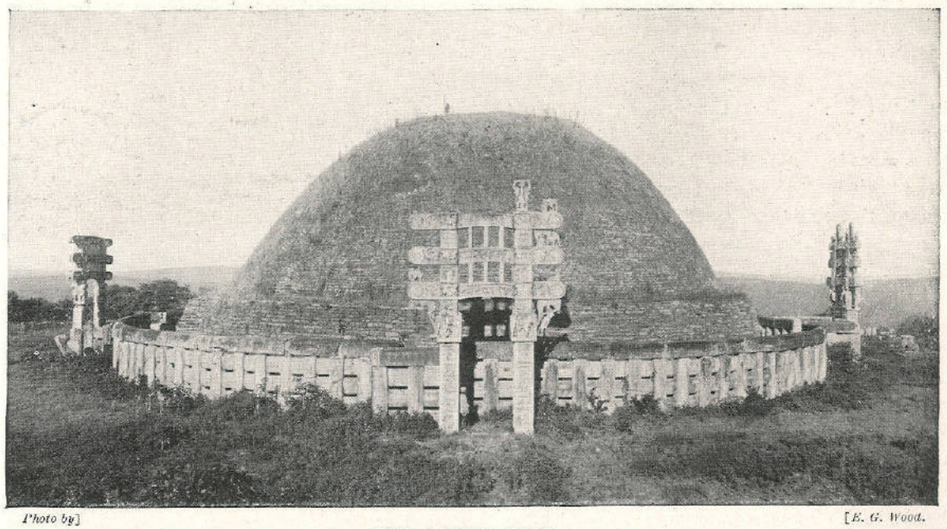


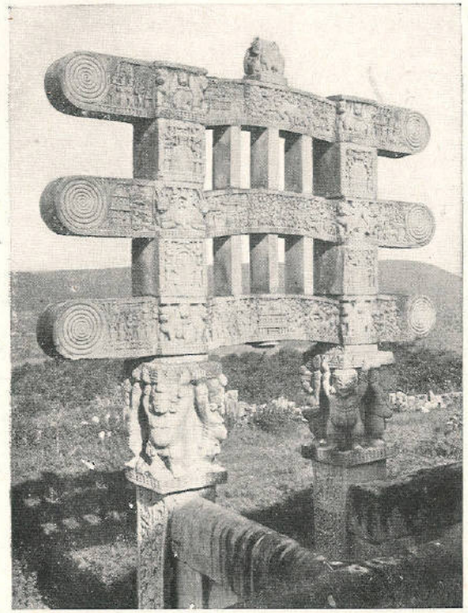
Photo by] *[E. G. Wood.*

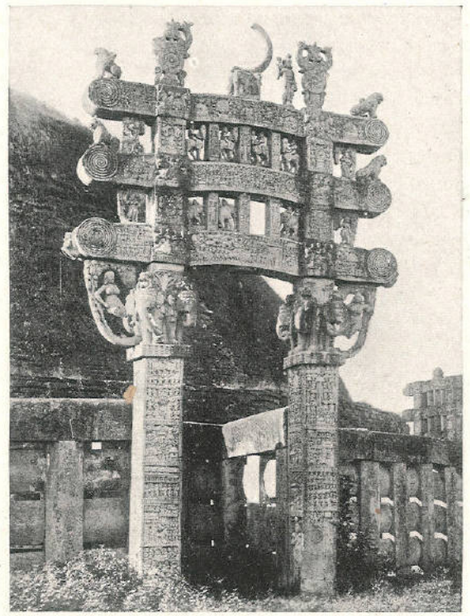
THE SANCHI TOPE.

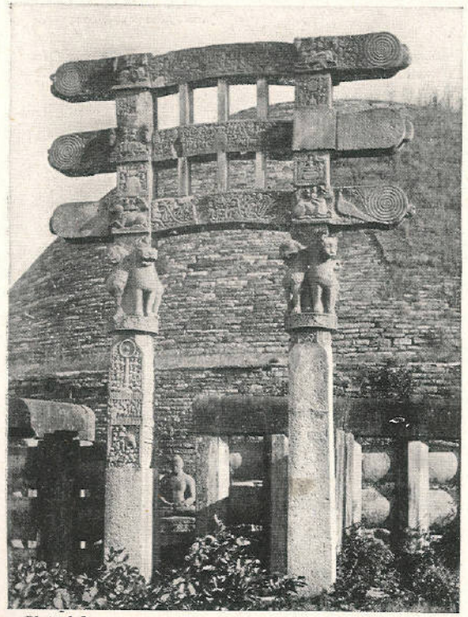
On an exquisitely wooded hill near Bhilsa, stands the Sanchi Tope, the oldest historical ruin in India. Wrapped in silence, it has not yet bestowed its secret origin to the outer world.

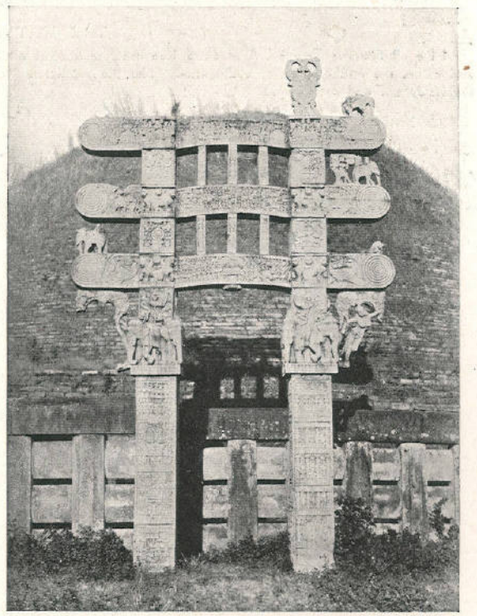
grandeur unsurpassed. A staircase of two hundred and forty steps leads to the hill-top, where he sleeps in an unadorned tomb of stone with a bronze urn above it. In front is a stone table with a bronze incense burner, a vase of lotus blossoms, and a bronze stork with a candlestick in his beak. That is all. A lofty stone wall surrounds this place of majestic silence and simplicity, and giant cryptomerias make a solemn twilight there on the brightest day. The masonry of this vast retaining wall, the stone staircase and the gallery is contrived without mortar or cement; it has stood for two hundred and sixty years, and looks as if the centuries would slip by it as easily as the waters of the Daiya, of which the murmur comes up from the base of the hill. The great granite cistern for holy water on the top of the hill is an admirable piece of work. The water of a little cascade is caught and brought into this cistern from above, while the lower edge is so truly and daintily cut into steps that the water pours so evenly over the lip of the tank and down the undulations of the stone that it loses the appearance of water and looks as if it too were carved from some piece of translucent marble.

The burial place of the other Shogun, Iyemitsu, is close by, and is even more bewildering,









Photos by] *[E. G. Wood.*

THE BEAUTIFUL CARVED GATES OF THE SANCHI TOPE

At the four cardinal points of the compass there is an entrance to a curious ambulatory which encircles the Tope, with an exquisitely carved gate, the ornamentation of which cannot be surpassed in the whole of India



Photo by] [*Robt. Lenz & Co., Bangkok.*

THE WAT PHRA KEO.

Like all Siamese Temples, Wat Phra Keo contains a great array of monster figures of men and beasts that guard the entrances and defeat the machinations of evil spirits. The pious Siamese "acquire merit" by building endless *phrachedees*, or pagodas, which are richly gilt and ornamented.

because here the Buddhist ceremonial still holds full sway. The stone buildings of this temple are roofed with sheet copper or with richly-coloured tiles, giving it an effect of great brilliancy.

Mrs. Bishop has thus summed up her impression of this wonderful place: "The details fade from my memory daily as I leave the shrines and in their place are picturesque masses of black and red lacquer and gold, gilded doors opening without noise, halls laid with matting so soft that not a footfall sounds, across whose twilight sunbeams fall aslant on richly arabesqued walls and panels carved with birds and flowers, and on ceilings panelled and wrought with elaborate art: of inner shrines of gold, and golden lilies six feet high, and curtains of gold brocade, and incense fumes and colossal bells, and lacquer screens and pagodas, and groves and bronze lanterns: of shaven priests in gold brocade and Shinto attendants in black lacquer caps: and gleams of sunlit gold here and there, and simple monumental urns, and a mountain side covered with a cryptomeria forest with rose azaleas lighting up its solemn shade."

The Leaning Tower of Soo-chow.—Soo-chow and Hang-chow enjoy the distinction of being the two most beautiful cities in China. Indeed, their beauty is proverbial. "Above there is Paradise, below are *Soo* and *Hang*," says one Chinese proverb. And according to another well-known native saying, to be perfectly happy a man must be born in Soo-chow, live in Canton, and die in Liau-chow. This saying has reference, no doubt, to the fortunate position of Soo-chow from the point of view of its "fung-shui." This fung-shui bears such a large part in Chinese life that it is perpetually offering problems for the study of the Westerner. So far as it is possible to unravel the intricacy of Oriental ideas, fung-shui appears to be a faint inkling of natural science overlaid and infinitely distorted by superstition. It is believed that through the

surface of the earth there run two currents representing the male and female principle in Nature, the one known as the "Azure Dragon" and the other as the "White Tiger." The undulations of the earth's surface are held to indicate to the professors of fung-shui (aided as they always are by magnetic compasses) the whereabouts of these occult forces. To obtain a fortunate site, these two currents should be in conjunction, forming, as it were, a bent arm with their juncture at the elbow. Within the angle formed by this combination is the site which is calculated to bring wealth and happiness to those who are fortunate enough to secure it for building purposes, or for a place of burial. As it is obviously impossible to command such a conjunction, the necessary formation may be supplied by artificial means. In a level country a bank of earth and a grove of trees answer all the purposes of the "Azure Dragon" and the "White Tiger." Of such an origin is the Tiger Hill at Soo-chow. It is a monstrous mound of earth, produced artificially long years ago to accommodate the fung-shui of the spot whereon the great Ho-lu-Wang was buried.

He is said to have founded the city of Soo-chow in 484 A.D., though there is great divergence of opinion as to the exact date. Some authorities put it—at least that of the construction of the great Pagoda of Ku-su-tai, said to have been built by him—as late as 600 A.D. The poetic name of the city is Ku-su, so-called after the great tower of nine stories, which is considered the finest in all this land of pagodas. Soo-chow owes its beauty to the fact that, like Venice, it is built upon a cluster of islands, on the eastern side of Lake Tai-hu, in the province of Kiang-su, about fifty miles north-west of Shanghai. The Tai-hu Lake is celebrated for its size and beauty, and it is dotted

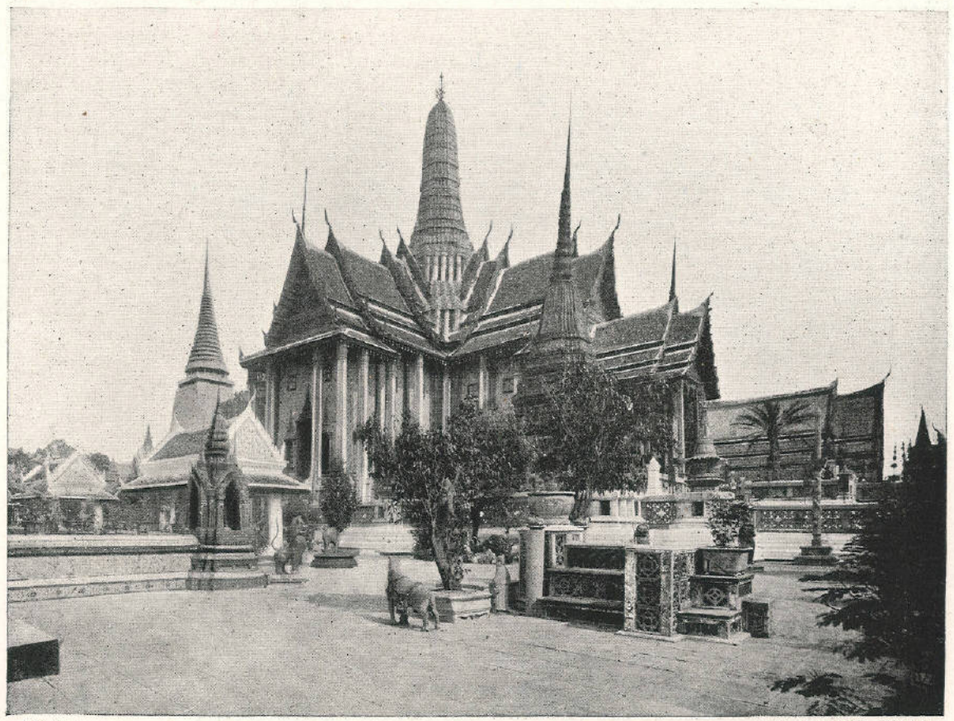


Photo by] [*Robt. Lenz & Co., Bangkok.*

THE WAT PHRA KEO.

The Temple called the Phra Marodop in the centre of the court is planned in the form of a cross, and the King goes there on festive occasions to hear a sermon from the Prince-High-Priest.



Photo by] [*Robt. Lenz & Co., Bangkok.*

THE WAT PHRA KEO.

Within the Temple boundaries there are a multitude of temples, shrines, pagodas and dwellings for priests, the whole enclosed within walls covered with elaborate frescoes.

over with islands on which are temples and pleasure-houses. The Grand Canal, the magnificent artificial river which connects the waterways of North and South China, after leaving Hang-chow, passes round the eastern side of Lake Tai-hu, and surrounds the city of Soo-chow before it trends north-east through a densely-populated and fertile country.

Sanchi Tope.—Hardly one of the more important sights of India is as little known to travellers as the Sanchi Tope, yet here, on the top of an exquisitely wooded hill near Bhilsa, within the territories of the Begum of Bhopal, there are to be found not only the oldest historical ruins in India, but a wealth of architectural carving which might well surprise a man who has visited all the most famous of Eastern shrines.

The tradition is that immediately after the death of Buddha in Kusinara, two of the Master's chief disciples set off on a mission of evangelization into South India and Ceylon. Within a short time Ceylon seems to have established a regular connection with the Buddhist region, and one of the halting places of this sacred traffic seems to have been at Sanchi. Perhaps the beauty of the situation, as well as the convenience of a common half-way house, helped to decide the choice of the early missionaries. No doubt also the fact that the great Buddhist Emperor, Asoka, found his first wife in a neighbouring village, and that, in consequence, his attention was especially directed to the district, accounted for much of the religious importance of Sanchi in later generations. On several of the hills round Sanchi, Buddhist structures have been found, though none of them, with one exception, is of great importance. Asoka paid a special honour to Sanchi by lavishing upon it architectural ornamentation of a kind that has been surpassed nowhere else in India, and rivalled only at Bharahat.

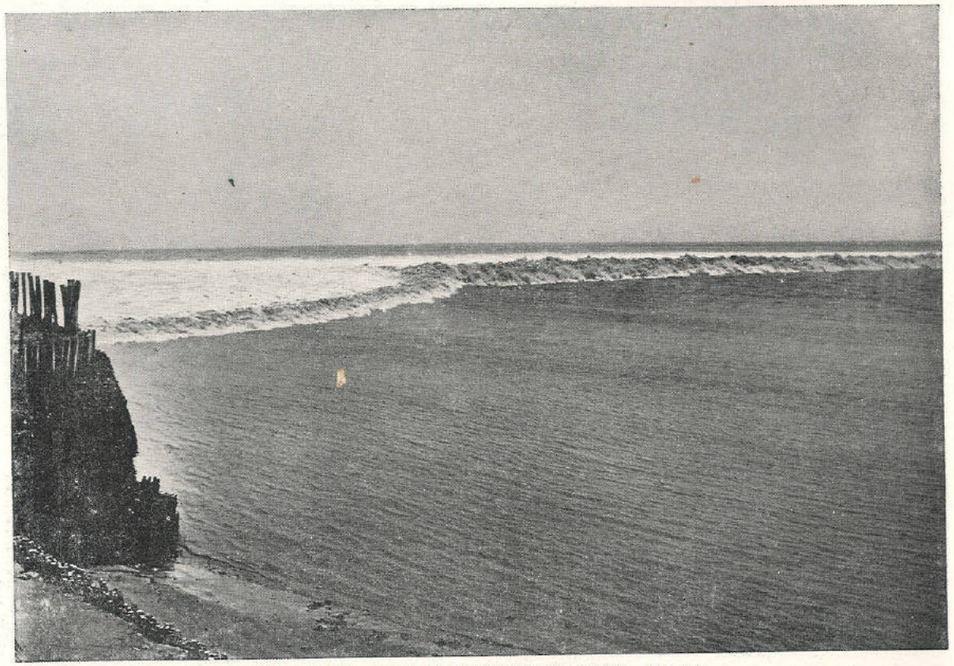
The gateways that surround the central mound are almost as perfect to-day as when they



Photo by] [*Bourne & Shepherd, Calcutta.*

THE SACRED BULL, MYSORE.

This stone Nandi, or Sacred Bull of Shiva, stands on a low hill near the city of Mysore. The Brahmin reveres animals, and among them the bull and the cow are pre-eminently holy.



THE BORE ON THE TSIEN-TANG RIVER, CHINA.

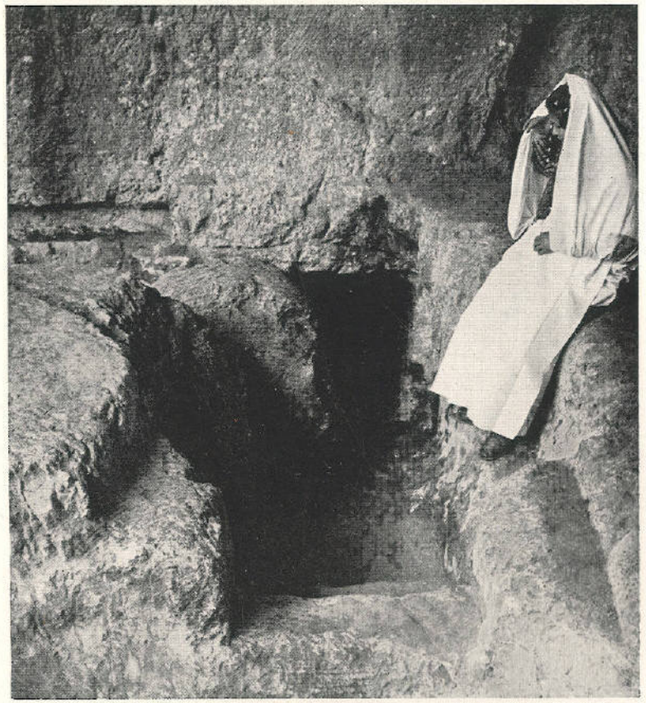
This great tidal wave sweeps up the river from the sea in a wall of water twenty feet high. It traverses thirty-five to forty miles in less than four hours when the moon is at the full or change. No boat or even large vessel can live before its onslaught.

were first set up. A faithful restoration was, indeed, carried out in 1883, but scarcely any new material was needed, and the central tope itself is, with the exception of a stone palisade upon the summit, almost exactly as it was left by Asoka in the middle of the third century B.C. But the place was holy long before King Asoka bedecked it with these sculptured portals. The ashes of Sariputta and Moggalyana, two of Buddha's nearest friends and comforters, have been found buried within a smaller mound a few miles away. The central tope at Sanchi then, the oldest and by far the most important of the religious buildings of this district, has not yet yielded its secret. No relic chamber has as yet been found within it, and the tradition that it was built in honour of no other than Yasodhara, Buddha's long-deserted wife, has no historical basis whatever. This mound, which is one hundred and six feet in diameter, is placed upon a plinth fourteen feet in height: round this again is the famous railing, of the gates of which illustrations are here given. The railing itself is of a typical Asokan character. The stone posts are about nine feet six inches in height, and the broad stone rails between them are two feet two inches long. The aspect thus given is rather of a wall than of a fence, especially as a heavy stone coping crowns the entire structure. At the four cardinal points of the compass there is an entrance into this curious ambulatory, which encircles the tope, and each of the gates would repay a week's careful study. That to the east is perhaps the most famous, though in point of richness there is little to choose between the four portals. The groups of elephants which surmount the heavy square gateposts and support the elaborate superstructure, deserve special attention, and from the details of the carving that covers every inch, back and front, of the stone beams above, no small amount of our knowledge of early Buddhist life in India has been drawn.

The Wat Phra Keo.—The great Temple of Phra Keo is intimately bound up with the life and history of Bangkok, the capital of Siam.

King Chulalok, who founded the present dynasty, founded also the city of Bangkok in 1782, and three years later he inaugurated the building of the Temple there with a grand religious ceremony "as a Temple for the Emerald Buddha, the palladium of the capital, for the glory of the King, and as an especial work of Royal Piety." The work of royal piety, however, stopped far short of completing the whole design, and only the library and chapel were finished. But King Chulalonkorn ascended the throne, and it is recorded that on Tuesday, 23rd December, 1879, he made a vow to complete the work, which was commenced the next month and finished, after a period of two years, three months and twenty days, in 1882, and on the one hundredth anniversary of the founding of Bangkok the crowning glory of the city was to be seen in all its perfection. The King defrayed the whole of the enormous outlay out of his private purse. His many brothers and relatives were entrusted with the different sections of the work. One relaid the marble pavement: a second renewed all the stone inscriptions inside the Obosot: a third laid the brass paving of the Obosot: a fourth restored the pearl inlaid work: a fifth repaired the ceilings.

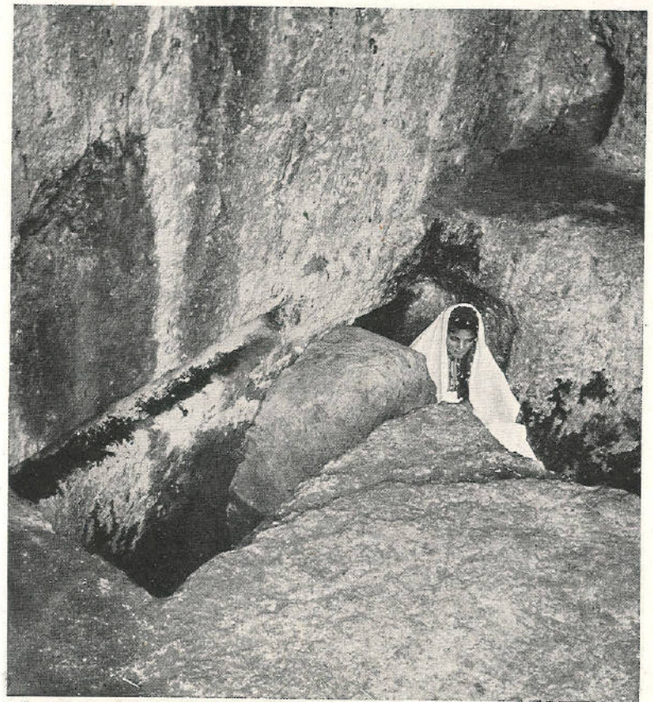
Included under the general designation of Wat Phra Keo are various buildings. A temple, called Phra Marodop, in the centre, is planned in the form of a cross. Thither the King goes on state occasions to hear a sermon from the Prince-High-Priest. The walls of it are decorated with inlaid work, the ceiling is blue and gold, the beautiful doors of ebony are elaborately inlaid. Behind this Chapel Royal is the great Phrachedee, covered with gilt tiles, of which the effect is gorgeous. The Obosot shelters the Emerald Buddha, a very beautiful figure of "emerald" green jade, found at Kiang Hai in 1436, and brought hither after various vicissitudes. The figure has different costumes, all richly ornamented with gold, for use at different seasons of the year. Here, too, the half-yearly ceremony of drinking the Water of Allegiance is held, when the Siamese, through their representatives, the princes and high officers of state, renew their oath of fealty to the King. The ceremony takes place on April 1st and September 21st, and consists in drinking a draught of water sanctified by priests. This great Temple is a symbol of the rule of the Siamese dynasty; it is bound up with the progress of the civiliza-



From Stero copyright] [*Underwood & Underwood.*

ANCIENT ROCK-HEWN SEPULCHRE, JERUSALEM.

The rolling-stone moved partly back into its groove, discloses the entrance to the tomb, which is approached by stairs cut in the rock.



From Stereo copyright] *[Underwood & Underwood.*

THE ROLLING-STONE.

This view, taken from above, shows the manner in which the rolling-stone serves its purpose of opening and closing the tomb. The girl may be seen standing with her back to the entrance.

tion of the people, and its completion marks an epoch in Asiatic history, for the city founded by King Chulalok one hundred and twenty-eight years ago now numbers hundreds of thousands of inhabitants.

The Sacred Bull, Mysore.—This stone Nandi, or Sacred Bull of Shiva, on a low hill near the city of Mysore, is one of the finest Nandis in India. There is a similar figure at Tanjore, carved in one block of granite, which is rendered the more remarkable by the fact that the nearest superficial formations of granite are hundreds of miles distant. Mysore city lies at the foot of the Chamundi Hill, an isolated peak rising fifteen hundred feet sheer from the plain. The Brahmin, not content with his million gods, reveres animals, and among them the bull and the cow are pre-eminently holy. Sacred cows block up his temples, bulls freely roam his streets. To buy fodder and give it to them is a meritorious act: to let them eat of the grain exposed for sale outside, and even inside your shop, is counted to the unhappy grain-seller for righteousness, though of late years a pirate bull is apt to receive a smart but surreptitious slap on the nose if he continues his depredations too long. The Nandi, or image of the bull, is especially Shiva's emblem. It is the companion emblem of the lingam, and is to be found in the same recumbent form wherever the God of Life and Death is worshipped in India.

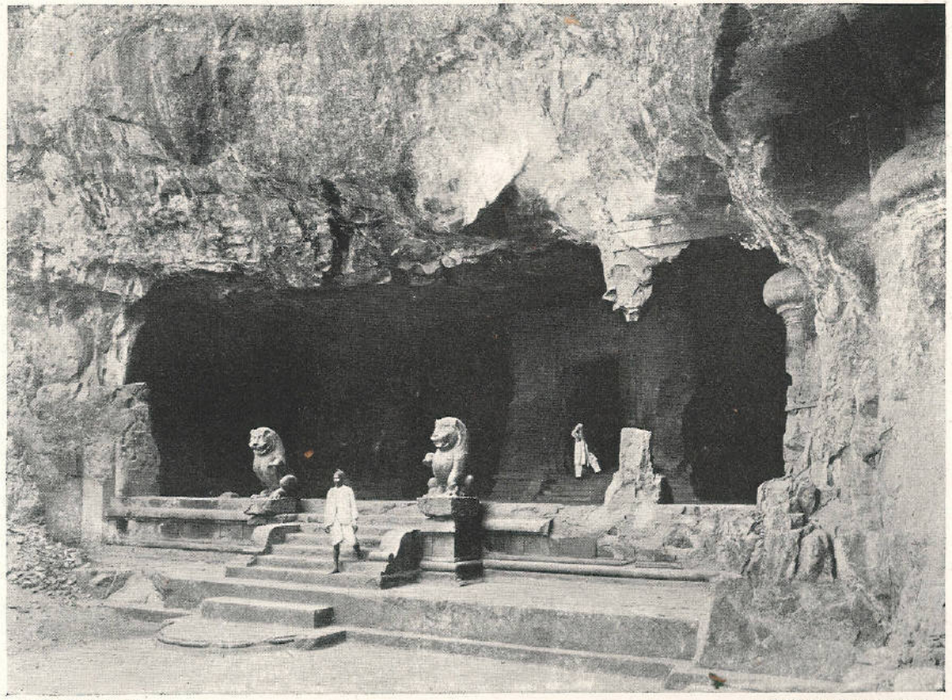
The Bore at Hang-chow.—The Bore is found in miniature in at least six rivers of the British Isles. There are also two or three estuaries in France where it occurs, and is known as the Mascaret; but it is only seen in all its grandeur at the mouths of the Amazon in South America and of the Tsien-tang river in China. According to Vice-Admiral Osborne Moore, R.N., who has made a special study of the subject, "the conditions necessary to produce a perfect bore are (1) a swiftly flowing river; (2) an extensive bar of sand, dry at low water, except in certain narrow channels kept open by the outgoing stream; (3) the estuary into which the river discharges must be funnel-shaped with a wide mouth, open to receive the tidal wave from the ocean. When any one of these conditions is absent, the bore is not known. Thus, in the Thames, although the third condition is present, the first and second are absent: for the stream is not swift, and there is no dry bar at low water. In the Severn all three conditions are present, and there is a bore, not a very large one, but the highest in these islands. The bore of the Tsien-tang river in China has the three conditions developed. The estuary into which the river



From Stereo copyright] *[Underwood & Underwood.*

THE BURNING GHATS, BENARES.

After having been dipped in the sacred Ganges, the mortal remains of the Hindu dead are very tenderly placed upon the prepared fire. Two or three logs are then put longitudinally upon the corpse, the sacred fire is applied, and within half an hour the flaked cinders are set adrift upon the bosom of the broad, placid river



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

CAVE TEMPLES AT ELEPHANTA.

This is the entrance to the principal Cave Temple on the island of Elephanta, Bombay. These Hindu temples date from about the 10th century, and are chiselled from the living rock of the island.

falls has a vast area of sand at its head, and is favourably situated for the reception of the tidal wave from the Pacific. The range of the tide immediately outside the Hang-chow gulf is twelve feet; but as the wave becomes compressed on advancing towards its head, it is as much as twenty-five feet in height at ordinary spring tides, and thirty-four feet when the wind is blowing on shore and the moon in perigee at the time of full and change. . . . In crossing the bar, first, of course, through the narrow river channels, the flood meets with the swift outgoing stream, which trips up its foot and causes an overfall; then, as more rushes of water overlie the first of the flood, the inequality of level becomes greater until the water rises to a bore, which advances, with increasing velocity but great regularity of front, towards the mouth of the Tsien-tang. . . . The bore maintains its breadth, height, and speed for twelve or fifteen miles above the mouth of the Tsien-tang. As the bed of the river slopes gradually up from Haining to Hang-chow, the range of the tide, and consequently the height of the bore, decreases from about twenty to six feet. It usually then breaks up."

The speed of this bore is estimated at about fifteen miles an hour. It flies up the river at the pace of a galloping horse, its front is a gleaming cascade of foam, a wall of agitated water ten to twelve feet high, pounding along upon itself, and roaring up the sandy flats at the river side. On a calm, still night it can be heard fifteen miles away, a full hour before it passes with a roar like the rapids of Niagara. This devastating wall of water sweeps the channel every low tide, but in calm weather, and at neap tides, it is only two or three feet high. It is at spring tides, when the moon is at the full, that it arrives in all its force. The life of this bore is three or four hours from the time it forms in the bay to the time when it dies above the

city of Hang-chow, and it travels about forty miles in the time. Opposite the city it is quite innocuous for fifteen or twenty days a month.

At Haining it is always dangerous for boats, and at spring tides no ship could live before it.

The Bhota Pagoda is the best spot at which to watch the bore enter the river.

This pagoda is said to be over one thousand years old; it is one hundred and twenty feet high, hexagonal, and has six stories. The native version of the building of the pagoda and explanation of the bore are as follows: Many hundred years ago there was a certain general who had obtained many victories over the enemies of the emperor. But being constantly successful and deservedly popular among the people, he at last excited the jealousy of his sovereign. The emperor therefore caused him to be assassinated and thrown into the Tsien-tang, when his spirit conceived the idea of revenging itself for the ingratitude by bringing the tide in from the ocean in such force as to overwhelm the city of Hang-chow, then the capital of the empire. The spirit flooded a large part of the country, and the alarmed emperor failed to appease it until he had built a handsome pagoda upon the sea-wall at the spot where the worst breach in the defences had been made by the waters. We may presume that mending the breach, too, had some influence also in ensuring the better behaviour of the resentful general.

The Tombs of the Kings, Jerusalem.—The name given these tombs by tradition is apparently not sanctioned by authority, for no Kings of Judah were buried here. The place is known to the Jews as the "Gorged Dog" (Kalba Shebna), from the legend that a rich Jew once lived here who fed all the dogs of the city during the last siege of Jerusalem—the story is referred to in the Talmud. It lies three-quarters of a mile distant from the Damascus Gate, and is composed of several sepulchral chambers containing sarcophagi, hewn out of the solid rock. These chambers vary in size from ten to twenty feet square.

The largest is entered by a portico with columns and pilasters in the Doric style, but the architecture proves it to be not later than the Roman period. There is a descent, by rock-cut

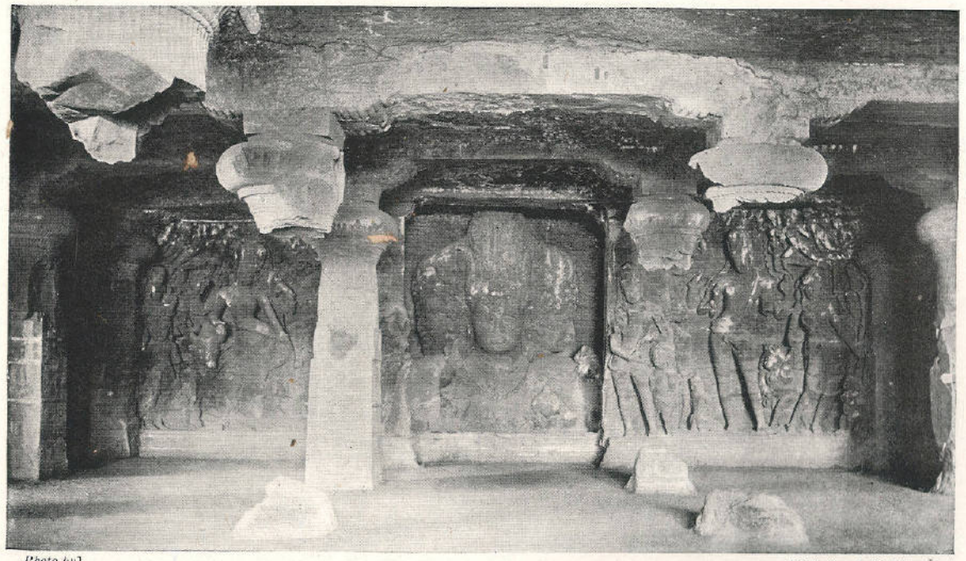


Photo by] [*Johnston & Hoffmann.*

TEMPLE OF SHIVA, ELEPHANTA.

The subterranean hall of this temple is 130 feet square, and the roof is upheld by 26 massive pillars. Much of the damage it has suffered is said to be the work of Portuguese iconoclasts.



Photo by] *[Bourne & Shepherd.*

IN THE TEMPLE OF SHIVA, ELEPHANTA.

Round the walls are groups of colossal figures, twelve to twenty feet high.

stairs, to a large rectangular chamber excavated in the solid stone to a depth of twenty feet. The entrance is guarded by the curious rolling-stone shown in our illustration. In shape it is something like a mill-stone, and it can be made to roll backwards and forwards along a deep groove hollowed in the rock outside, thus concealing or revealing the opening into the tomb. This ancient form of construction throws some light upon the reference in the New Testament to the need for rolling away the stone from the door of the sepulchre wherein Christ was buried.

The Burning Ghats, Benares.—Few visitors to Benares fail to make a visit to the famous Burning Ghats by the side of the sacred river Ganges. There are few things that seem on the face of them to be more repulsive; in reality there are few that are more simple and more significant. Very tenderly the mortal remains of the dead, after having been baptized in the waters of the Ganges, are placed upon the prepared pyre. Two or three logs are then placed longitudinally upon the corpse, so as to conceal the unbeautiful process of cremation from the eyes of the curious. One of the special caste which alone may fulfil the offices, draws near and applies the sacred fire. The flame licks upwards through the logs, and in twenty minutes or half an hour all is over, and from among the white, charred ashes of the wood the flaked cinders of what was once a human being are set adrift upon the bosom of the broad, placid river. Thus, as the Hindus most faithfully believe, will the spirit that once occupied the mortal frame attain certain peace.

Benares is the most sacred city in India. It is to Hinduism what Lhasa is to the northern Buddhist, and what Mecca is to the followers of Mohammed. Moreover, it is not only the white-hot centre of the fanaticism that clings round the worship of Shiva, but it is one of the oldest universities that the world possesses.

The god Shiva has perhaps a stronger hold upon the mind of Hindus than anything else within their lives. Sir Alfred Lyall well sums up the nature of the worship of Shiva in the following words:

"Shiva represents what I have taken to be the earliest and universal impression of Nature upon men—the impression of endless and pitiless change. He is the destroyer and rebuilder of various forms of life; he has charge of the whole circle of animated creation, the incessant round of birth and death in which all Nature eternally revolves. His attributes are indicated

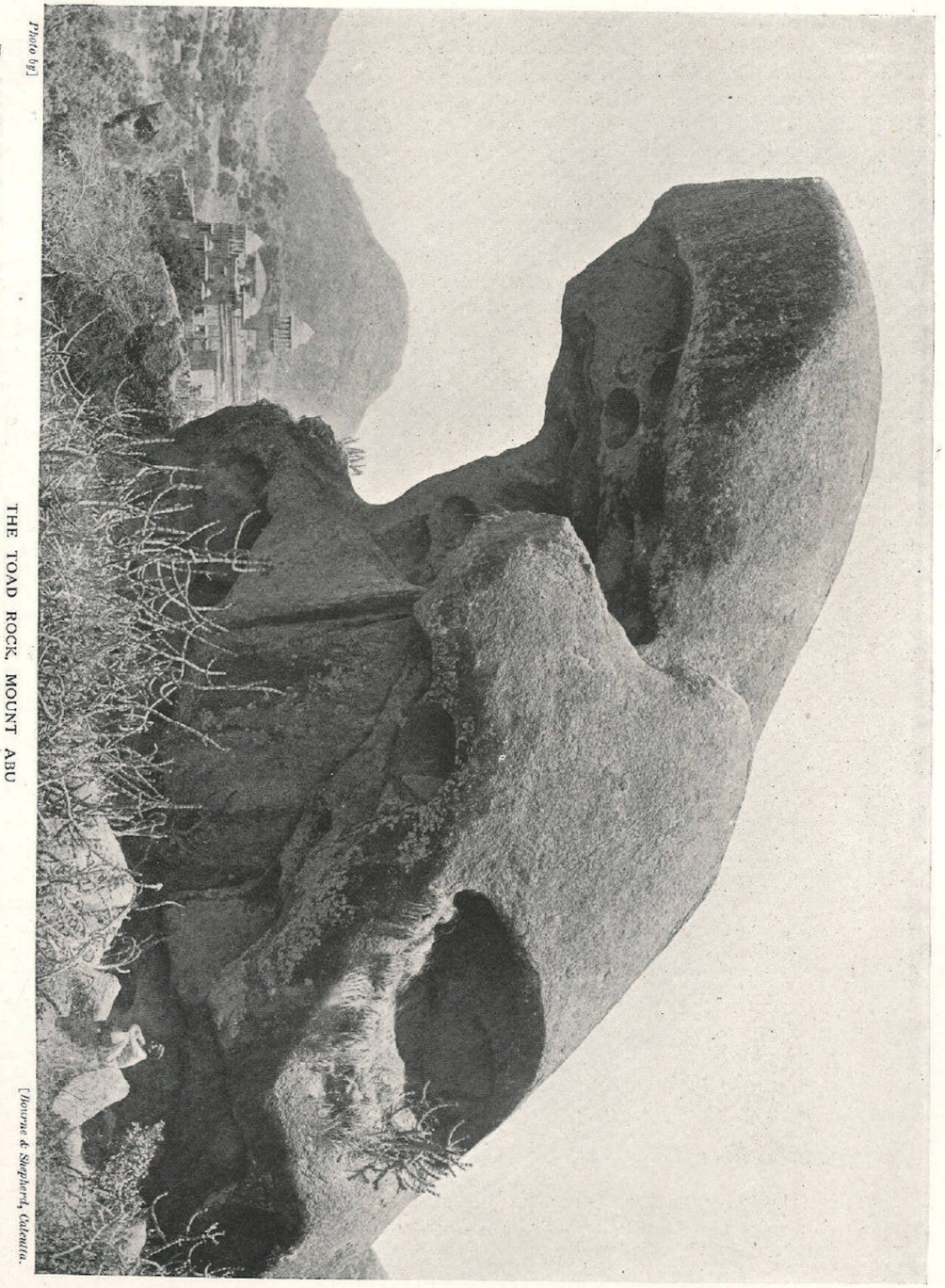


Photo by] *[Bourne & Shepherd, Calcutta.*

THE TOAD ROCK, MOUNT ABU

The beautiful lake that this toad is perpetually threatening to leap into is artificially formed, but the gigantic toad has been poised in its position by the hand of Nature

by symbols emblematic of death and of man's desire; he presides over the ebb and flow of sentient existence. In Shiva we have the condensation of the two primordial agencies: the striving to live and the forces that kill; and thus, philosophically speaking, we see in this great divinity a comprehensive transfiguration of that idea which, as I repeat, I hold to be the root of Natural Religion. He exhibits by images, emblems, and allegorical carvings the whole course and revolution of Nature, the inexorable law of the alternate triumph of life and death—*Mors Janua Vitæ*—the unending circle of indestructible animation."

And of this grim deity Benares is the chosen home.

The Caves of Elephanta, Bombay.—The island of Elephanta lies six miles out across the water from Bombay. It is a conical hill six hundred feet high, for the most part covered with coarse vegetation, and instead of beaches there are mangrove swamps which creep up to the very side of the slippery concrete blocks on which visitors step ashore.

A long flight of steps leads up to the caves, which date from the tenth century, and are witnesses to the skill of the chisels of the early inhabitants of the harbour. The island is sacred to Shiva, who is largely represented in the decorations. The temple to Shiva-linga is one hundred and thirty feet square; the roof is upheld by twenty-six massive fluted pillars and sixteen pilasters. Round the walls are groups of figures, twelve to twenty feet high, carved out of the solid rock, as, of course, is the whole building. In past years these caves have been considerably damaged by the Portuguese, but they still remain to testify to the splendour and spaciousness of Hindu architecture in the early centuries of our era.



Stereograph by] [*H. C. White Co., London.*

STONE IMAGES OF THE "500 DISCIPLES" OF BUDDHA.

Go-hyaku Rahan, or the "500 Disciples," were the Arya, or Holy Men, who were O Shaka Sama's immediate disciples. The most famous company of these effigies is that at the Temple of Seikenji, near Okitsu, Japan

The Toad Rock, Mount Abu.—Mount Abu is a popular hot-weather resort, and there are a number of private houses and bungalows on the outskirts which cluster round the shores of the Gem Lake. The Lake is dotted with little toy islands that are reflected in the still water, while over all hangs a curious natural rock that looks like a gigantic toad about to spring into the water. It has the squat outline and the heavy slothful air of its hideous prototype. Its dun-coloured mass throws a dark and sinister shadow upon the sparkling water in the brightest of mountain sunshine. The heights of Mount Abu are so broken up that practicable roads are few; it is mostly traversed by footpaths that wind their way among the scattered boulders and masses of rock. The



Photo by] [*J. Thomson, Esq., F.R.G.S.*

THE BEAUTIFUL GORGE OF THE YANGTSE KIANG.

The Yangtse Kiang is the chief river of China, and is one of the longest and noblest in the World Its area is calculated as about 584,000 square miles

Toad Rock was tossed into its position by the hand of some primeval giant long ages ago, and now sits looking darkly down into the green heart of the little lake that men have made at its feet.

Images of the Rahan, or Disciples of Buddha.—These holy men provide one of the favourite subjects of Buddhist art. They figure in the sacred paintings; their images are placed within the temples, and groups of statuary out of doors representing these earliest disciples are frequently found. This band of disciples was gathered round him by the *Master* when after long wanderings and much self-mortification the truth of his Buddhahood had been revealed to him beneath the Bô-tree near Gaya. Inspired by a Divine call to teach to his suffering and deluded fellow-men the way to attain peace, he hastened to the Deer Forest near Benares, where his late pupils lived. He had disappointed them when he had given up in despair the life of relentless self-mortification he had been practising in their company; but he knew that by that road alone the truth could not be found. He found them in the Deer Forest, and, it is said, preached to them with the greatest earnestness and eloquence for five days, when they became convinced of the truth of his revelation of the Way of Perfection and gladly embraced the new faith.

These men formed the nucleus of the band of five hundred disciples. Here in the Deer Forest many eager hearers gathered round him, till his personal followers soon numbered three-score. After due instruction he sent them forth on preaching expeditions. To the newly-formed Sangha, or Society of Mendicants, he gave a regular organization and the most minute rules for the conduct

of those who entered it. They were permitted to eat no solid between sunrise and noon: they might drink no intoxicating liquor: they were to beg their food in a begging bowl from house to house without distinction of rich or poor. Their dwelling, wherever possible, was rather to be in a grove or forest than in the houses of those to whom they were sent. Their heads were to be shaven. Such a monk might possess but eight articles: his three robes, a girdle, an alms-bowl, a razor, a needle, and a water-strainer—this last in order that by no accident should he swallow any living thing as he drank.

The effigies of these first Rahan are set up as ensamples of right living and right thinking to their weaker brethren of to-day. In many a Buddhist centre we may see them, with their grave faces, their high, shaven foreheads, their emaciated limbs, their scanty covering. In Japan, the most famous company of these holy men is perhaps to be seen at the great Buddhist Temple of Seikenji, near Okitsu, which is the subject of the illustration.

Gorge on the Yangtse Kiang.—The immense waterway of the Yangtse Kiang rises in the mountains of Tibet, follows a course of something like three thousand miles through fertile and

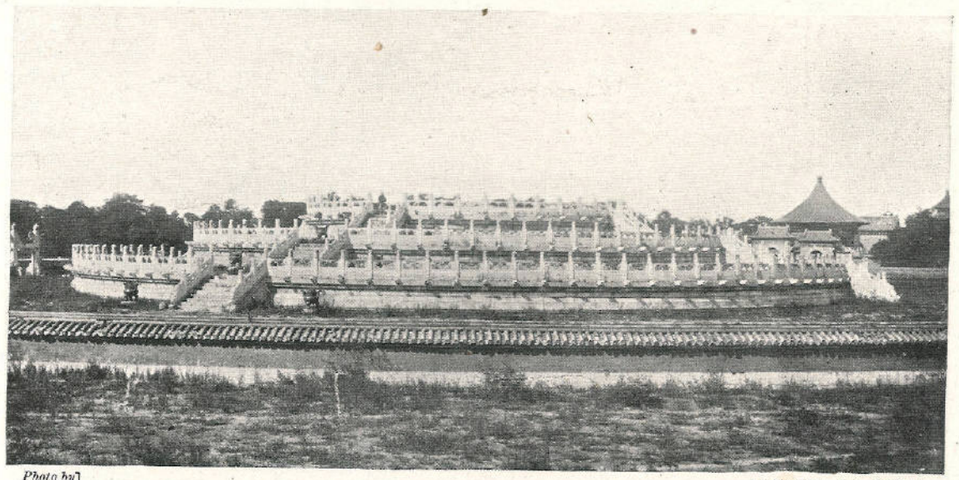


Photo by] [*J. Thomson, Esq., F.R.G.S.*

THE ALTAR OF HEAVEN.

The altar is open to the sky on the summit of three terraces, the topmost being paved with stones laid in nine concentric circles. The Emperor repairs here once a year, in winter, to adore "the Azure Heaven" with solemn ritual. The Emperor claims to represent Man in the Divine Trinity with Heaven and Earth.

densely populated territory, and empties itself into an estuary on the Chinese shore of the Yellow Sea. It is the chief river of China, and one of the longest and noblest in the world. Its basin, of which the area is calculated as about five hundred and eighty-four thousand square miles, includes the greater part of China proper. At the juncture of its two main affluents, where it is already a formidable torrent and barely fordable even at low water, its height above the sea level is estimated as thirteen thousand feet. From this great height it hurls itself down through leagues of wild and forest-grown country and through barren mountain passes, tumbling over rapids and tearing through the narrow channels of its bed. Soon, however, the steep descent yields to a flat tableland, and as the gradient ceases the long, quiet journey is made, among the shifting sand-banks, to Hang-kow. Here it flows so placidly and mildly that the incoming tide ripples up its bosom full two hundred miles from its mouth.

By far the most beautiful scenery along its course, if we except the inaccessible wilds of Tibet, which are forbidden land, is found among the mountain gorges above I-chang. Here the mountain spurs thrust themselves down to the bed of the river, at times forcing the mass of the



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE TEMPLE OF HEAVEN, PEKING.

Within the temple enclosure are several fine buildings. Among these are the Chamber of Imperial Heaven, where the Emperor repairs to worship "the Supreme Ruler" and his ancestors, and the Hall of Abstinence, where he retires for fasting and vigil during the cumbersome ceremonies in which he takes part, according to a ritual older than any other now in use in the world.



Photo by] [*American Colony, Jerusalem.*

THE ROSE-RED ROCKS OF PETRA

The approach to Petra from the east is by a narrow defile, known as "the Sik." Located in this canyon-like and narrow Sik is the wonderful temple of El Khasneh, cut out of the rose-red rock in Graeco-Roman architecture.

moving current into so narrow a channel that it becomes a boiling torrent of foaming water. Then, again, the mountains seem to stand back as though to observe their handiwork, and the tortured river spreads itself out into wide, peaceful pools, wherein the exquisite scenery is reflected.

The Temple of Heaven, Peking.—This is a remarkable building in itself, but to Western ideas it is yet more remarkable for the fact that it is bound up with the claim to divinity of a human being. The Emperor of China does not claim to be King by Divine Right, he claims to be Divine, and, therefore, King. In the Chinese religion there is a Divine Trinity—Heaven, Earth and Man—of which the Emperor represents the third. "The Emperor," says Professor Douglas, "is the possessor of a power limited only by the endurance of the people, the object of profound reverence and worship by his subjects, and the holder of the lives of 'all under Heaven.' As possessor of the Divine authority, he holds himself superior to all who are called gods, and takes upon himself to grant titles of honour to deities, and to promote them in the sacred hierarchy. He alone is entitled to worship the azure heaven, and at the winter solstice he performs this rite after careful preparation and with solemn ritual. The Temple of Heaven, where this august ceremony is performed, stands in the southern portion of the city of Peking, and consists of a triple circular terrace, two hundred and ten feet wide at the base, and ninety feet at the top. The marble stones forming the pavement of the highest terrace are laid in nine concentric circles. On the centre stone, which is a perfect circle, the Emperor kneels facing the north, and acknowledges in prayer and by his position that he is inferior to Heaven and to Heaven alone. Round him on the pavement are the nine circles of as many heavens, consisting of nine stones, then of eighteen, then twenty-seven, and so on in successive multiples of nine until the square of nine, the favourite number of Chinese philosophy, is reached in the outermost circle of eighty-one stones * On the evening before the winter solstice the Emperor is borne in a carriage drawn by elephants to the

* Williamson. "Journey in North China."

mystic precincts of the Temple, whence after offering incense to Shangti, the Supreme Ruler, and to his ancestors, he proceeds to the hall of penitential fasting. There he remains till 5.45 a.m., when, dressed in his sacrificial robes, he ascends the second terrace. This is the signal for setting fire to the whole burnt sacrifice, which consists of a bullock of two years old without blemish. The Supreme Ruler having been thus invoked, the Emperor goes up to the highest terrace, and offers incense before the sacred shrine, and that of his ancestors. At the same time, after having knelt thrice and prostrated himself nine times, he offers bundles of silk, jade cups, and other gifts in lowly sacrifice. A prayer is then read by an attendant minister. One solemn rite has still to be performed before the sacrificial service is complete. While the Emperor remains on his knees, officers appointed for the purpose present to him 'the flesh of happiness' and the 'cup of happiness.' Thrice he prostrates himself before the sacred emblems and then receives them with solemn reverence. By this solemn sacrifice the Emperor assumes the office of Vice-Regent of Heaven, and by common consent is acknowledged the co-ordinate of Heaven and Earth, and the representative of Man in the Trinity of which these two powers form the other persons."

The whole Temple of Heaven is contained in an open space about a mile square, within a triple enclosure, which is, or was, used to secure the animals intended for sacrifices. To the south is the very sacred structure of terraces, on the summit of which is the altar, open to the sky. The northern structure, which is more of a temple proper, is roofed, but not enclosed, by walls. The main roof is supported by four columns, and the



Photo by] [*American Colony, Jerusalem.*

EL KHASNEH, OR "THE TREASURY OF PHARAOH"

The wonderful rock-hewn temple of El Khasneh is a temple of Isis, and was probably erected by the Emperor Hadrian when he visited Petra in 131 A.D.

The Bedouin Arabs believe it contains the "treasure of Pharaoh," and from this fact the temple takes its name.

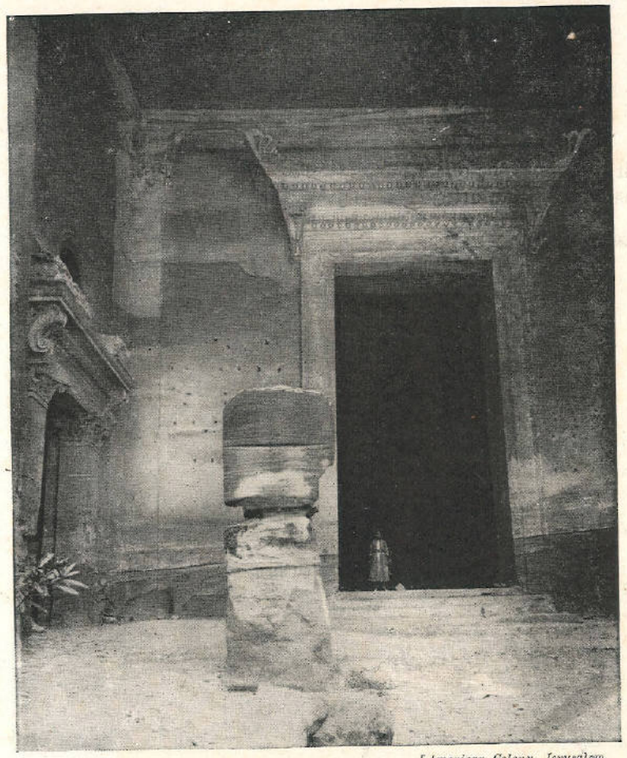


Photo by] [*American Colony, Jerusalem.*

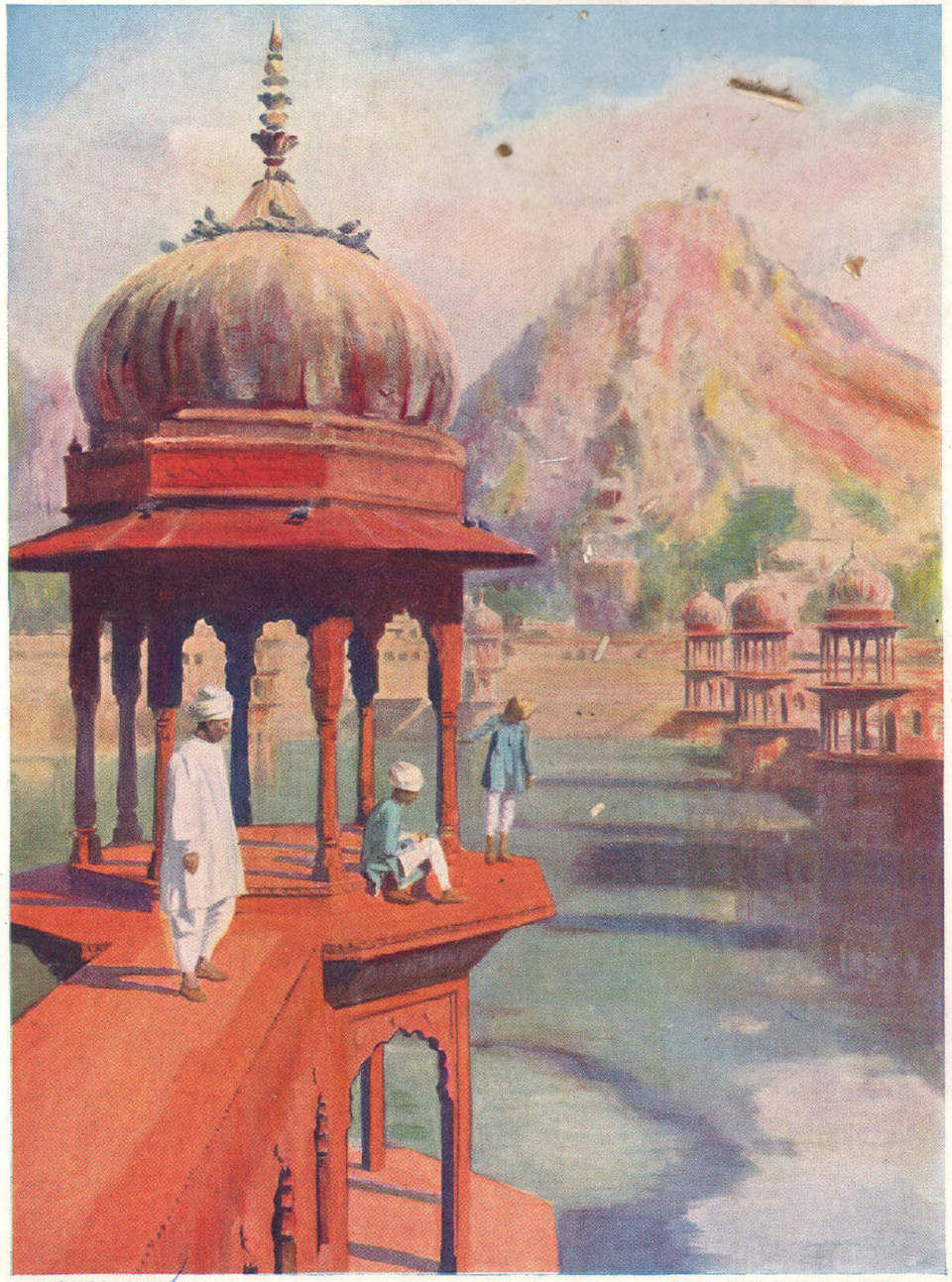
Entrance to the rose-red rock-hewn temple of El Khasneh, Petra

two lower roofs round it by twenty-four shorter columns, the whole being richly gilt and sculptured.

El Khasneh, The Treasury of Pharaoh.—This is the crowning gem in the collection of rock-built tombs and temples in the valley of the Wady Musa, where was the ancient Nabataean town of Petra. This rocky and almost inaccessible valley is situated in the mountains between the Dead Sea and the Gulf of Akaba. El Khasneh is a Temple of Isis, and was probably erected by the Emperor Hadrian when he visited Petra in 131 A.D. The building owes much of its wonderful beauty to the rose colour of the living rock from which it is hewn. For, with the exception of the two central columns of the portico, the entire edifice is fashioned from the rock of the hillside.

The façade of the "treasury" has two stories and is sixty-five feet high. The handsome portico of the lower story is supported upon six massive Corinthian columns. All the capitals, cornices, and the pediment are of fine workmanship. Above the pediment, the symbol of Isis, a solar disc between two horns, can be distinctly traced. At either corner are sphinxes. Columns in the same style adorn the upper story also, and in the centre, interrupting the pediment in a curious manner, is a large and deep recess. Within this is poised a kind of cylinder, or circular lantern, and upon the pointed, conical top of this rests an urn, within which, as the Bedouin Arabs believe, is deposited the "treasure of Pharaoh," whence the building takes its name. No doubt some object of great veneration or of mythical value was contained in this strange receptacle when the Temple was originally built, but there is now no trace of it left, however slight, by which to determine its nature. In front of it, standing between two columns, stands Isis, holding in her hand the horn of plenty. The figure of the goddess is unfortunately much damaged. She is supported on the right and left by attendant figures popularly supposed to be Amazons.

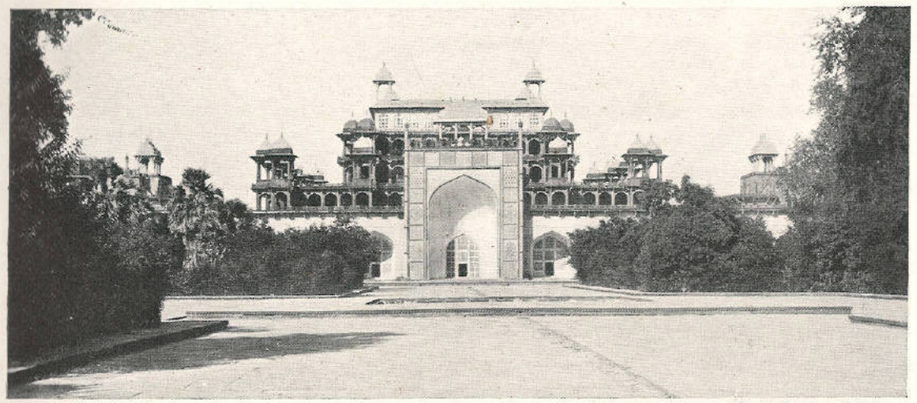
The interior of the Temple is reached by a richly-decorated door beneath the principal portico. The chief hall is of large dimensions, and is absolutely devoid of ornament. The pale rose-coloured walls with their delicate veinings rise in austere plainness from the smooth pavement under-foot. The light is dim, the echoes are loud, the place has just that air of mystery which to this day often clothes an Eastern shrine with legend and romance. There are three smaller chambers grouped round it, all as plain and unadorned as the central hall. The whole, as we have said, is carved from the ruddy sandstone rock of this wild hillside, and offers to the student, the artist, or the traveller one of the strangest and most beautiful works of architecture in all Syria.



Painted by F. Seth. *Photo. by H. G. Ponting, F.R.G.S.*

THE SACRED TANK, ULWAR.

The Sacred Pool of Ulwar is one of the most lovely spots in all India. The tomb of a native chieftain, Bakhtawa Singh, who died in 1815, stands on one side, and temples dedicated to Vishnu on the other. The place is deemed so holy that visitors may only approach without their shoes.



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

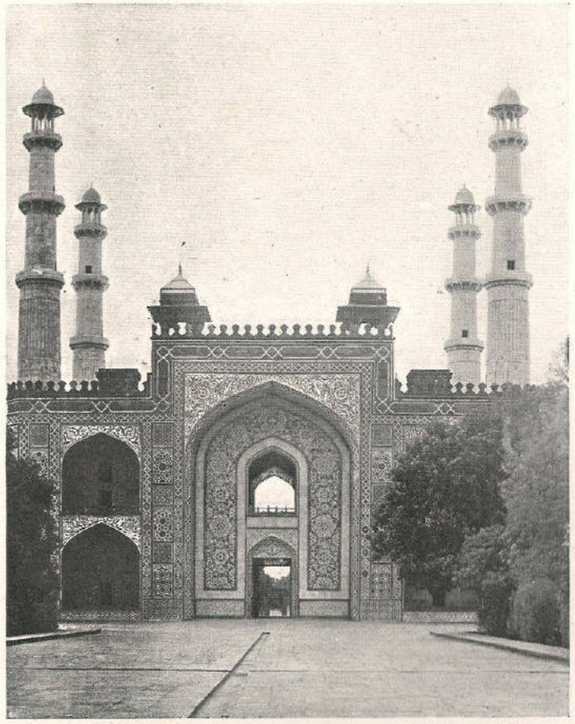
THE TOMB OF AKBAR, SIKANDRA.

This is the actual mausoleum, a pyramidal building of four stories. The three lower ones are of red sandstone, in elaborate arcades. The topmost is of dazzling white marble.

CHAPTER III.

By B. L. PUTNAM WEALE.

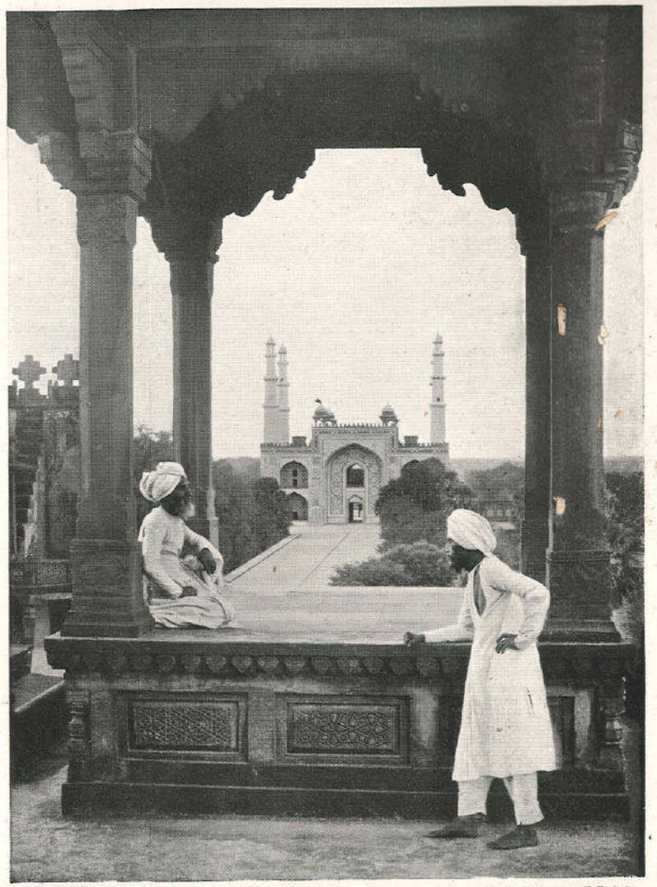
Akbar's Tomb, Sikandra.—Akbar, the great Moghul emperor, died in 1605, at the age of sixty-two. He was a contemporary of Queen Elizabeth, and the splendour of his reign equalled, if it did not excel, that magnificent period of English history when the world was ringing with English doings. During his lifetime Akbar built himself a magnificent tomb at Sikandra, a suburb of Agra, his capital. In doing this he was only following the example of many Eastern potentates; but the building he erected is, as Fergusson, the highest authority on Oriental architecture, says, "quite unlike any other tomb built in India either before or since, and of a design borrowed, as I believe, from a Hindu, or more correctly a Buddhist model. It stands in an extensive garden, still kept up, approached by a noble gateway. In the centre of the garden, on a raised platform, stands the tomb itself, of pyramidal form. The lower story measures thirty feet in height, pierced by ten great arches on each face, and with a larger entrance, adorned with a mosaic of marble, in



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE BEAUTIFUL ENTRANCE GATE TO AKBAR'S TOMB.

The Emperor's tomb is in a luxuriant garden. The gate that leads to the enclosure is imposing both from its size and gaudiness. It is of red sandstone, skilfully inlaid with white and coloured marble.



Copyright photo by [*H. G. Ponting, F.R.G.S.*

AKBAR'S TOMB.

There is a magnificent cenotaph on the top story. It is of white marble and carved all over in exquisite designs of flowers. Far below is the actual tomb, a plain marble slab devoid of ornament.

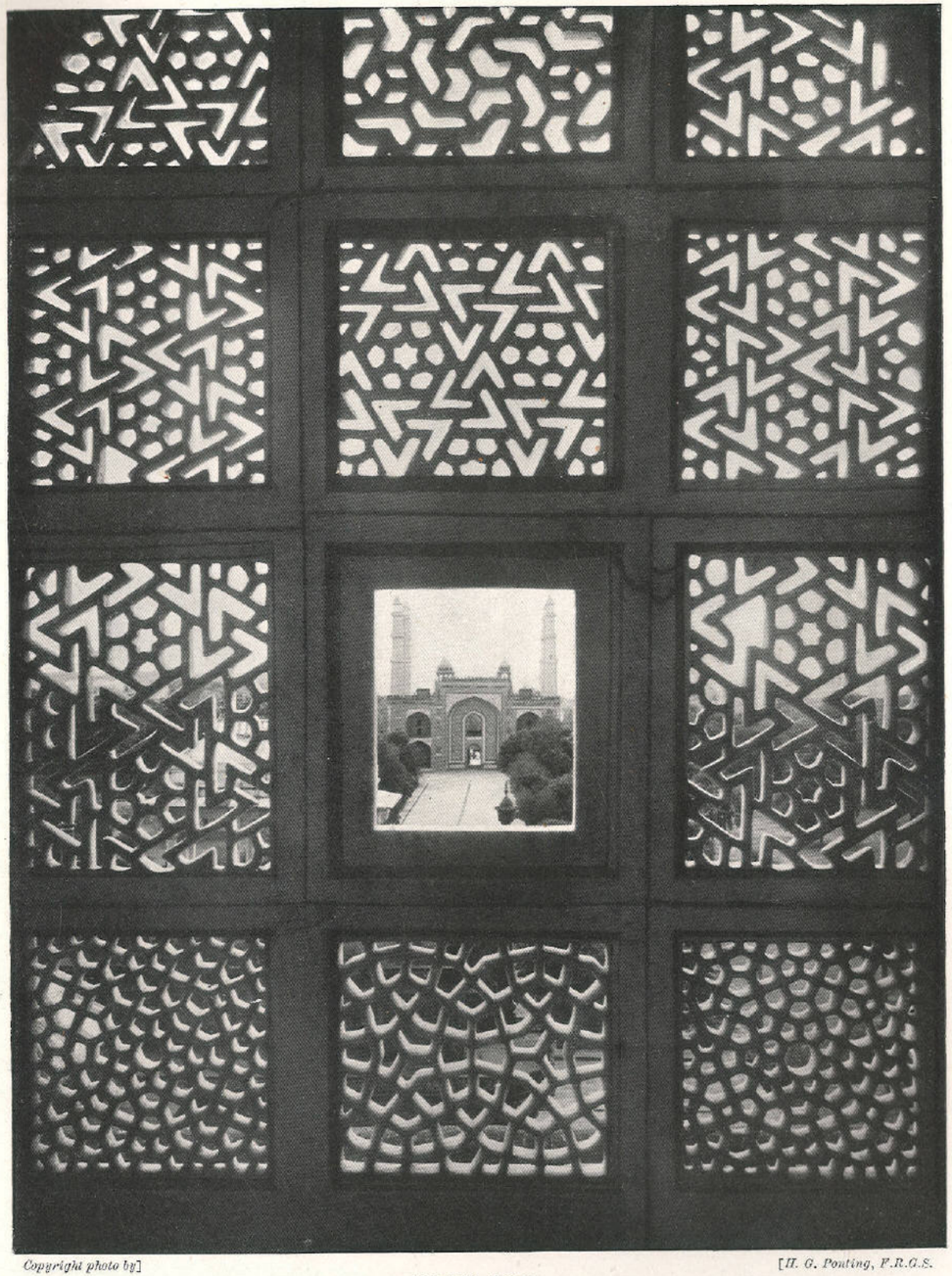
the centre. On this terrace stands another stone far more ornate; a third and fourth story of similar design stand on this, all these being of red sandstone. Within and above the last is a white marble enclosure one hundred and fifty-seven feet each way, or externally just half the length of the lowest terrace, its outer wall composed entirely of marble trellis-work of the most beautiful patterns. Inside it is surrounded by a colonnade or cloister of the same material; in the centre of which on a raised platform is the tombstone of the founder, a splendid piece of most beautiful arabesque tracery. This, however, is not the true burial place; the mortal remains of this great king repose under a far plainer tombstone in a vaulted chamber in the basement, exactly under the simulated tomb that adorns the summit of the mausoleum."

The Moghul princes made their sepulchres places of gaiety and amusement; so long as the founder lived his tomb was a rendezvous for his friends and a festive place of retreat. When once the place had been consecrated by the interment therein of its founder, it immediately ceased to be used as a place of festivity.

The sarcophagus of Akbar is inscribed on one side "ALLAHU AKBAR" ("God is greatest") and on the other "JALLA JALALAHU" ("May His glory shine"). This story on the summit of the great building is of wonderful beauty. The magnificent cenotaph, of white marble, most delicately carved, lies unsheltered beneath the sky. The full blaze of the tropic sun falls on it; it is washed by the tropic dews.

Akbar was a man with the most liberal conceptions of religion; he tolerated all creeds. And now on his monument, carved by his orders among the flowers that adorn it, stand the impressive words: "God is greatest." All his doubts and aspirations seem to be summed up in that last sigh from his dying lips!

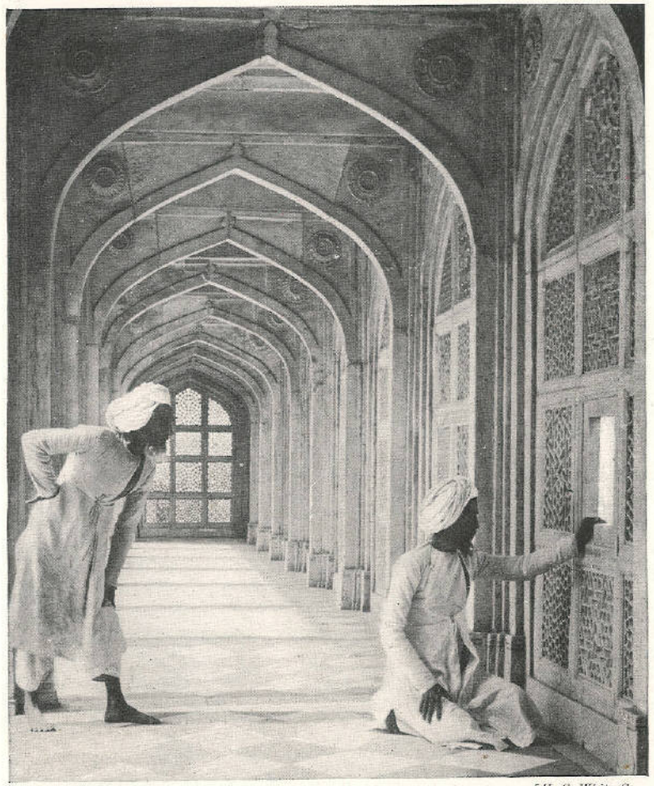
He was not only an unconquerable soldier, a patron of art and literature, a great builder and lover of fine architecture, but he loved all forms of beauty, and his collection of gems was one of the



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AKBAR'S TOMB.

View of the great red gateway through one of the fine marble lattices of the mausoleum



From Stereo copyright] *[H. C. White Co.*

AKBAR'S TOMB.

All round the sides of the topmost terrace is an exquisite cloister, with walls of marble trellis work.

marvels of the world. Among them was the famous "Koh-i-noor" diamond, now one of our own Crown jewels. A small marble pillar can be seen close to the cenotaph on the tomb. This was once covered with gold, and within a receptacle in the upper part the Koh-i-noor reposed, it is said, for the space of one hundred and thirty years, until carried off by the Shah Nadir of Persia. The entrance to the gardens and tomb lies through a marvellous gateway of the proportions of a palace. This gateway merits some attention. It is of red sandstone, profusely inlaid with white marble. There are minarets sixty feet high at the corners, and the interior contains spacious halls. From the platform on the top of this wonderful structure the Moghul emperor could see the waters of the Jumna river washing the walls of the massive red sandstone fort he had reared on its banks to protect his rich capital of Agra. The most impressive feature of this magnificent royal mausoleum lies behind a plain doorway in the lowest story. A narrow passage ends in a simple undecorated vault, and here beneath a marble slab, bare of all inscription or ornament, lies the body of the greatest of the Moghul emperors.

Marble Rocks, Jabalpur.—Twelve miles by road from the city of Jabalpur the solemn hills have been cleft as if by the blow of a giant sword. The turbulent waters of the Nerbudda river have carved this passage through the mountain, and now lie like a silver sword-blade along the bottom of the gorge. Sheer on either side tower the white cliffs, gleaming, marvellous. The gorge of the "Marble Rocks" is a mile long, a mile of rare and wonderful beauty. To say that these gleaming white walls of magnesian limestone are from ninety to one hundred and twenty feet in height can give no adequate idea of their singular dignity. An unearthly beauty clothes every rock and green thing in the gorge. To pass from the Smoke Cascade at its head, where the Nerbudda flings itself over the lip of the cliff into the boiling cauldron below, past the narrow spot known as "Monkeys' Leap," past the curious shaped rocks the "Foot of the Elephant," to the wild welter where the river springs over the rock barrier at the foot of the gorge, and leaps foaming out into the open valley, is like a journey in fairyland. And when the brilliant Indian moonlight lies like a silvered veil upon the glistening walls, and every crevice and rift is sketched with a pen of ink, the scene is one never to be forgotten. The Nerbudda

river runs swift and deep down the echoing gorge, singing its wild song, or sinking its voice to a mysterious murmur where the rocks fall away and it grows deep. The stream is said to be no less than one hundred and fifty feet deep in parts.

Quantities of wild bees make their nests in these marble rocks, and travellers are warned to do nothing to disturb them. There is a warning in the shape of a simple memorial at the lower end of the ravine to a young English engineer officer who was drowned there in trying to escape the attack of the venomous insects.

The Old Palace, Amber.—The deserted city of Amber, in Rajputana, is one of the most romantic and entrancing spots in which to wander in all the romantic East. To quote Sir Frederick Treves, Amber is "a wizened old city hidden among hills at the end of a lonely gorge. So very ancient is this town that Ptolemy (the Greek historian) knew of it and wrote of it, while a century or more before the Norman Conquest of England Amber was already great and prosperous. Here many maharajas reigned in splendour, and here, in 1600, was built the great palace which still stands defiantly at the blind gorge's end with its back to the hills.

"At last there came to the throne one Jey Sing. He was a prince of unexpected talents and of original mind. . . . Although his palace was one of the stateliest in India, although centuries of romance and the memory of great deeds hung about the old city and its huddled streets, he determined to abandon Amber and to rebuild a capital in the plains that opened at his feet.



Photo by] *[Frith & Co. Ltd., Reigate.*

THE MARBLE ROCKS, JABALPUR

The Gorge of the Marble Rocks is a mile long, where the Nerbudda river flows between those gleaming white walls of magnesian limestone that look like the walls of a cathedral. They tower to a height of 120 feet, and their unearthly beauty is a thing travellers gladly go the twelve miles out from Jabalpur to see

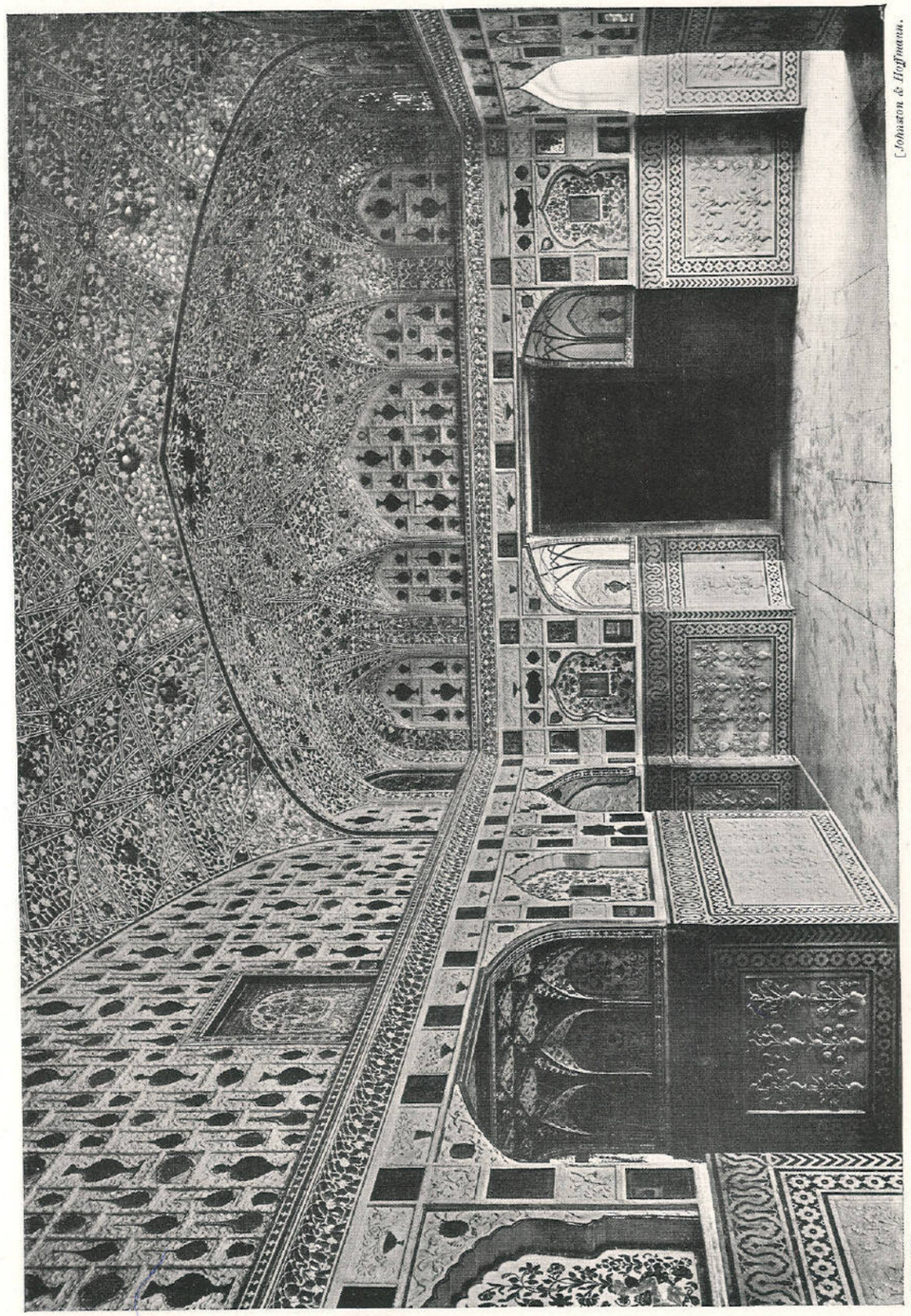


Photo by [*Johnston & Hoffmann.*

INTERIOR OF THE PALACE, AMBER

This magnificent palace in the deserted city of Amber is in a state of perfect preservation, and is a splendid example of Rajput art.

Thus it was that he founded the surprising city and called it Jeypore after his own name. . . . The old city, Amber, clings to the hillside at the blind end of the ravine, a medley of winding ways, of steep causeways, and of houses built up on steps of rock, crowned by a palace. . . . On the summit of the highest hill is a deserted fort, while on a low ridge in the valley is the deserted palace.

"The town of Amber covers each slope of this ridge together with all that part of the valley which gives access to it. The palace stands well—a fine, solid, square mass of masonry with white walls, stout buttresses, and many cupolas and domes. Its monotony is broken by arcades and passages with columns, by an occasional verandah, or by the trellised walls of hidden courts. . . . It is maintained in perfect state, and its halls and corridors are endless. . . . The whole city can be viewed from a balcony which juts out from the palace wall. It is a city of ruins, utterly silent, empty and forlorn. At the foot of the palace hill is a lake, with an island of gardens. The island has around it an embankment, in which are steps leading down to the water. Its gardens are in terraces, traversed by paved paths and covered walks, with here and there a summer house or cool court. Upon the island and its gardens a woeful ruin has fallen. A wild undergrowth has spread over it, so that there is now reflected on the surface of the lake little more than a lonely arch, a crumbling balustrade, or a heap of stones covered with a cobweb of briars and brambles. So utterly desolate is this once laughter-haunted spot that the poor pleasaunce may be a garden of Babylon, and the little stairs may be hiding their broken steps in the waters of Babylon."

Yet there are in the old palace many halls that present fine specimens of Rajput art. The Diwan-i-Am is particularly fine. The rajah's apartments

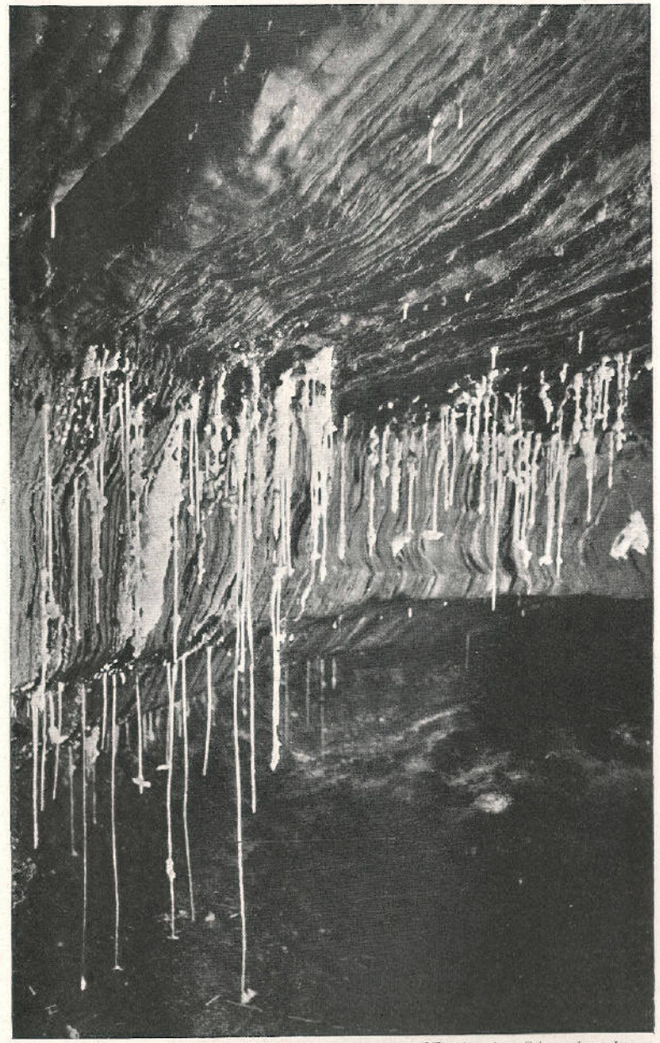


Photo by] [*The American Colony, Jerusalem.*

INTERIOR OF SALT CAVE, JEBEL USDUM.

The hill of Jebel Usdum, in Palestine, is 350 feet high and about seven miles long. It is composed of a great mass of rock salt, in which are tortuous caves The illustration shows the stalactites of salt

are situated on the higher terraces and separated from the main portion of the palace by a splendid gateway covered with mosaics. Above this is the exquisite little pavilion known as the Suhag Mandir, with beautiful latticed windows. On one side of a garden cool and green where fountains play is the Jey Mandir, or Hall of Victory, adorned with panels of alabaster, some inlaid and some carved with fine relief of flowers. Near this a narrow passage leads down to the bathing rooms where the rajah and his intimates disported themselves. These are all of a pale cream-coloured marble, in which the delicate veining has drawn faint natural patterns. The light is dim and full of tender gleams and pale shadows. It is an ideal place of refuge from the fierce heats of an Indian summer. One wonders with what keen regrets the dwellers in this luxurious palace left it for the new splendours of the brand new city in the plain below. But such was the influence, or authority, of Jey Sing that they left the old city just as it was, and as they left it so it remains to this day, save for the havoc wrought by time and the elements in one hundred and seventy years. The dwellers in this palace moved out in a body down the very narrow streets, down the narrow hill paths, to the road across the plain that led them to the pink and white palace ready and waiting for them in the empty new town of Jeypore.



THE CLEPSYDRA, OR WATER CLOCK, OF CANTON.

This is a monster hour-glass, five hundred years old. The water drips slowly from one copper jar to the next, and in the lowest a float marks against a scale its gradual rise. It takes twelve hours to transfer the water from the topmost to the lowest jar.

Jebel Usdum.—Tradition commonly places the cities of the plain, Sodom and Gomorrah, in this now barren and desolate spot, although they were more probably situated at the more fertile northern end of the Dead Sea. Jebel Usdum, or the Mountain of Sodom, is a great mass of rock salt three hundred and fifty feet high and about seven miles long from north to south. It is covered by a loose crust of gravel, flint and gypsum. It is full of cracks and fissures, whilst blunt and pointed pinnacles are crowded together on its heights like hundreds of gaunt figures pointing skyward. The salt cliffs continually fall and leave perpendicular precipices with a heap of rubbish at their feet. And in this salt mountain are long, narrow, tortuous caverns, penetrating far into its harsh and glittering heart, looking like the labyrinths of a deserted mine. Stalactites hang from the roofs, their fine fragments strew the uneven floors: to enter is to walk in a natural salt mine.

All the appearance of the surrounding country points to eruptions and upheavals in comparatively historic times. There are sulphur springs all round the south shores of the cruel and lifeless sea. Sulphur is strewn over the plain, bitumen is deposited with the gravel on the



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

MOUNT FUJI, JAPAN

The distant view of Fuji, the sacred mountain of Japan, is very impressive. It rises in lonely majesty to a height of over 12,000 feet.



Copyright photo by] [H. G. Ponting, F.R.G.S.

MOUNT FUJI.

This is a beautiful view of Fuji, with the winter hood of snow on its shoulders. The low hills round about are threaded with pretty cascades, and there are also a number of hot springs in the vicinity.

beach and oozes out through the rocks. Tristram, the great authority on the environs of the Dead Sea, discusses the probable position of those four cities of the plain whose destruction the Bible story attests. "If there be any physical evidence left of the catastrophe which destroyed Sodom and Gomorrah, or of a similar occurrence, we have it here," though he adds that there are no remains to be found of the cities either here or at the more likely northern end of the sea. But "the kindling of such a mass of combustible material either by lightning from heaven or by other electric agency, combined with an earthquake ejecting the bitumen or sulphur from the lake, would soon spread devastation over the plain, so that the smoke of the country would go up like the smoke of a furnace." That gloomy and terrible things should be associated with such a region is only too natural.

The Water Clock of Canton.—Threading the narrow, dark, winding streets of Canton, it is easy for the traveller to imagine that he has been suddenly transported into some forgotten century. There is no large city visited by the tourist that is so entirely "native" in its aspect—that is so immersed in its own peculiar civilization. Canton looks practically the same to-day as it must have looked nearly six centuries ago when the celebrated Venetian adventurer, Marco Polo, visited it and wrote his vivid descriptions of its many curiosities. Among the quaint survivals of another age the famous Water Clock must take a prominent place. This is a primitive form of time register and hour-glass worked by water.

To visit it the stranger makes his way along the picturesque and crowded Street of the Double Gateway in the Old City. Here are the largest and most fashionable book stores, and it is this

street that is the most favourite haunt of the *literati*. The Double Gateway itself pierces a section of a very fine old wall dating from the seventh or eighth century, and above it is seen the curious erection in which the Clepsydra, or Water Clock, is housed. This consists of four large copper jars mounted on steps one above the other, in such fashion that when the top one is filled, the water flows very slowly, drop by drop, into the next one, and then on into the lowest. In this last one is a float to which is attached an indicator or measure. And it takes exactly a day of twelve hours for the contents of the top jar to be emptied completely into the lowest. As the water steadily rises in this last receptacle, the float points to the hour marked on the indicator. This archaic time gauge was first erected about 1324 A.D. It has a history full of incident: it has been many times destroyed during invasions from without and riots within the city. But it has always been restored, so that to-day, in spite of the advances made in mechanical methods of measuring time, we find the old water clock in practical use as it was five hundred years ago. For at intervals during the day the (more or less) correct time is exhibited on a board outside the building, and the native Cantonese are quite content to pin their faith to this unique servant of old Father Time.

Fuji-san.—Mount Fuji is the sacred mountain of Japan, and is held dear and holy by every sect in the country, however widely they may differ from one another on other points. Pilgrims crowd its steep paths all through the summer days, although the ascent is well known to be a very hard, long, and toilsome business. Indeed, a Japanese proverb runs, "There are two kinds of fools, those who have never ascended Fuji, and those who have ascended twice." In spite of this, nowadays many women and girls yearly make the ascent.



Copyright photo by] [H. G. Ponting, F.R.G.S.

PEERING INTO THE CRATER OF MOUNT FUJI.

Although once an active volcano, Mount Fuji now no longer pours forth fumes and smoke. The Japanese hold it sacred, and pilgrims toil up its steep sides all the summer through to gaze down into its tremendous crater.

Fuji stands between the provinces of Suruga and Koshu. Its highest peak, Ken-ga-mine, is well over twelve thousand feet. It is a quiescent volcano. From books of the period we learn that smoke was commonly issuing from it as late as the fourteenth century. It is surrounded by low hills of volcanic origin in which hot springs are found. The belt of cultivation extends about fifteen hundred feet up, whereafter a wide belt of grassy moorland is separated by sparse forest from the cone of perpetual snow.

The distant view of Fuji is singularly impressive and beautiful. It rises skyward in majestic loneliness, there being no other peak to detract from its appearance of height and dignity. It is famed among the world's volcanoes for the unequalled grace and perfection of its sweeping lines.

Mrs. Bishop describes her first view of its beauty from the sea. "Looking heavenwards, I saw far above any possibility of height, as one would have thought, a huge truncated cone of pure snow, thirteen thousand feet above the sea, from which it sweeps upwards in a glorious curve,



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

WATCHING THE SUN RISE, FROM ABOVE THE CLOUDS

This unique photo was taken above the clouds from the top of Mount Fuji, and pictures the sun rising in the early morning.

against a very pale blue sky, with its base and the intervening country veiled in a pale grey mist. It was a wonderful vision, and shortly, as a vision, vanished. No wonder that it is a sacred mountain and so dear to the Japanese that their art is never weary of representing it."

It is mentioned by the very oldest Chinese writers, under the name of Horaisan, as a mountain of perfect beauty and whiteness rising out of the Eastern Ocean. Numberless are the traditions and legends that cleave to Fuji-san, even as its descriptive names are numberless. In Japan the ideal feminine forehead is known as the *Fuji hitai*, for it should be white, shapely, and rise up in a smooth cone like the holy mountain.

Legend says there is a mystic law that no unconsecrated soil may remain on the bosom of the holy mount, and that when alien grains of sand and dust are brought up it in the sandals of pilgrims they go racing down the mountain's sides again during the night.

Mrs. Hugh Fraser says that "Buddhists call it the 'Peak of the White Lotus.' To them the snow-covered mountain, rising in unsullied purity from the low hills around it, was the symbol of



Photo by] [*Messrs. Johnston & Hoffmann.*

THE HAWA MAHAL, OR HALL OF THE WINDS, JEYPORE.

Part of the Palace of the Maharajahs of Jeypore, it is composed entirely of pink and white stucco, and is a unique piece of Indian architecture. It was built by the founder of the city, Jey Sing, in 1728.



From Stereo] [*H. C. White Co.*

THE GREAT TORII, NIKKO

The grand approach to the Tombs of the Shoguns, at Nikko, Japan, is by an avenue of giant cryptomeria trees, and at the top there is a great granite Torii 27 feet high.

the white lotus, whose foot grows green under its wide leaves in the stagnant water, while its cup of breathless white holds up its golden heart, its jewel, to the sky; and the wonderful symmetry of the mountain, with its eight-sided crater, reminded them of the eight-petalled lotus which forms the seat of the glorified Buddha. . . . So the queen of the mountains hangs between the stars of heaven and the mists of earth, dear to every heart that can be still and understand. Fuji dominates life here by its queenly beauty, sorrow is hushed, longing quieted, strife forgotten in its presence, and broad rivers of peace seem to flow down from that changeless home of peace."

The Hall of Winds, Jeypore.—Jeypore is the finest of modern Hindu cities, and is beautifully situated in an amphitheatre of rugged and precipitous hills whose summits are crowned by picturesque fortifications. The city itself is dominated by the Tiger Fort, which is on the very top of a scarped and quite inaccessible rock. A solid wall of masonry, twenty feet high and nine feet thick, surrounds the city, with bastions and towers marking its course at regular intervals. The palace and gardens of the maharajah cover a seventh part of the whole city. The grand entrance to the palace, the Siran Deorhi, is in the most central spot in the town opposite the College.

The only portion of the palace visible from the street is the celebrated Hawa Mahal, or Hall of the Winds. It is one of the most curious and bewildering examples of Eastern architecture. It is constructed of a delicate shell pink and creamy white stucco. The varied designs in the elaborate ornamentation of each of the multitude of windows are rare and beautiful, but the number of these windows gives a bizarre effect to the building. Sir Edwin Arnold has left a record of his sincere admiration for it: he calls it "a vision of daring and dainty loveliness, nine stories of rosy masonry and delicate overhanging balconies and latticed windows, soaring with tier after tier of fanciful architecture in a pyramidal form, a very mountain of airy and audacious beauty, through the thousand pierced screens and gilded arches of which the Indian air blows cool over the flat roofs of the very highest houses. Aladdin's magician could have called into existence no more marvellous abode, nor was the pearl and silver palace of the Peri Banou more delicately charming."

It was to this fairy edifice that Jey Sing conducted his bewildered and possibly reluctant Court when he brought them from Amber to inhabit the fine new city he had constructed after his own

design. Amber had not a street that could be called straight; it was like a rabbit warren on a very lovely hillside: Jeypore resembles an American city, being laid out in rectangular blocks divided by cross streets into six equal parts. Jey Sing thus anticipated the triumphs of modern town planning in the early part of the eighteenth century.

Temple Lanterns, Japan.—The elaborate and varied beauty of the bronze, metal and stone lanterns that adorn all the temple precincts is a noteworthy feature of Japanese art. These lanterns are for the most part offered separately by the devout as a tribute to the tutelary deity or hero of each particular temple, and such offerings are highly respected. For instance, it is recorded that the wonderful avenue of cryptomeria pines leading to the tombs of the Shoguns at Nikko was planted by a humble countryman too poor to offer a bronze lantern to decorate their temple courts. The temple of Kasuga-no-Miya, near Nara, is especially famed for its hanging lanterns of bronze and brass. Their decoration is wonderfully elaborate. Many of them are of immense age, although an equally large number are comparatively modern. The temple is said to have been founded in 767 A.D., so there has been much time in which the faithful could add to the collection of lanterns. These are variously dedicated to the Shinto god Ama-no-Koyane or his wife, or certain mythical heroes to whom the temple is sacred. It is approached by way of a delightful deer park, where the deer are very tame and have their horns cut every autumn to ensure that they do not hurt any of the worshippers. At the end of a long avenue of stone lanterns stands the main temple, which is a riot of rich colour, wherein the gleaming brass lanterns which hang in countless numbers from its roof beams combine with the brilliance of its red lacquer to dazzle the eye. There is an open shed or oratory here where in ancient days the Daimyos used



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

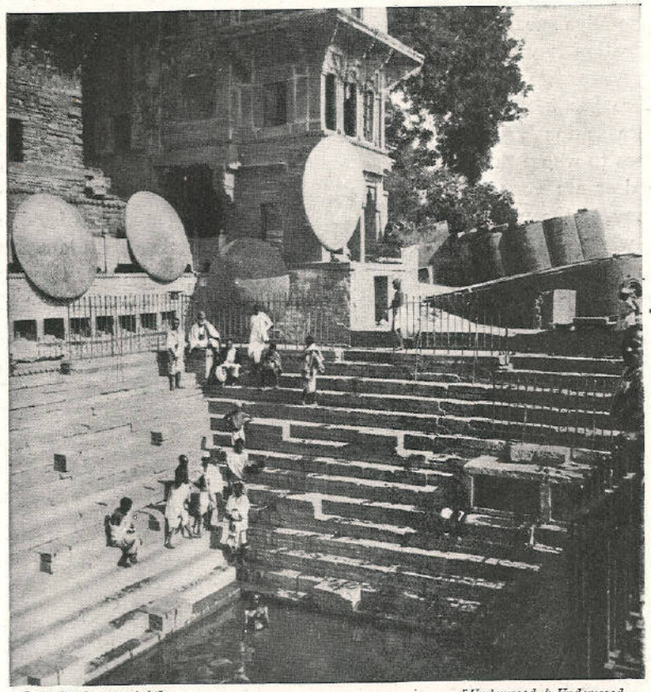
THE TEMPLE LANTERNS, JAPAN.

These beautiful bronze and brass lanterns decorate the temple of Kasuga-no-Miya, near Nara. The variety and elegance of design seen in the lanterns that adorn all the temple precincts are a feature of Japanese religious art.

to gather for worship: it is now used by the townsfolk of Nara for a quaint ceremonial on the eve of Setsu-bun (February 3rd), the scattering of beans to expel evil spirits.

The giant cryptomeria pines stand in solemn dignity about the temple courts and their green magnificence is in striking contrast to the restless and bewildering multiplicity of lanterns and ornaments.

Well of Vishnu, Benares.—In all the holy city of Benares the most sacred spot to the devout Hindu is this well on the Manikarnika Ghat. Massive piers running out into the river enclose the great flight of stone steps up and down which the faithful jostle and thrust from the river's edge to the topmost platform. The temple of Tarkeshwara stands at the head of the steps, and behind this is the sacred well. It is a railed-in tank thirty-five feet square, with stone steps leading down from every side to the water. Every pilgrim who visits Benares, and their name is legion, flings his tribute into this well—offerings from the Bel tree, flowers, milk, sandalwood, sweetmeats and the sacred water of Ganges, are all cast by pious hands into this foul-smelling tank already choked with rotting and putrid gifts. The water of this pool is never renewed except by the rain from heaven; evaporation slowly removes the water and leaves the stagnant filth. Such are the extraordinary results of piety in certain parts of the world!



From Stereo. copyright [*Underwood & Underwood.*

THE SACRED WELL OF VISHNU, BENARES

The well on the Manikarnika Ghat is one of the most sacred spots in all Benares. Countless pilgrims visit it to bathe in its foul and stagnant waters. The temple of Tarkeshwara stands at the head of the ghat, which leads down to the river Ganges.

Here are the actual words in which the Rev. Arthur Parker describes this scene: "Within a railed enclosure is a square tank, having on each of its sides a staircase of stone leading down to a pool of stagnant water, fetid with the rotting flowers which have been cast into it as offerings. In this the visitor sees the most sacred spot in Benares. To bathe in that filthy water means to the Hindu to obtain deliverance from all penalties, even for sins of the deepest dye. The liar, the thief and the murderer may here wash and be clean, in a spot which the foot of the purest Christian would instantly defile. The visitor to this spot is at the very heart of Hinduism. Around him surges a motley throng of pilgrims and devotees of all kinds; here is the naked yogi, with matted locks and smeared from head to foot with sacred ashes, and side by side with him the gentle sanyasi, as clean as the other is foul, carrying in one hand his gourd of sacred water and in the other his bamboo wand which never touches the ground. Nuzzling about among the crowd, foraging for sacred flowers and leaves and dropped rice, are sacred bulls."



Photo by] [*Rt. Lent, Bangkok.*

THE BRONZE BUDDHA IN THE RUINS OF AYUTHIA.

Time and the elements have corroded the bronze, but the benign dignity of the colossal features remains to bear witness to the skill of the artist who dealt with such massive and unwieldy materials.



Photo by] [*Rt. Lenz, Bangkok.*

AMONG THE RUINS OF AYUTHIA.

In the heart of the ruins, amidst crumbling masonry, broken sculptures and spires half buried in vegetation, a huge bronze Buddha still keeps watch.

Every pilgrim is absorbed in a passionate endeavour to reach the sacred well, to cast therein his crumpled wreath, all crushed in the crowd, his handful of dirty rice, or his little potful of Ganges water that gets more than half spilt as he struggles through the press.

There are many legends connecting the good lord Vishnu with this well. One of them declares him to have dug it out himself with pain and labour at a time of great drought to give drink to his worshippers, and his sacred sweat filled it to the brim with a pearly flood. Between the well and the ghat is the Charana Paduka, a round slab of stone on which upon a pedestal are the imprints of two small feet in the marble. Here it is said the god alighted and marked the spot as holy by the sign of his own footprints.

The Ruins of Ayuthia, Siam.—The great city of Ayuthia was founded by the famous Siamese ruler, Phaya Uthong, in 1351, as the capital of the kingdom which he had widely extended, and whose power he did much to consolidate. He and subsequent monarchs enriched the capital with temples, shrines and pagodas, and filled these with treasures of fabulous price. This rendered the city the El Dorado of invading armies, and the jealous Burmans and Peguans frequently assailed it, attracted by rumours of its vast wealth. In its most prosperous days in the sixteenth century it covered an immense space of ground, three leagues in circumference. Within its walls it contained distinct quarters for foreigners of different nationality—Chinese, Peguans, Malays, Japs and Portuguese. It withstood several sieges from Burmans and others. In 1555 they succeeded in taking it, when Siam was reduced to dependence. But a few years later the national hero, Phra Naret, restored the independence of Siam, subdued Lao and Cambodia, and invaded Pegu, which was utterly overthrown.

But once again Ayuthia fell. In the eighteenth century Siam was weakened by internal

wars and feuds, and the Burman took advantage of this to invade her and reduced Ayuthia, the Magnificent, to ruins.

The city was never rebuilt. The modern city of Bangkok was founded by King Chulalok in 1782, and became the new capital of the realm. Ayuthia is still a city of ruins and splendid memories. The way thither from the modern village of Krung Kao on the banks of the river Menam is through a dense, dark jungle, in which the heat is stifling. And in the silence of the forest jungle, overgrown with rank weeds, flowering creepers, orchids and tropical vegetation, are palace walls, towers, topes, statues and spiral pagodas, all in various stages of decay, and all immersed in a brooding spirit of desolation. The most prominent building of Ayuthia was the pyramidal structure known as the Golden Mount, some four hundred feet high, surmounted by a dome and spire. And above the trees a tall pagoda of the sixteenth century rears a slender, tapering spire that glistens in the sunbeams. The greatest of the relics of Ayuthia's golden past is the immense grey-green bronze image of the sitting Buddha, Amida. It has been well described by Maxwell Summerville: "One would not suppose that the artist, in making so colossal a figure, would have been able to produce and preserve in it the dignity of Deity. Yet those enormous features are expressive of benignity; the tender glance of those great eyes seems to be that of a being tarrying here to bless, yet belonging above; those placid lips mutely console



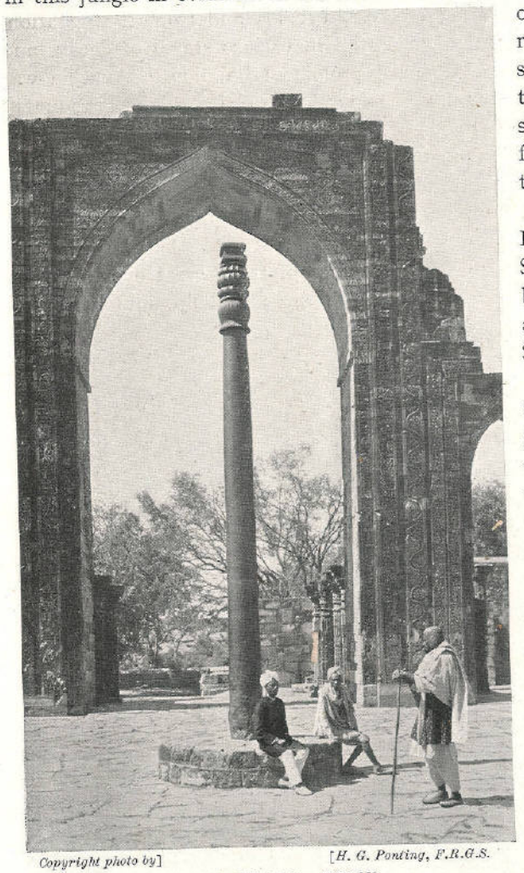
Photo by] [*Rt. Lenz, Bangkok.*

RUINED AYUTHIA.

Ayuthia, the famous capital of Siam, was founded in 1351. After four centuries of brilliant life, during which it contained fabulous wealth, which made it the object of attack from countless invaders, it was almost destroyed by the Burmese in 1767, and has since fallen into complete decay.

those who approach, believing. Time and the elements have corroded the bronze, but the serenity inspired by the sculptor still prevails in that impressive face.

"There is food for thought as we stand in the wilderness and underbrush, brambles and desolation, looking up at the same image that centuries ago was the patron deity and hope of thousands in that metropolis, of which naught else remains save the ruined walls that still rise in this jungle in evidence of the monuments that once graced its avenues. Portions of the walls of the temple in which the image once reigned supreme are standing on four sides, supported by dilapidated pilasters with Corinthian capitals, which were placed there at the suggestion of the Greek colonists who lived and fraternized with the Ayuthians at the time of the construction of the shrine."



Copyright photo by [*H. G. Ponting, F.R.G.S.*

ASOKA'S PILLAR, DELHI.

The oldest cast-iron pillar in the world, dating from the third century B.C., may be seen standing at Delhi. The spread of Buddhism in India dates from the reign of Asoka. He caused the Fourteen Edicts, or moral rules, to be engraved on certain pillars and rocks and set up for the instruction of his people.

Although the Portuguese were the first Europeans to establish relations with the Siamese, in 1511, after the conquest of Malacca by D'Albuquerque, other nations followed, and English traders were known to be in Siam early in the seventeenth century.

Asoka's Pillar, Delhi.—The poignant interest of this plain iron pillar lies in the fact that it is the oldest cast-iron pillar in the world. It astonishes us to-day to learn from this post that when the world was young, in the India of the third century before Christ, an iron pillar could be cast and adorned with inscriptions of a particularly clear type, in characters that are the oldest in form of any yet discovered in India. In spite of their beautiful decision, however, the mediæval Emperor Feroz Shah, who found and took possession of the pillar, placing it in its present position, assembled all the learned of his day, that they might decipher for him the inscriptions, but all in vain. Their secrets lay hid until the patient genius of the late Henry Prinsep, the Oriental scholar, discovered the true key to the characters.

Feroz Shah brought the *Lat*, or column, from Topra, which is on the banks of the Jumna river. He set it up on the top of a lofty platform in the Kotila, which formed the citadel of Firozabad, the city founded by him. The city is a heap of ruins now; its bones and sinews strew the plain outside the walls of modern Delhi. The Kotila still stands fronting the sun, a little way outside the Delhi Gate on the eastern side of the city.

The pillar is ten feet ten inches in circumference where it leaves the platform, to soar straight as an arrow to a height of forty-two feet seven inches, of which four feet is embedded in the masonry.

The real spread of Buddhism in India dates from the reign of Asoka (272–231 B.C.), who ruled



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THE TEMPLE OF "THE FIVE HUNDRED GENII," CANTON.

The temple of "the Five Hundred Genii," or Flowery Forest Monastery, at Canton, is of very early origin. It dates b... and is one of the wealthiest in the city.



Stereo by] [*H. C. White Co.*

"THE FIVE HUNDRED GENII."

These images are seated in two rows on an elevated platform, and the variety of posture, expression and type of feature is worth a close study. There is a legend that the effigy of the Venetian traveller, Marco Polo, is to be found among the "Disciples."

all India north of a line drawn west from Nellore. He is known to us chiefly for his Edicts which he caused to be carved upon rocks and monolithic columns, or lats. There are several "Asoka rocks" and posts known in different parts of India, a notable one being at Allahabad. Henry Prinsep, who deciphered their inscriptions, found them to embody for the most part all the moral rules of Buddhism, the full number of general edicts being fourteen. They forbid the shedding of blood, inculcate obedience to authority and charity, refer to rules of conduct, the appointment of censors of morals, and the creation of such works as hospitals, roads and wells. And they all conclude with pious aspirations for the spread of Buddhism.

The Delhi Lat, besides the Pali inscription of Asoka's Edicts, bears a Nagri inscription of the date 1524 A.D., which was put up after the lat was removed to Delhi. There are two other curious inscriptions, dating from the twelfth century, set above and below the Edicts, which record the victories of Prince Visaladeva, whose kingdom extended at one time from Himadri to Vindhya.

Temple of "Five Hundred Genii," Canton.—This temple is said, in Mr. Bowra's translation of the native history of the province, to have been founded by Bôdhidharama, a Buddhist monk, about 520 A.D. We are all familiar with this Bôdhidharama, for it is he whom we so frequently behold on Chinese cups and saucers ascending the Yangtse river on his frail bamboo raft! The rebuilding of the temple in 1755 was the pious work of the great Chinese Emperor Kien Lung, whose name is familiar to every collector of porcelain. With all its temple buildings, its houses for priests and its lovely gardens, it covers a large tract of ground on the outskirts of Canton. It is also known as the Flowery Forest Monastery, and is one of the wealthiest temples in the city. Very large sums of money are spent by the rich and devout upon certain of the ceremonies here.

There is a fine marble pagoda, presented by the Emperor Kien Lung in the later eighteenth century. On the north side of the quadrangle immediately behind the pagoda is the Hall of "the Five Hundred Genii" or Disciples of Buddha. These richly-gilt images are seated on elevated platforms arranged in aisles. In the centre aisle is a bronze pagoda with bronze images. The variety in the features, expression and posture of the five hundred holy men would repay hours of study.

In his later edition of "Marco Polo" Colonel Yule says that one of the statues in this temple is a portrait of the celebrated Venetian traveller of the fourteenth century.

The Abbot who rules over the little company of shaven, silent, thoughtful-looking monks who have the guardianship of the temple receives visitors with kindly hospitality. His private apartments show an austere plainness and the strictest neatness and uniformity. The floor is of marble; the tables and chairs are all either marble or ebony; while by way of comfort there is a block of polished marble in one corner, and one or two glazed porcelain stools. Texts from the sacred classics adorn the walls. There is an inner court where under huge plantain trees the monks have their tables and seats, and practically spend all their leisure. There is also a lotus pool in the centre, which is a vision of loveliness when the sacred blossoms are in full bloom. Finally, there is the Lo-hang-tang, or Hall of Saints, full of solemn brooding figures. The interior of the inner shrine is very dim and dark and mysterious, and the air is heavy with the smell of incense.

Mount Omi, China.—"Many beautiful descriptions have been written of Mount Omi, that mountain that stands alone in its sacredness," says Mrs. Little, "alone in the far west of China, with an all-round view from its summit, where the beholder stands on the verge of one of the most gigantic precipices in the world, said by Mr. Baber to be a mile deep. But it would be hard to surpass that of Fan Yü-tsz, of the Ming dynasty, who tells how he saw the Wa-Wu, and the snowy mountains 'running athwart like a long city wall,' and India, and the mountains of Karakorum, together with all the barbarous kingdoms, the great Min river, and the rivers of Kiating, the Tung and the Ya; and winds up by saying: 'The advocate and I clapped our palms and cried out: "The grandest view of a lifetime!"'

"And day after day, year after year, all the year round, pilgrims come and prostrate themselves on the different outjutting bastions of the cliffs upon boards laid in the wet grass for their convenience, while they venerate Puhsien, who, they say, came up from India on his elephant and settled here; just as their ancestors probably came, before ever Buddha was, to venerate the Sun God. . . . The men and women of the province come in great numbers: the men with their brows bound with the white Szechuan handkerchief like Dante, and with mouths like

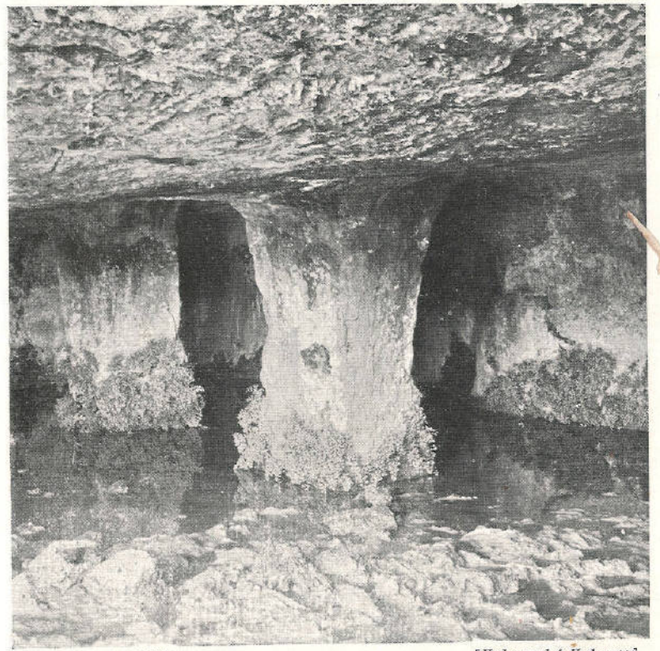


Photo by] [*Mrs. Archibald Little.*

FIRE AND TIGER GODS, MOUNT OMI.

A constant stream of pilgrims climbs up the steep and toilsome paths of this sacred mountain in Western China, and the man-eating tigers that inhabit its inaccessible caves take their toll yearly of the stragglers and the feeble. Here are two of the effigies on the mountain top to whom respect is paid.

the old Greek gods, with rich, regular curves ; the women with their skirts only to their knees, and feet of the natural size, or only slightly deformed, and in each case bound with Indian corn husks the better to contend with the steep stone steps that lead up and down the ten thousand feet of mountain-side. . . . Some of the wild tribes also come, without pigtails, like decent people, but with their hair strangely sticking out in front of their heads, as if they wore their tails in front. And all prostrate themselves and do reverence, as they look over the edge of the great precipice, and there on the mist below see the circular halo of three primary colours, very brilliant, and in its central brightness the shadow of their own head and shoulders ; or, if their heart be such, Puhsien himself riding on his elephant as he came from India more than two thousand years ago. . . . Then we meet a pilgrim who is standing staring at some caves far below with protruding eyes ; and he says : ' There are tigers in there ! ' then stands speechless. But on our laughing, we are told again of six men already eaten this year by tigers." There are many tales told of the tigers in these mountains and of their ruthless attacks on pilgrims ; and so it is customary for the worshippers on Omi to take care to propitiate the spirits of these sinister inhabitants of the sacred mount.



From Stereo copyright] [*Underwood & Underwood.*

ROCK CISTERN, PALESTINE.

The ancient dwellers in Palestine who carved themselves cisterns of water in the living rock have left monuments from Biblical times that endure to this day. This one lies beside an ancient *khan* or inn on the road from Jerusalem to Nazareth.

In a shrine upon the mountain there is an unburied saint—the figure of an old man gilded all over, who sits squatting on an altar. He is said to have been a priest here long ago, and such a true saint that his body would not decay, so he was gilded and set upon an altar. And pilgrims to-day still prostrate themselves before him and burn joss-sticks to his spirit.

The Rock Cisterns of Palestine.—In all Eastern countries the well, or cistern, still continues to play a central part in the daily life of the people, as it once did even in Europe. All Eastern gatherings take place near some well of note. Where civilization is still primitive, it is the water-springs that determine the road the traveller shall take, not the contours of the country ; and in Palestine, morning and evening, the women come to-day with their water-pots to draw from the well, just as they did in the Bible stories. We can still visit the Well of Jacob, dug out by the patriarch himself, where the " Woman of Samaria " came to draw water and receive her great lesson. This well is sunk through the solid rock, reaching down to a depth of seventy-five feet, and is said always to have at least twelve feet of water in it. And the water in such a well is ever cool and pure.

At the entrance to Bethlehem we can see another of these historic and long-lasting rock-hewn cisterns, the Well of David. This well is immensely deep, with two or three narrow openings into



Photo by] [*Rt. Lenz, Bangkok.*

THE WAT CHANG.

The Wat Chang, at Bangkok, lies within an enclosure nineteen acres in extent, with lovely gardens, temples and dwellings for priests The pagoda is one of the most imposing in Siam.



Photo by [*Rt. Lenz, Bangkok.*

THE WAT CHANG.

The pagoda is covered with tiles and porcelain plates. It tapers to a height of 225 feet, its cone-shaped spire being indented with niches in which pieces of faience are hung.

it, and is situated in an untidy yard reached by a narrow passage on the left-hand side as you enter Bethlehem. It is possibly the well "at the gate," for whose water David longed so sorely in the Cave of Adullam.

At Shiloh, beside the picturesque ruins of the "House of God," is yet another of these wells cut out of the solid rock, of considerable size. A likely place for the dance of "the daughters of Shiloh."

At Bethel is a large tank or cistern, some three hundred feet by two hundred feet, into which the water flows at the upper end from a spring, being drained off by a culvert at the lower end. From Bethel a rough road leads along a fine glen, called Robber's Valley, a lonely road threading the wildest and most enchanting scenery. In the northern ravine, up which the path leads, stands the famous "Robber's Fountain," with the remains of a large rock cistern beside it. One of the most interesting of these rock-hewn cisterns is found at Athlit, among some of the finest "Crusader" ruins in Palestine. The walls of the town, the towers and fortress, are fallen into decay, while poor Arab huts are huddled among the heaps of ruin. But the splendid Banqueting Hall still stands where the Crusaders are said to have held their last solemn feast together on the eve of their final departure from Palestine. These are the best preserved of the ruins in Athlit. And through a low doorway close beside it we can get inside an ancient cistern, all cemented within, and having a manhole in the roof. This fine cistern probably supplied the whole town with water, and is capable of holding two hundred and sixty thousand gallons. To give a full list of these historic wells is impossible, but, in conclusion, it may be noted that after leaving Jerusalem, on the road to Nazareth *viâ* Nablus, a ruined *khan*, or inn, is passed, and then not far from Ramah and a little off the main road is another ancient rock-hewn cistern in a state of very good preservation.

The Wat Chang, Bangkok.—This great temple is within an enclosure nineteen acres in extent, full of the most bewitching gardens, and the usual array of temples, shrines, dwellings for the

bonzes, novitiates and higher clerics, a library and a great array of griffins, dwarfs, giants, and fantastic animals, standing about in groups, many of them reflected again on the surface of ornamental pools of water, or guarding the portals of temples and the approaches to shady grottoes. The pagoda is one of the most imposing in Siam; its cemented exterior is covered with tiles, China plates, saucers, etc., of faïence and porcelain. Its graceful lines taper gradually upwards. At a height of two hundred and twenty-five feet from the ground it is crowned by a cone-shaped spire, in whose side are many rows of ornamental niches in which are hung pieces of faïence.

Below this spire are groups of elephants and seated Buddhas, also in faïence. The lines of the groups and the twisted trunks of the elephants have been most skilfully utilized to enhance the architectural beauty of the building. The whole thing is adorned with multitudes of figures, all with extended arms and gestures of admonition and supplication. It is as if the mission of the building were to point the eye heavenward in search of Nirvana, for it is almost without entrance way to the dim interior.

The Great Bell at Peking.—"In some respects this may be called the most remarkable work of art now in China: it is the largest suspended bell in the world," says Mr. Williams of one of Yung-lo's five bells, in his classical survey of the wonders of "The Middle Kingdom."

This great bell is to be found in an obscure lane near Peking, and in a country where the main roads are scarce better than beaten tracks filled with miry holes, the obscure lanes are very rough indeed. About two miles to the north of the city of Peking, passing through a ruined gateway dating from the days of the redoubtable Marco Polo, we find the Ta-chung-sz, or the Great Bell Temple. Here is the deep-voiced giant, one of five immense bells that were cast in the reign and under the personal direction of the



Photo by [*Rt. Lenz, Bangkok.*

THE WAT CHANG.

About the courts are the usual array of colossal monsters and giants, standing in groups or guarding the portals of the temples.

Emperor Yung-lo. This emperor was the third of the Mings or native Chinese dynasty, and ascended the throne in 1403. An exceptionally able administrator, it was he who framed the code of laws which has ever since formed the basis of Chinese legal usage. This bell is presumed to have been cast in 1406. It was not covered by a small temple until many years later, in 1578; and as one looks at it one is struck with the opportunity which was then lost, for had it been housed in some great hall it would have been infinitely more impressive. The bell stands fourteen feet high, including the umbones; it is thirty-four feet in circumference at the rim; its weight is fifty-two tons, whilst the uniform thickness of the metal is nine inches. It is struck by a heavy beam of wood swung against its rim on the outer side, and a square hole in the top prevents its fracture under the heaviest blows. It is covered both on the outside and the inside with myriads of fine Chinese characters, which are extracts from the two great Buddhist classics, the Fah-hwa King and the Ling-yen King. Only one of the emperor's five monster bells was ever hung. Another lies half buried in a neglected spot outside the walls of Peking. This

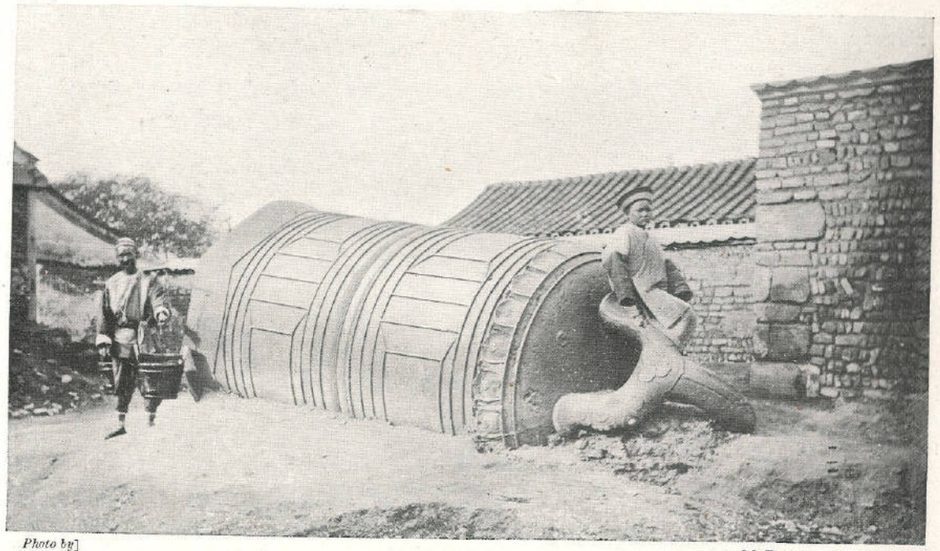


Photo by] [*J. Thomson, Esq., F.R.G.S.*

THE GREAT BELL LYING NEAR PEKING.

This is one of five immense bells that were cast in the reign of Yung-lo, of the Ming Dynasty, in 1406. It weighs fifty-two tons, and is thirty-four feet in circumference at the rim. Only one of the five bells is known to have been hung.

bell is dumb: its great voice has never spoken; the fine characters engraved on it are hidden by a coating of dust. Seeing that it weighs more than fifty tons, the difficulties of removing it from its lowly bed and hanging it in some great temple as it should be, are well-nigh insuperable. But there is something tragic in the sight of that splendid bell lying helpless on its side during the passage of six centuries. Countless generations of boys have hung on its arched rim and clambered up its curving sides, and have grown old and passed away. While the bell has only settled a little deeper in the mud and rubbish of this obscure lane, waiting in dumb patience for the day when it shall be set up to fulfil the beautiful function for which it was brought into being so very long ago.

The Cascade of Kegon-no-taki, Japan.—There is no more entrancing view in all Japan than this delicious waterfall, at whatever time of the year it may be visited. The river Daiya issues from the Lake of Chuzenji, a benign and quiet stream, though liable at certain seasons to sudden swellings and floods, when it will fly impetuously between its tree-clad banks. But at the



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE BEAUTIFUL WATERFALL OF "KEGON-NO-TAKI," AT CHUZENJI, JAPAN.

The lovely fall of "Kegon-no-taki" is one of the finest in Japan. It drops from a height of over 250 feet, and is a favourite place for Japanese suicides



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE TEMPLE ON MOUNT MINOBU, JAPAN

The Buddhist monastery on Mount Minobu was founded by the saint, Nicheren, who retired to this beautiful spot to meditate. Much of it was destroyed by fire in 1875, but new buildings and temples have been erected which are fine specimens of modern Japanese temple architecture. The illustration shows the exterior of the Founder's Temple.

cascade known as Kegon-no-taki the river suddenly pours out from the overhanging edge of a great precipice, and roars down in a racing mass of tortured water on to the rocks two hundred and fifty feet below.

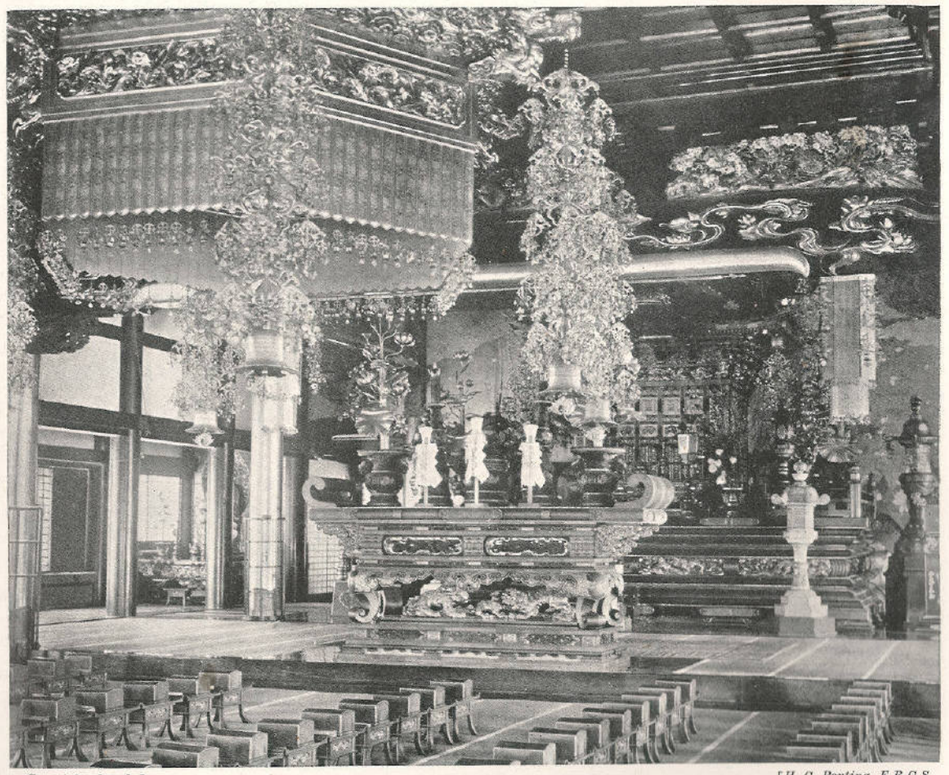
There is a little picturesque tea-house from whose garden paths the finest views of the fall are obtained. Roughly it may be said that the waterfall has three moods. In the early part of the year, when the river is almost dry, it murmurs as gently as a dove among its bare, upstanding rocks, and pours like a soft veil of silver lace over the lip of the cascade and dances down into the gorge below. At that season the hills are clothed with maple-trees still wearing their spring dress of pallid green, and the fertile valley spread below looks soft and very far away. But after the summer rains the Daiya races between its banks, and a huge volume of water leaps far, far out over the cliff edge in a glittering sheet of green and white, and the sound of its thunderous descent can be heard long before you turn the corner of the tea-house and the grand sight breaks on your eyes. Then the maples flaunt their crimson mantles, and the whole valley is steeped in colour, and the gorgeous beauty and power of the scene is such as almost to take away your breath. With the coming of winter there is the third and final change. Snow falls constantly until the ground is covered to a depth of several feet; the temperature falls lower and lower; the lake, from whence comes all this water, gradually freezes over, until at last Kegon-no-taki is nothing but a mass of superb icicles, which in the sunshine gleam and flash like a million swords.

Mount Minobu, Japan.—The Buddhist Monastery of Kuenji, on Mount Minobu, was founded by the Japanese saint, Nicheren, who is still held in the greatest reverence throughout the country.

His followers are not very numerous, but owing to their controversial and uncompromising attitude towards other Buddhist sects, the disciples of the "fiery Nicheren" have been called the Jesuits of Buddhism. Their doctrine is a complete pantheism; as Dr. Griffiths puts it, Nicheren "was destined to bring religion down, not only to men, but even down to the beasts and the mud." The headquarters of this peculiar sect is the monastery on Mount Minobu, and thither the faithful yearly make their pilgrimage. Much of the monastery was destroyed by a great fire in 1875, but new buildings and temples have been erected to replace the old, and all these later editions are fine specimens of modern Japanese temple architecture.

As is usual in Japan, on entering the gardens and crossing a courtyard, the cluster of temples is approached by one of two broad and long flights of stone steps. At the top is the large Founder's Temple, and thence galleries lead to the Temple of the True Bones, to the Temple of the Posthumous Tablet, to the pilgrims' dormitories, the reception rooms, the Archbishop's dwelling, and the various other offices of the sect. Most of the buildings, as well as their ornamentation, look fresh and brilliant, in great contrast to many other temples in Japan, where great age has tarnished the gilding and subdued all the colours.

The chief treasure of Minobu is the Temple of the True Bones, where sacred relics of the great founder of the sect are preserved. The exterior of this small octagonal building is unpretentious,



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

INTERIOR OF THE FOUNDER'S TEMPLE, MOUNT MINOBU.

This is a blaze of colour and gold, and is the most beautiful interior in the whole of Japan. The central altar, which is 24 feet by 15 feet, is of scarlet lacquer decorated with gilded figures. Notice the wealth of ornament on the hanging bells, which is said to be worth £30,000.



Photo by [*E. G. Wood.*

THE HIRAN MINAR, OR DEER TOWER.

This tower was raised by the great Moghul Emperor Akbar over the grave of his favourite elephant. Its sides are studded with elephant tusks of stone From the lantern he used to shoot the deer and other game driven down to him out of the neighbouring forest.

but within is a blaze of colour and a glitter with gold. All round the walls on a golden ground are full-sized white lotus blossoms, the emblem of purity and of the Buddhist faith. The actual shrine is of gold lacquer in the shape of a two-storied pagoda about two feet high. In it reposes a casket of gold and precious stones, in the form of a tiny octagonal pagoda, which rests on a carved lotus flower of a translucent jade. Within lie the bones, or a portion of them, of Nicheren, the holy founder. One of the pillars of this little shrine bears a date corresponding to A.D. 1580.

The Founder's Temple is the largest and most imposing of the buildings. Its centre hall is seventy-five feet by one hundred and twenty feet. The high altar is twenty-four feet long. The pillars and framework of the walls are all of brilliant black and red lacquer. The altar is partitioned off by gilded pillars, and is itself lacquered scarlet and decorated with gilt lions and peonies. In the shrine is a life-size figure of Nicheren. The whole is ablaze with colour, and has an effect of unsurpassed richness and brilliance.

A feature of the ceremonial here is the insistent beating of drums and gongs, whilst the invocation of the sect "Namu Myōhō Renge Kyō" ("Hail to the Doctrine of the Lotus and the Wonderful Law") is repeated in a constant and monotonous iteration by all the worshippers.

The Hiran Minar.—The strange tower known as the Hiran Minar (Deer Tower) has a curious history. It was built by the great Moghul Emperor Akbar over the grave of his favourite elephant. Twenty-two miles from Agra, across the cotton-fields, lies Fatehpur-Sikri, the deserted city built by the emperor. It remains just as it was left, in a wonderful state of preservation. Akbar built it in 1570, and after a few years of brilliant life the palace and the town that had grown up about its walls were mysteriously abandoned. Near to Fatehpur-Sikri stands the tower Akbar erected over the dead favourite who had no doubt borne him gallantly on its broad shoulders many a time in the chase, and had doubtless by its courage, docility and perfect training preserved his life in the jungle when out after the tigers that were then more plentiful in Indian forests than they are to-day. So after its death he is said to have conceived the idea of erecting a tower of stone among the woods, from whose summit, as from the howdah on the elephant's back, he could shoot game. Hence its name, Deer Tower, for deer and antelope and the shy creatures of the forest were driven past the tower below the royal sportsman, as grouse are driven across the butts on a Scotch



Painted by F. Seth. *Photo by permission of the Earl of Ronaldshay.*

AMIDA, THE GIANT DAIBUTSU.

The most famous representation of AMIDA is to be found at Kamakura, Japan. The boss in the h[illegible] which is of solid silver, weighs thirty pounds, and the eyes are of pure gold.



Photo by] [*Newton & Co.*

ON THE ROAD TO A FAMOUS TOMB.

The Tomb of I'timad-ud-deulah is one of the most remarkable edifices in India. It is situated at Agra, and is built of marble of the purest white. The above shows the approach to the mausoleum.

moor. There is a sort of lantern on the top from which the emperor could shoot, fully concealed from sight. To the north and west the country was all under water in Akbar's day, and from the shores of this large lake no doubt the wild-fowl were also driven down to the tower.

It is a circular tower, some seventy feet high, studded with protruding elephants' tusks of stone.

The Sacred Tank, Ulwar.—This is one of the most lovely spots in India. The sheet of artificial water lies at the foot of a splendid tomb, the cenotaph of Bakhtawa Singh, a native chief who died in 1815. The city of Ulwar is beautifully situated on rising ground, and is dominated by a fort which towers high above the winding white-washed streets, perched on a peak of rock nine hundred feet high. It is the capital of the Rajput State of Ulwar, and as things go in India, is comparatively modern, having been founded in 1771.

The palace is a group of detached buildings in a variety of styles, and is only divided from the foot of the mountain range by the splendid Tank referred to above. The Shish Mahal and the latticed windows of the zenana actually overlook it; and the precincts are deemed so sacred that no visitor may approach either the Tank or the cenotaph of Bakhtawa Singh without taking off his shoes.

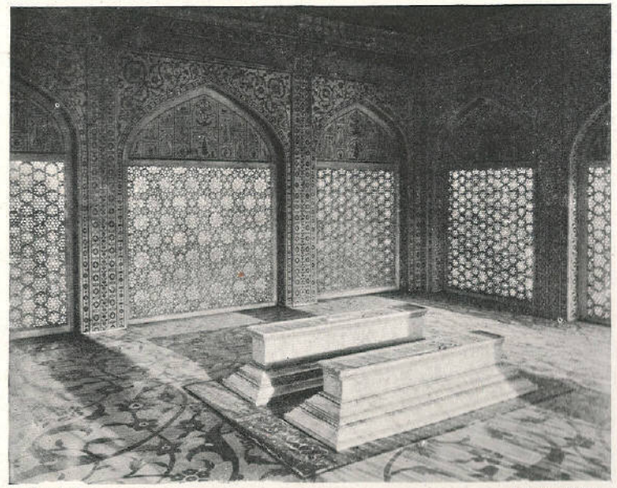


Photo by] [*Newton & Co.*

THE YELLOW MARBLE TOMBS.

The chamber divisions of the interior of this tomb are of wonderful marble lattice-work. In the above photo the two actual tombs may be seen surrounded by these exquisitely-worked screens.

CHAPTER IV.

By ALAN H. BURGOYNE, M.P., F.R.G.S.

The Tomb of I'timad-ud-daulah.—Despite the claims of a thousand cities of India to historic distinction, there is not one, perhaps, more rich in varied interest both to the student and the traveller than Agra. Apart from the temples and other oriental edifices naturally associated with the country, there are within the town, or dotted about its immediate environments, a series of tombs, the fame of which has not a little to do with the popularity of Agra as a tourist resort. Pride of place is given to the Taj Mahal (" The Crown Lady's Tomb "), erected in 1640 by the Emperor Shah Jehan, but a close rival to it both in beauty and in interest must rank the mausoleum of I'timad-ud-daulah. This tomb, which is situated on the eastern bank of the Jumna opposite the town, was erected to one Ghiyas Beg, a noted Persian refugee, grandfather of the lady of the Taj, who became high treasurer to Jehangir. It stands in an extensive, well-tended garden, and is raised from the ground about four feet upon a base measuring one hundred and fifty feet square. The mausoleum has a breadth and depth of sixty-nine feet, and is fitted with a flat roof, at each of the four corners of which rises an octagonal tower forty feet in height from platform to pinnacle. From the centre of the roof is built a small pavilion, twenty-five feet square, with triple latticed windows, lavishly decorated, on each side. It has a curved, oriental roof and wide, overhanging eaves.

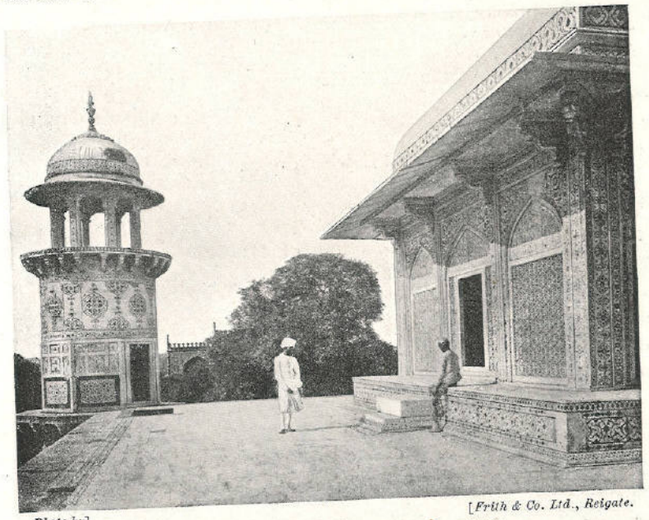
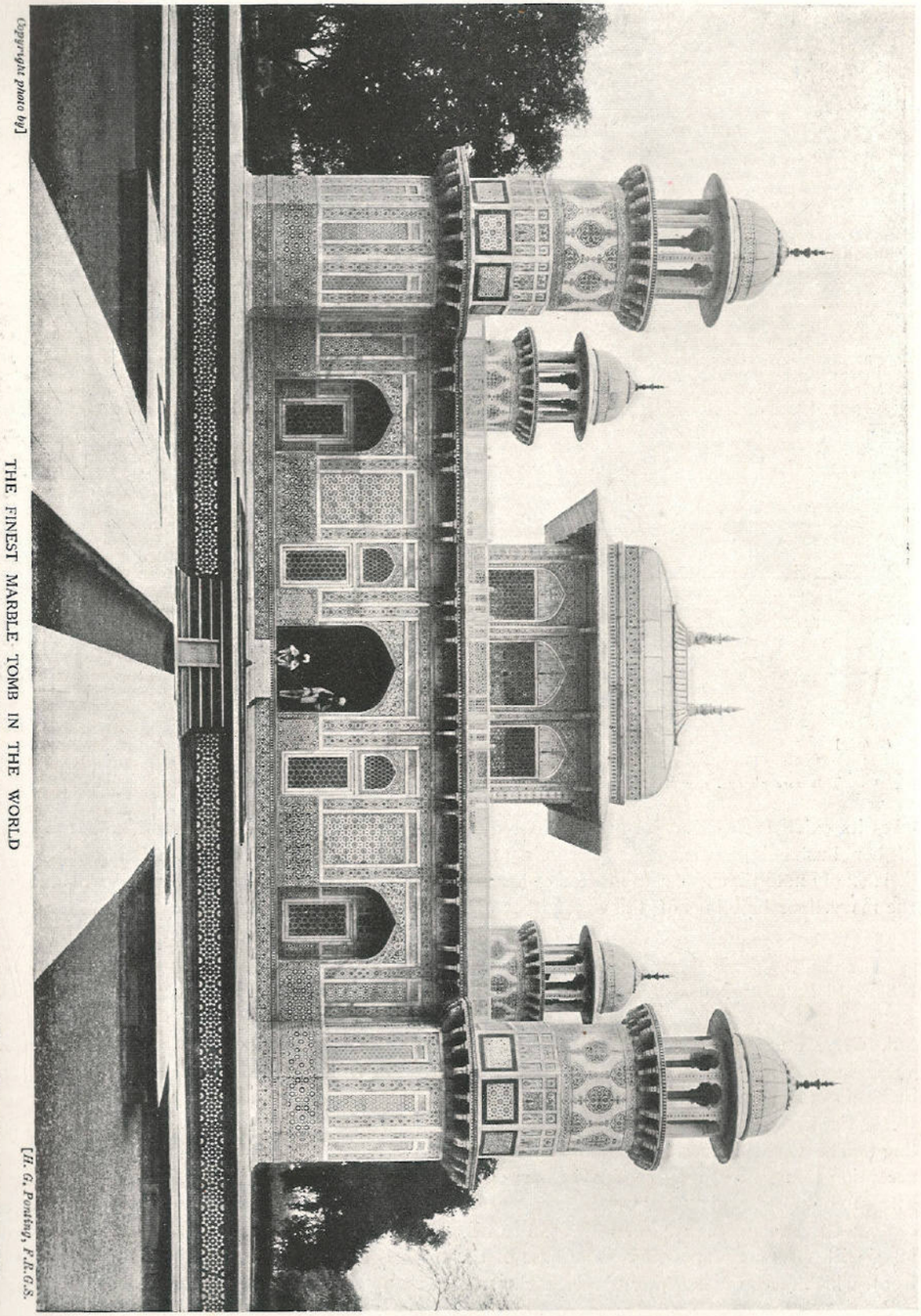


Photo by] *[Frith & Co. Ltd., Reigate.*

ONE OF THE FOUR CORNER TOWERS.

At each corner of the main building is a beautiful octagonal tower. Copies of the tombs are placed directly over them in the roof pavilion—a duplication of oriental reverence common in the East

The lower building is divided up into rooms around a central chamber twenty-two feet square, in which, side by side, are the tombs of I'timad-ud-daulah and his wife. These are made of beautifully chiselled yellow marble, and are strikingly effective in the simplicity which contrasts in strange fashion with the ornate decoration and gilding of the walls. The side rooms are devoted to a display of paintings of flower-vases and fruit, the intervening passage walls being made of exquisite marble lattice-work, which allows plenty of light to reach the exhibits. In the pavilion on the roof are facsimiles of the two tombs in the central room below. Perhaps the special feature of this tomb is the show of marble; it has been claimed, and with justice, that the inlay and mosaic work to be found in this building, though it dates from 1628 and is, therefore, the earliest known in India, is, nevertheless, the most perfect and pleasing specimen in the country. Much of the interior and the whole of the exterior is of glistening white marble. The tomb of I'timad-ud-daulah



[Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE FINEST MARBLE TOMB IN THE WORLD

Erected to I'timad-ud-daulah, a refugee Persian (Ghiyas Beg), by his daughter, who, from an Eastern harem, made her way to a throne. The inlay marble, dating from 1628, is the earliest known in India

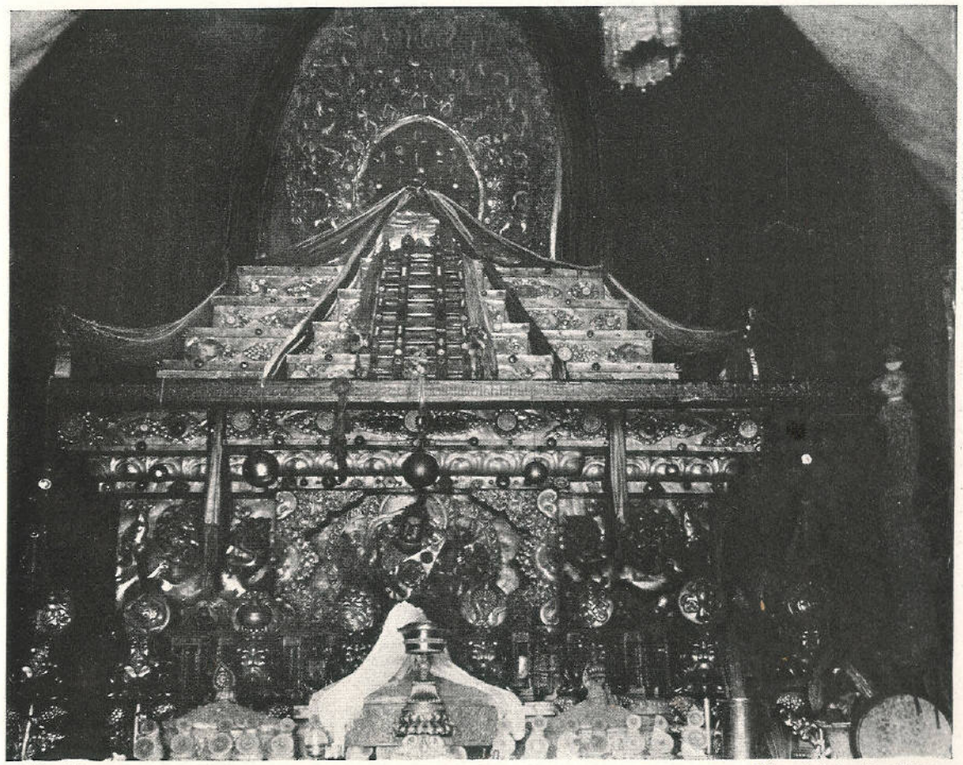


Photo by] *[Capt. C. G. Rawling, C.I.E.*

TOMB OF THE FIRST TASHI LAMA, THIBET

This sarcophagus, one of five in the Tashi Lhumpo Lamasery, is of pure gold, studded with turquoises and precious stones.

owes its existence to Nur Jehan, daughter of Ghiyas Beg, who also designed and built the tomb of her husband, the Emperor Jehangir, at Shah Dara, about six miles from Lahore. It is of melancholy note that whilst the tombs of her father and husband are both well tended and amongst the marvellous buildings of the world, that erected to Nur Jehan herself, also at Shah Dara, was never completed and is now nearly in ruins.

The Tomb of the First Tashi Lama.—Close to Shigatse, Thibet, the head-quarters of the Tashi Lama, is to be found the most beautiful lamasery in the country. It is called Tashi Lhumpo and consists of numerous temples and dwelling-houses built down the slopes of a rocky hill. Here four thousand five hundred lamas spend their lives and keep guard over their most valuable possession—the five golden tombs of the former Tashi Lamas. Though many of the buildings of this monastery are two and three stories in height, the gilded roofs of these magnificent tombs rise high above all the structures around. Describing them after a visit, Captain C. G. Rawling ("The Great Plateau") says: "Externally and internally they were very similar, with the exception that that of the first Tashi Lama was perhaps the most beautiful and lavishly decorated. The sarcophagus, which has a width, depth and height of about twenty-five feet, stands in the centre of the room, the roof of which is of Chinese design and heavily gilded, closely painted and hung with silks and tapestries. The base of the tomb is square, the back perpendicular, and the front, which faces the doorway, slopes backwards, rising in tiers until the summit of the tomb fades away in the darkness. The sarcophagus itself is of gold, covered with beautiful designs of ornamental work, and studded with turquoises and precious stones. The turquoises appear to be all picked stones, arranged in patterns, and in such profusion as to cover every available spot, including the polished concrete of the floor. Along the ridges at the side of the tomb, stand exquisite old china vases and ancient *cloisonné* ware, whilst golden bowls, each holding a lighted taper, and vases and cups of the same material, are placed along the front of the base of the tomb. At the summit and situated in a niche, sits a figure of the dead Tashi Lama, with pearls hanging in festoons from above and around the neck." The ornaments forbidden him during life decorate his image after death. A feature almost as striking as the richness and quality of the precious stones used in the ornamentation of this tomb is the presence, suspended from a gilded rail, of five coloured glass toys of the kind sold in thousands in this country for decorating Christmas-trees. It is of interest to note that, despite this tangible wealth (and the value of the jewels attached to the tombs is perfectly well known), the lamas themselves live in a state of wretched poverty and dirt. The writer has visited many Mongol and Chinese monasteries and never yet has found one that appeared sanitary, cared for, or habitable. In spite of these conditions, so detrimental to health, the monks and lamas live in numberless cases to a ripe old age.

Next to the Delai Lama, whose temporal seat is Lhasa, and whose sanctity is such that it is believed that anyone (unless belonging to the highest nobility) who casts his eyes upon his sacred features will promptly lose his sight, the Tashi Lama is head of all the Buddhist faith, to which, it is said, one-third of the world owes allegiance. The Tashi Lamas are longer lived than the Delai Lamas, despite the secluded and sedentary life that they are forced to lead; this may, perhaps, be due partly to the distance at which they live from the constant intrigues of Lhasa. To these intrigues many an early death may safely be ascribed. The present Tashi Lama is about thirty years of age; he is described by those who have met him as gentle, intelligent, fair in complexion, and, taken as a whole, possessed of a most pleasing personality.

The Active Crater of Aso-san.—In Part I. of this work appeared a remarkable view of the extinct crater of Aso-san, the largest volcano in the world. We are here able to illustrate the active crater, at all times a roaring



From Stereo copyright] *[Underwood & Underwood.*

THE ACTIVE CRATER OF ASO-SAN.

Aso-san is the world's mightiest volcano: its main crater, ten miles by fourteen in extent, is, however, extinct. This is a view of the active vent



Stereograph by] [*H. C. White Co., London.*

A GLIMPSE OF INFERNO.

One slip on the treacherous edge of a volcano's crater would precipitate the watcher many hundred feet down into a lake of molten lava.

cauldron of incandescent matter. But for this vent, which is situated on the western side of the mountain, the position of the many villages within the huge, fourteen-mile quiescent crater would be full of danger. Eruptions of Aso-san go back to the earliest days of Japanese history, the most notable in recent times having taken place in the years 1884, 1889 and 1894. During the first of these the dust and ashes ejected hung suspended in the air in such quantities that even as far as Kumamoto, thirty miles away, the darkness was so great that for three days artificial light was everywhere necessary. The 1894 outbreak altered the configuration of the inner crater, besides causing great rifts in the outer walls. It is on record that the ashes from this eruption fell continuously until 1897, so much so that garments left out of doors were destroyed and crops withered. There are five peaks to the crater wall of Aso-san: namely, Kijima-dake, Eboshi-dake, Naka-no-take, Taka-dake, and the loftiest, Neko-dake; this has a height of five thousand six hundred and thirty feet. Aso-san is not, therefore, remarkable for elevation. It is situated in the southern island of Kyushu. According to popular tradition, the whole inner crater was, in years gone by, a great lake; one day the god of the mountain, seeing to what poor use the sheet of water was being put, kicked a breach in the containing wall and let the waters out, leaving the land thereafter fit for cultivation. The break to which this story refers is on the Kumamoto side, and through it runs the Shirakawa river.

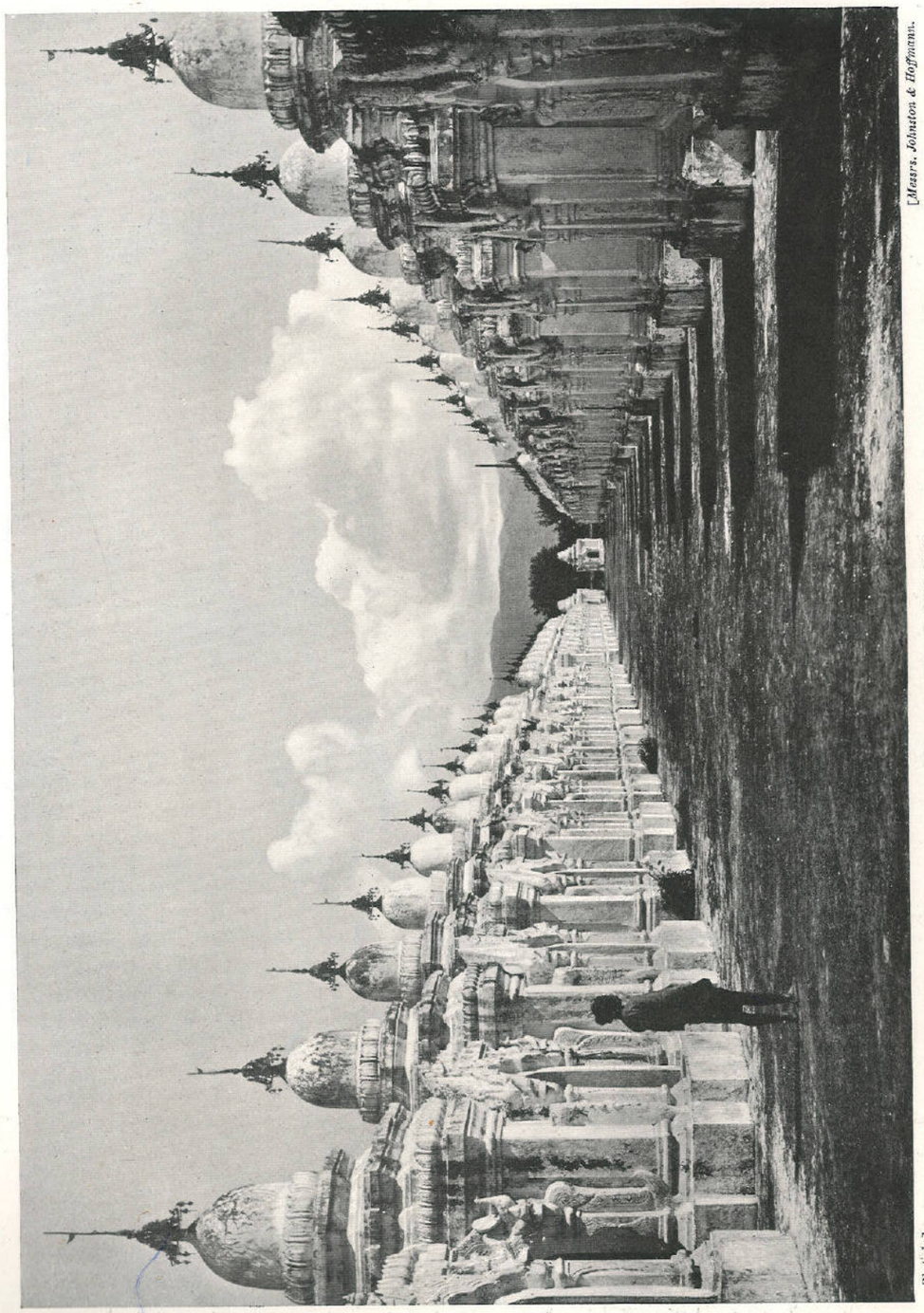
Pine-tree at the Kinkakuji Temple, Kyoto.—Japan is the true home of the pine-tree, nearly every species growing in this land of botanical contradictions with equal strength. It does not appear strange, therefore, that the national bent for training plants in directions not intended by Nature should have extended to the pine. The picture given here represents a most famous specimen, and it is hard to realize that this native sampan, or boat, has been developed from but a single root. It is situated in the Kinkakuji Temple, Kyoto, and is said by tradition (frankly untrustworthy in this case) to date back to 1397, when Ashikaga Yoshimitsu, having resigned from the Shogunate, built himself a palace to serve as a retreat. Of this palace nothing remains but a pavilion three stories high and measuring thirty-three feet by twenty-four feet, in which are a number of unimportant statuettes of Amida, Kwannon and Seishi, by the well-known carver, Unkei. Hence, not a few travellers entirely ignore Kinkakuji and its tree. The pine-tree, now so curiously shaped, was, according to the most reliable data, planted about two centuries ago, and



From stereo copyright] [*Underwood & Underwood*

A BOTANICAL WONDER OF KYOTO, JAPAN.

The above tree, fashioned in the shape of a boat, springs from a single stem. It is already over 200 years old



[Messrs. Johnston & Hoffmann.

AN AVENUE OF PAGODAS.

The Kuthodaw, Mandalay, is a collection of 729 pagodas, each containing a stone whereon are written verses from the holy books of Buddhism.

Photo by]

had not reached many years of age before a religious old monk conceived the idea of training it in the form it possesses. At his death, another monk took on the work as a pious duty, and so, from generation to generation, the tree has developed, and, having in view its robustness at the present time and the incomparable skill of the Japanese in these matters, it seems not improbable that in yet another century it will be flourishing as healthy as it is to-day.

The Kuthodaw, or Four Hundred and Fifty Pagodas, Mandalay.—To the north-east of Fort Dufferin, and at the foot of Mandalay Hill, there is, in the city of that name, a remarkable group of miniature pagodas. They are described both by the natives and Europeans as numbering four hundred and fifty, though, in fact, there are seven hundred and twenty-nine, and they owe their existence to a religious uncle of King Theebaw. This worthy man was desirous of recording in a manner that time could not affect the words contained in the holy books of Buddhism. To this end he summoned a concourse of the most learned priests, and instructed them to prepare the purest version of the commandments for transcription on to stones. These stones are all identical

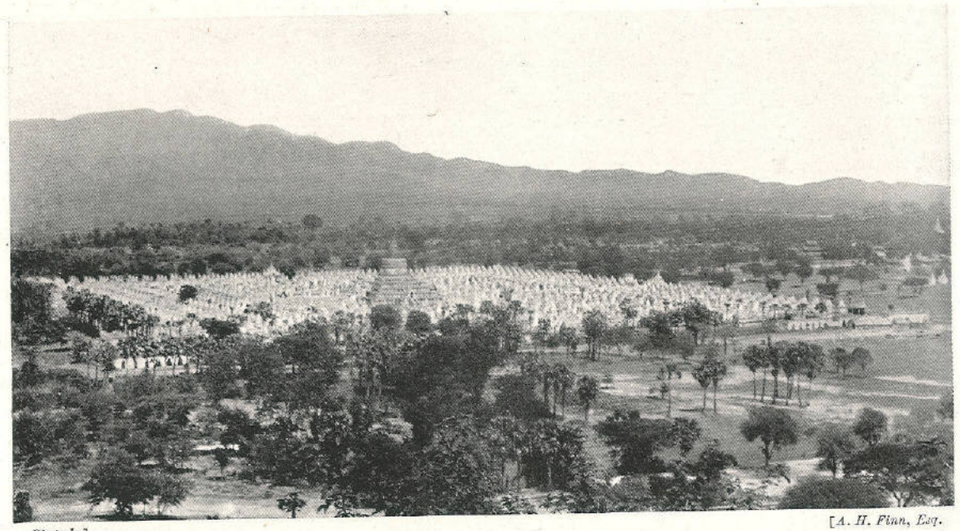


Photo by] [A. H. Finn, Esq.

THE KUTHODAW, OR THE 450 PAGODAS.

Being, in fact, 729! These were erected by an uncle of King Theebaw, who, it is not generally known, is still alive. They fill a space approximately half a mile square.

in pattern, and on the completion of the task the royal enthusiast set them up row on row in parallel lines within a space approximately half a mile square. Over each stone a small domed building was erected to preserve the writing from the weather, and the whole surrounded by a high wall fitted with an ornamental gate in the centre of each side. The writing on the slabs is executed in the Pali language, but transcribed in Burmese characters. Of the inscriptions, one hundred and eleven stones contain Vini or Canon Law, two hundred and eight have Ab-bhi-Dhamma-pitaka cut into them, and the remaining four hundred and eight stones contain Sutta Law or Nike. In the m dst of the smaller buildings is a much larger and more ornate structure, with a gi'ded dome, where prayer may be offered by devotees who visit this strange place.

The Throne, Peking.—There are several throne-rooms situated in the Forbidden City, Peking, each having a distinctive appellation and use. Thus, T'ai-ho-tien, "Throne Room of Supreme Concord," is set aside for certain solemn occasions and ceremonies, notably, the keeping of the New Year fête. The Tchong-ho-tien, or "Throne Room of Comparative Agreement," is where

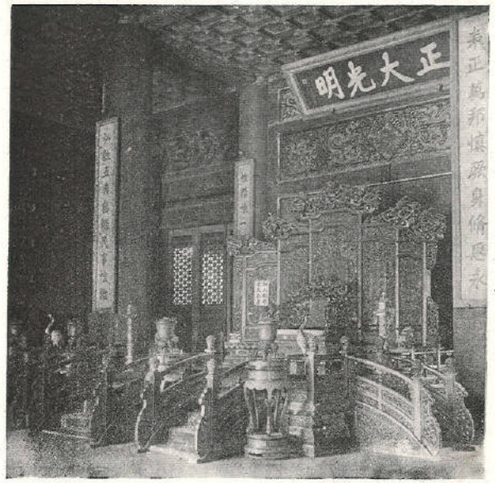
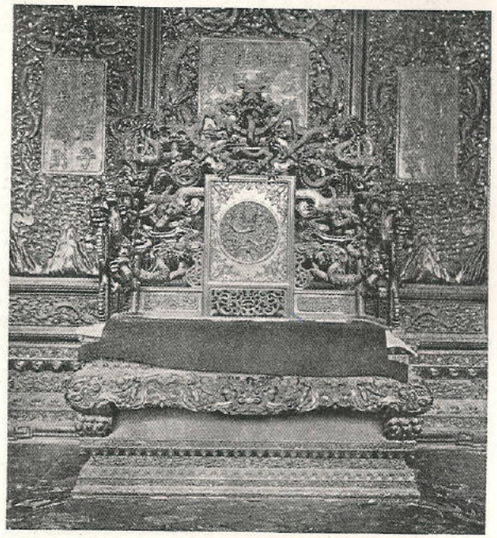


Photo by [*The Keystone View Co.*

THE ROYAL THRONE ROOM, PEKING.

There are several Throne Rooms in the Forbidden City. This is the most notable and in it are kept the Royal Seals.

presents of grain and comestibles for sacrificial purposes are handed to the Emperor. In the Pao-ho-tien, "Throne Room of Assured Concord," the examination for candidates for the Han-lin academical honours are now held. Finally, after passing through the huge hall where imperial audiences are granted, the Kiao-t'ai-tien, "Throne Room of Sublime Union," is reached. Here royal marriages are celebrated and the imperial seals kept. The throne itself, backed by a wonderful gold screen, is raised upon a platform some three feet in height, and approached by three short stairways from the front and a further similar flight of steps at each side. The legs are very short—merely a few inches in length—and so, to give dignity to the occupant, the actual seat, with its stumpy gilt legs, is raised to a comfortable height on a plain carved daïs. Few Europeans had been privileged to view this throne prior to the Chinese insurrection in the first year of this century. On August 28th, 1900, subsequent to the relief of the legations, General Linevitch marched an international division of soldiers, drawn from the British, American, Japanese, German, French, Austrian and Russian relief columns, through the Forbidden City to signify that, owing to the outbreak, the secrecy of the past could no longer be respected. The first time the Ministers of foreign Powers resident in Peking were allowed an audience of the Emperor within the Forbidden City was in 1895. The palace and gardens, with the many interesting outbuildings and the picturesque lakes, are now open to all comers.



Stereograph by] [*H. C. White Co., London.*

THE THRONE, PEKING.

Probably the most valuable seat in the world, being ornate with gold and precious metals

Mount Everest.—It is a curious commentary on the wonderful view we give of Mount Everest that, had there been as free access to Thibet as to every other inhabited country of the earth, this giant peak would not have remained so long an unconsidered factor as was the case. For only from Thibet can a clear view of Everest be obtained; from nowhere in India is it visible except as a point showing not too clearly over the immense shoulders of other and nearer ranges of giant mountains. The traveller who would look on this peak is directed to Darjeeling, whence, having ridden six miles to Tiger Hill, a view of it may, weather permitting, be obtained, but at a distance of at least one hundred and twenty miles. From this vantage-point it is quite overshadowed by Kinchinjunga, a mere forty-five miles away and twenty-eight thousand one



Photo by] [*Vittorio Sella.*

MOUNT EVEREST.

Mount Everest is 29,002 feet above sea-level. It has only been known sixty years, and was, even then, discovered by an accident.



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE STONE LANTERNS OF NARA, JAPAN.

Emblems of respect for the dead, these lanterns are erected along the approaches to temples to light the departed souls either in their new sphere or on their return to their earthly haunts

hundred and fifty-six feet high. Everest just tops the twenty-nine thousand, being twenty-nine thousand and two feet The manner of its discovery about sixty years ago is quite worth narrating.

The custom of the department charged with measuring these huge mountains was to choose certain known altitudes separated by calculated distances and triangulate with the various visible snow peaks. Results were worked out at leisure—almost haphazard; when a measurement one day surpassed anything so far attained the excitement may well be imagined. The Surveyor-General of India most noted for his work in our Oriental Empire was named Everest; to do him honour, the newly-discovered mountain was called after him, and Mount Everest it has remained. It is related that, not entirely satisfied with the name, a Captain Wood was dispatched in 1903 to Katmandu to find out whether the Nepalese had given the peak a name. But these folk had never considered it as worthy of particular note, owing to its inaccessible position. It was not until the British Mission opened up freer communication with Thibet that the full beauty of the mountain could be appreciated and its immense altitude properly ascertained. From the tracks taken by the various parties that have penetrated the Great Plateau of Asia many a good view of Mount Everest has been obtained at no greater distance than forty to fifty miles. One traveller who saw it under exceptional circumstances wrote: "It is difficult to give an idea of its stupendous height, its dazzling whiteness and overpowering size, for there is nothing in the world to compare it with."

The Stone Lanterns of Nara, Japan.—The lantern plays a very considerable *rôle* in the life of the Japanese, though the advent of European ideas has largely negatived their significance. Thus there are Bon Matsuri, or Feast of Lantern festivals, in many of the chief towns, which

have for their *raison d'être* the lighting up for departed souls of those haunts they most cherished during their lifetime. Outside all temples—and their name is legion—will be found a row of stone lanterns, sometimes many rows of them. These have been presented at various dates in history by devout followers of the faith to which the temples are dedicated, either to light the givers on their way to the hereafter, to perform that office for a revered relation, or to illume the world of worship for the soul that never dies. Whatever be the reason, the result is peculiarly picturesque. The illustration given shows a few of the lanterns stretching through Nara Park on the road to the Kasuga-no-Miya Temple. This temple was founded in A.D. 767 and is dedicated to the ancestor of the Fujiwara family, the Shinto god Ama-no-Koyane, to his wife and to certain mythical heroes dear to the minds of the Japanese people. It holds a great festival every year on December 17th, during which the lanterns, all illuminated, take an important part. Though of one general design, these lanterns differ very considerably in detailed conception. Whilst some are purely ornamental, their lighting capacity being almost neglected, others are well hollowed out and fitted with transparent paper windows to protect the little oil lamps when alight from the action of the winds. One of these latter is seen to the right hand of the photograph. The park in which these lanterns are situated is full of tame deer, to feed which the attendants at the gate sell wheaten biscuits to visitors desiring them. Each year their horns are cut lest, during the rutting season, they should attack and hurt any of the crowds that daily walk through the park. Having once purchased and distributed these biscuits, the gentle deer refuse to leave you, and the writer recalls his experience when for half a mile or so he walked along surrounded



Photo by] *[N. P. Edwards.*

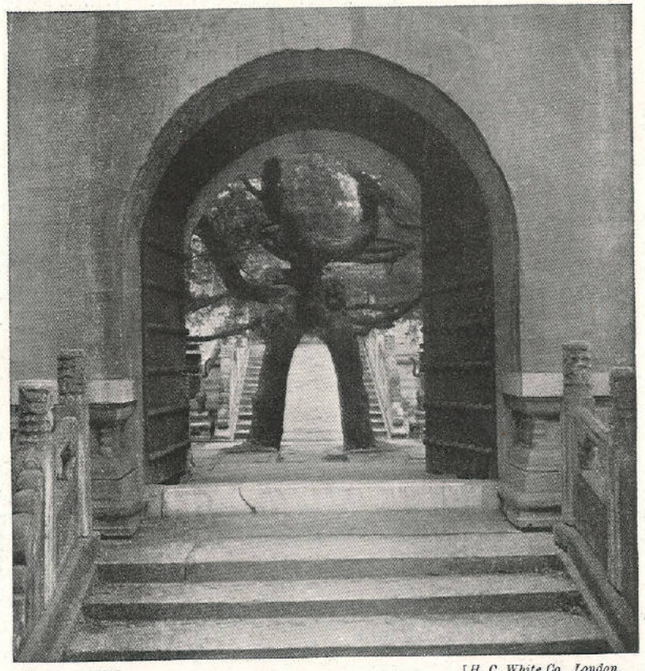
A PARSEE TOWER OF SILENCE, BOMBAY.

Erected by Sir Jamsetjee Jeejeebhoy for the disposal of the bodies of dead Parsees. The corpses are placed naked within the Tower and devoured by the hordes of vultures always in attendance

by them, pushing their noses into his pockets, rubbing their heads against his coat in their nearly human demands for a delicacy they greatly appreciate.

Parsee Tower of Silence, Bombay.—On the western side of Back Bay, Bombay, is Malabar Hill, whereon have been erected five huge Towers of Silence, the burial places of the Parsee sect. The Parsees pay a veneration to the elements Earth, Fire and Water which cannot permit their pollution by the contact of dead bodies. Also, and the second reason serves if faith in the first is not sufficient, it was laid down by Kartasht that in death the rich and the poor shall meet as one. Hence the Towers of Silence were devised. The following is a description of that in the photograph, which cost thirty thousand pounds to build, as also an account of the mode of burial.

Within the gateway of an outer enclosure is a flight of steps leading to an inner wall twenty-five feet in height and having a circumference of two hundred and seventy-six feet. The bier is carried up these steps by four Carriers of the Dead (Nasr Salars), followed by two bearded men and a number of mourners. The two bearded men are the only ones permitted actually to enter the tower. The outer wall of this is whitewashed, the interior having semblance to a circular gridiron sinking downwards towards the centre, where a deep well, five feet in diameter, is located. The dead bodies are placed entirely naked in compartments built between the outer and inner walls, and in a few minutes every particle of flesh is torn off the bones by the loathsome vultures always found in attendance. The skeleton thus left is exposed to the sun and wind until bleached and dry; the Carriers of the Dead then take the bones with tongs held in gloved hands, and cast them into the well, where they speedily crumble to dust. The rain-water running down from all around sets up disintegration, and channels are made at the well-bottom allowing the collected moisture to trickle out over a bed of charcoal, whence it flows into the sea. Should the perforations for escape become choked, the attendants descend a ladder attached to the well-side and remove the obstruction. Thanks to the torrential rains, the blazing sun, the keen sea winds and, most important of all, the voracity of the vultures, this method of disposing of the dead is not as insanitary as appears on the surface. So complete is the destruction that the accumulations in the well of the tower we illustrate have only attained five feet in forty years. The bearded men who do most of the work in connection with the burial ceremony proceed, on its completion, to a purifying place, where, having rid themselves of their clothes, they wash themselves. The following of general mourners link their clothes together in a certain understood fashion, thus



Stereograph by] [*H. C. White Co., London.*

THE SACRED TWIN TREE, PEKING.

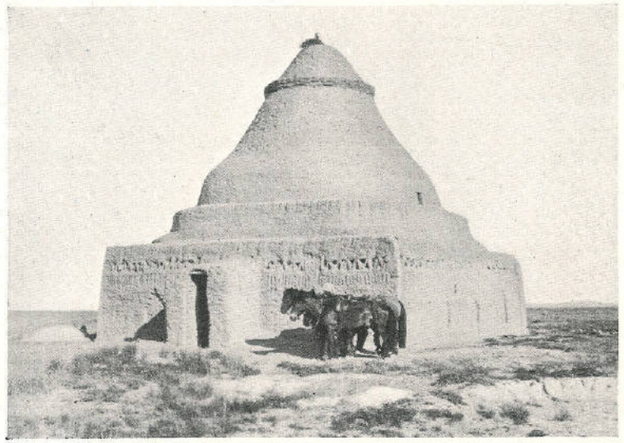
To be seen in the Temple of the Empress Ching-Ou-Tien, Peking.



Photo by] [*Capt. C. G. Rawling, C.I.E.*

THIBETAN YAKS CROSSING A RIVER ON A BRIDGE OF ICE.

Only during winter time is this road practicable. The Yak is the Thibetan beast of burden



A KHIRGHIZ TOMB, SIBERIA

These edifices are found on the rolling plains of Southern Siberia—a crude testimony to religious fervour

giving a mystic meaning to their attendance and displaying a reverential respect for the departed.

The land around the five Bombay towers, amounting to one hundred thousand square yards, was given to his co-religionists by Sir Jamsetjee Jeejeebhoy, whose body was subjected to the treatment outlined above. The gardens about the towers are laid out in such fashion as to suggest and foster meditation in all mourners, whilst banks of cypresses form a dark and solid background to the grey-white towers, and, as the Parsees themselves say, point the way to Heaven with their long, tapering shoots. One very unpleasant feature resulting from the proximity of these Towers of Silence to a number of European residences is that fingers or ears are occasionally found in the gardens around these houses, dropped there by a passing vulture or hawk.

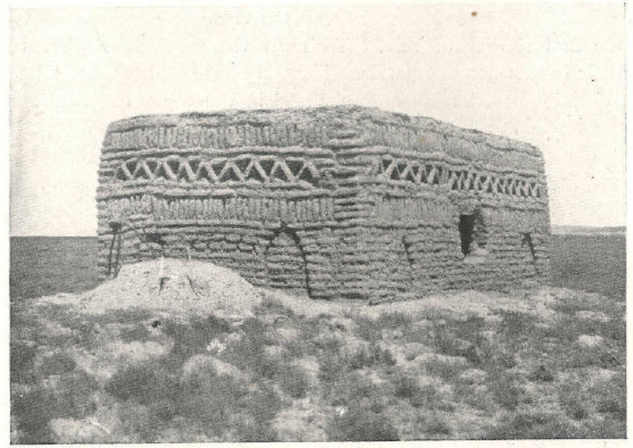
Sacred Twin Tree, Peking.—The religious and hallowed significance of growths such as that illustrated here is not what it used to be, say, twenty-five years ago. Doubtless many thousands of trippers have now desecrated (in the eyes of the devout Chinese), the opening presented by this twin tree, to be found in the private temple of the Empress Ching-Ou-Tien, Peking. The curious feature here is that the doorway, through which the photograph has been taken, was erected exactly to coincide with the span of the double trunk. The effect, with the handsome marble stairway in the background, is very striking.

A tree of different kind, but equal interest, is situated in the courtyard of the Kasuga-no-Miya Temple, Nara, Japan. Here, on a single tree-trunk, seven absolutely different species have been grafted inextricably together. There are camellia, cherry, wistaria, maple, icho (Japanese oak), and two other varieties. To this unusual emblem of inseparable affection Japanese lovers are wont to attach little pieces of paper, on which are written their vows and short prayers that these may be maintained during life.



ANOTHER FORM OF TOMB.

The Khirghiz have quaint notions of decoration. Being themselves nomads, their views on architecture are very unformed.



A TOMB IN A WILD SETTING.

For scores of miles, often, a tomb such as this is the only visible thing on the flat, sandy (and frequently snow-covered) plain.

An Ice Bridge.—This illustration of an ice bridge is probably unique. Its utility as a means of passage across a difficult spot is evidenced by the two heavily-loaded yaks and their driver. It was taken by Captain C. G. Rawling in the Changchenmo Valley, Central Thibet. He writes that "these causeways proved invaluable, as we were compelled to cross the river several times, and only in one place was much difficulty experienced." The especial feature of the structure lies in this, that during summer months the banks and hills of the valley through which the spanned river runs are covered with luxuriant grass, glorious flowers and wild cereals growing riot beneath a blazing sun. A sudden change of climate is characteristic of the Thibetan lowlands—unlike the changes from winter to summer in Canada or Manchuria, the difference in cause and effect are seen in the course of a single week. Snow, frost, deadly gales and icy fogs give way as if by magic to all the attractions of a perfect English summer.

The Khirghiz Tombs of Siberia.—In Central Siberia, localized around the Tian Shan plateau, there lives a tribe of nomads of which perhaps less is known than of any other people. The tombs illustrated here express more eloquently than words the character of these simple, peace-loving folk; around the tombs may be seen the stretching plains of sand and grass, typical of the country in which they live. The name Khirghiz embraces Indo-Europeans, Mongols and the Turanian tribes linked alike in habits and character. Their language is such that a knowledge of Turkish makes communication easy, and the hospitality of these nomadic shepherds is of a nature that payment for services is an unknown feature to them. The Khirghiz is forced to change his residence twice a year—and his family goes with him. This is necessary to obtain the best pastures for the herds and flocks, invariably to be found close below the ever-shifting snow-line. Again, since at night the

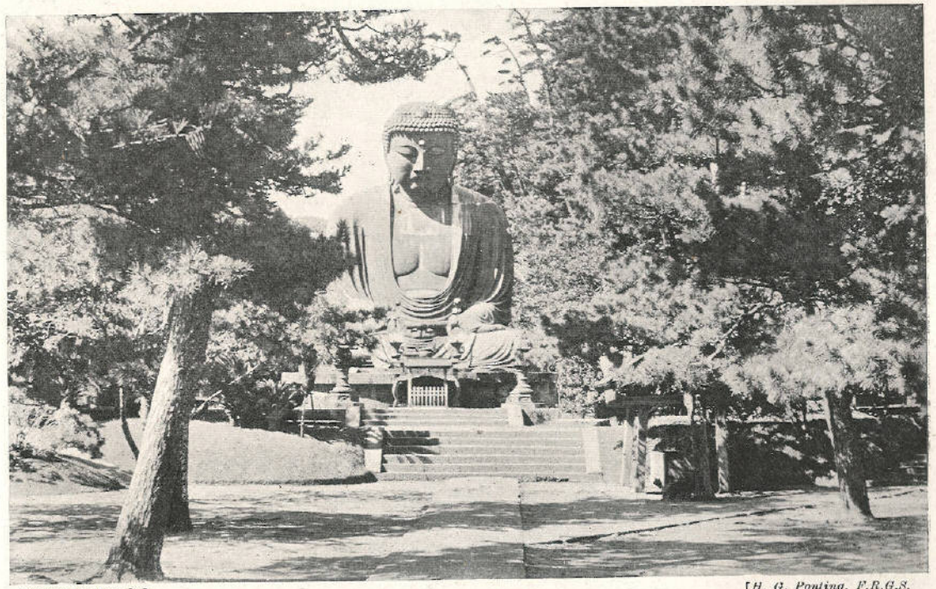


THE INTERIOR OF A KHIRGHIZ TOMB.

The headstone is seen here. Oftimes a little cradle lies pathetically against the wall—a reminder that a small child is buried with its parent

animals are herded close around the camp, the environments become foul beyond bearing after the first shower of rain. To meet these novel conditions of life, which know no change, their houses are collapsible. They are made of willow, based on a willow-trellis wall, circular in section and having a smoke-hole in the top. The willow is covered with woollen cloth, and the whole has the appearance of a huge inverted white pudding-bowl. These folk are sociable to one another and friendly to strangers; though Mohammedan in religion, their women go about unveiled and, moreover, have a strong influence in the affairs of the community. Beside the tombs shown here will frequently be found a baby's cradle—a sad, small emblem that a little one has been buried close to the holy shrine of past great men.

The Daibutsu of Kamakura, Japan.—Here is an image which, by general acceptance, stands without rival in the world. The Kamakura Daibutsu, by its massive serenity, by its majestic



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE DAIBUTSU OF KAMAKURA.

This representation of Amida, the most massive bronze figure in the world, is forty-nine feet high. It is now necessary to obtain an official permit to take a photograph, owing to the damage resultant on the former ease of access permitted to tourists.

calm, holds those who have seen it in irresistible fascination. It is set in environments moulded by nature to add a natural charm to that afforded by the sculptor. Those who once have seen it, go to see it again, the better to grasp its colossal size, its harmonious bearing, its impressive atmosphere.

A description of it seems nearly sacrilegious when brought down to measures and weights. Its height is forty-nine feet and circumference ninety-seven feet two inches. The length of the face is eight feet five inches, and in the huge forehead is set a silver boss thirty pounds in weight and fifteen inches in diameter. The eyes, fashioned in pure gold, look out from lids three feet eleven inches long, whilst the ears and nose have dimensions of six feet six inches and three feet nine inches respectively. The mouth is three feet two inches from corner to corner, and on the head are eight hundred and thirty curls, nine inches high each. The image is of pure bronze cast in sheets and brazed together afterwards, being finished off outside by chiselling. In the interior is a shrine with a ladder leading up to the head. The history of this Daibutsu, which represents



Photo by] [*Bourne & Shepherd, Bombay.*

THE RAMBODA WATERFALL, CEYLON.

This waterfall, amid the wildest tropical scenery, is caused by a river seeking an exit from the highlands of Nuwara-Eliya to the forest plains many thousand feet below. It is the most famous fall in Ceylon.

Amida, is very interesting. Tradition accords its conception to Yoritomo, who first organized the system of military government known as the Shogunate. Though he had discussed his plan very well with his associates, he died before he could personally superintend its execution. The Daibutsu dates from the year 1252 A.D. Originally it had about it a huge temple fifty yards square, the roof of which was supported on sixty-three wooden pillars firmly fixed on stone foundations. Twice, in 1369 and 1494, seismic waves have swept the covering temple away, but left the image unmoved, and it now stands in the open air unharmed by six and a half centuries of existence—the embodiment of intellectual and passionless serenity.

Ramboda Falls, Ceylon.—Twelve miles from Nuwara-Eliya, the well-known summer resort and ancient royal town of Ceylon, is a marvellous valley, looking down, with vistas of great mountains upon every side, over the elephant lands so much sought after by the hunter. Here, tucked away amid banks of magnificent verdure, are to be seen a series of waterfalls which, if they do not vie with others better known in volume or in height, can lay claim to features of beauty and situation unequalled the world over. Ramboda would never have been heard of but for these falls; over the jutting edge of a giant precipice there leaps a foaming torrent, falling first in a flight of steps and then clear into a boiling cauldron whence the eye cannot follow it. The very ruggedness of the containing rocks comes as a shock after the surrounding forest: it is all so unexpected, so stupendous, that this liquid mass should hurl itself, willy-nilly, several hundred feet down from the glorious highlands of Nuwara-Eliya. This wonder, too, possesses an unique advantage: unlike so many world-curiosities described in this work, it is close to the beaten track of the leisured traveller. Comfortable trains take him to his hotel,



Photo by] [*Messrs. Johnston & Hoffmann.*

THE CENTRE OF THE UNIVERSE.

A wonderful seven-storied erection directly over the Royal Throne Room of Mandalay Palace. This Palace, or Nandaw, has, since the exiling of Theebaw who is still alive, lost much of its beauty and historical aspect.

in comfort the manager of his hostelry will arrange his trip to the falls. And they, once seen, remain embedded in the memory of the fortunate observer; for in majesty, beauty and situation they are unsurpassed.

Theebaw's Palace: The Centre of the Universe.—There are many royal palaces in Asia famed either for their gaudy magnificence, their architecture, or their history, but none, perhaps, approaches that at Mandalay for general interest. This palace, or Nandaw, is situated exactly in the centre of Fort Dufferin—in itself a remarkable conception, being a huge square enclosed by walls twenty-six feet high and surrounded on every side by a moat about three hundred feet wide. There are but five bridges giving access to the fort, and three of these lead by roads direct to the palace. This palace was formerly a strongly fortified post, but, subsequent to the annexation, the outer stockade and brick walls were removed, leaving the chief buildings as they were originally.

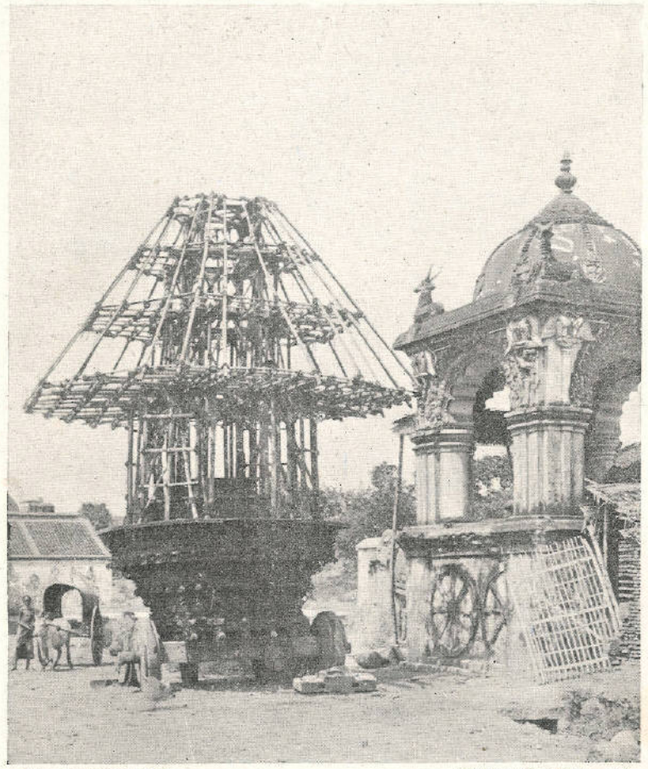


From Stereo copyright] [*Underwood & Underwood.*

THEEBAW'S PALACE, MANDALAY.

These massive wooden pillars are indicative of the departed glory of a great heathen *régime*. Spaciousness, ornate decoration and solidity are the distinctive features of Burmese architecture.

These buildings are mainly of teak, profusely carved and gilded after the manner of the country, and though in certain cases put to uses more acceptable to the present owners, are still known by their old names. The largest and most striking erection is the Audience Hall, which formerly contained the Lion Throne. This hall, now used as a church, has a length of two hundred and fifty feet from wing to wing, and is forty-five feet deep. At one end rises the *shwepyathat*, or gilded spire, the external emblem of royalty. This spire has seven stories, and is remarkable for its ornate decoration. The Lion Throne itself, over which it was built, has been removed to the Calcutta Museum. It is this tawdry yet unusual pinnacle that was known as the "Centre of the Universe," the Burmans arguing, so the story goes, that, being the centre of Mandalay, it was also that of the world. Directly behind the Audience Hall was the stable of the sacred White Elephant, whilst to the east of it rises a richly decorated shrine in which Theebaw passed the period of his priesthood.



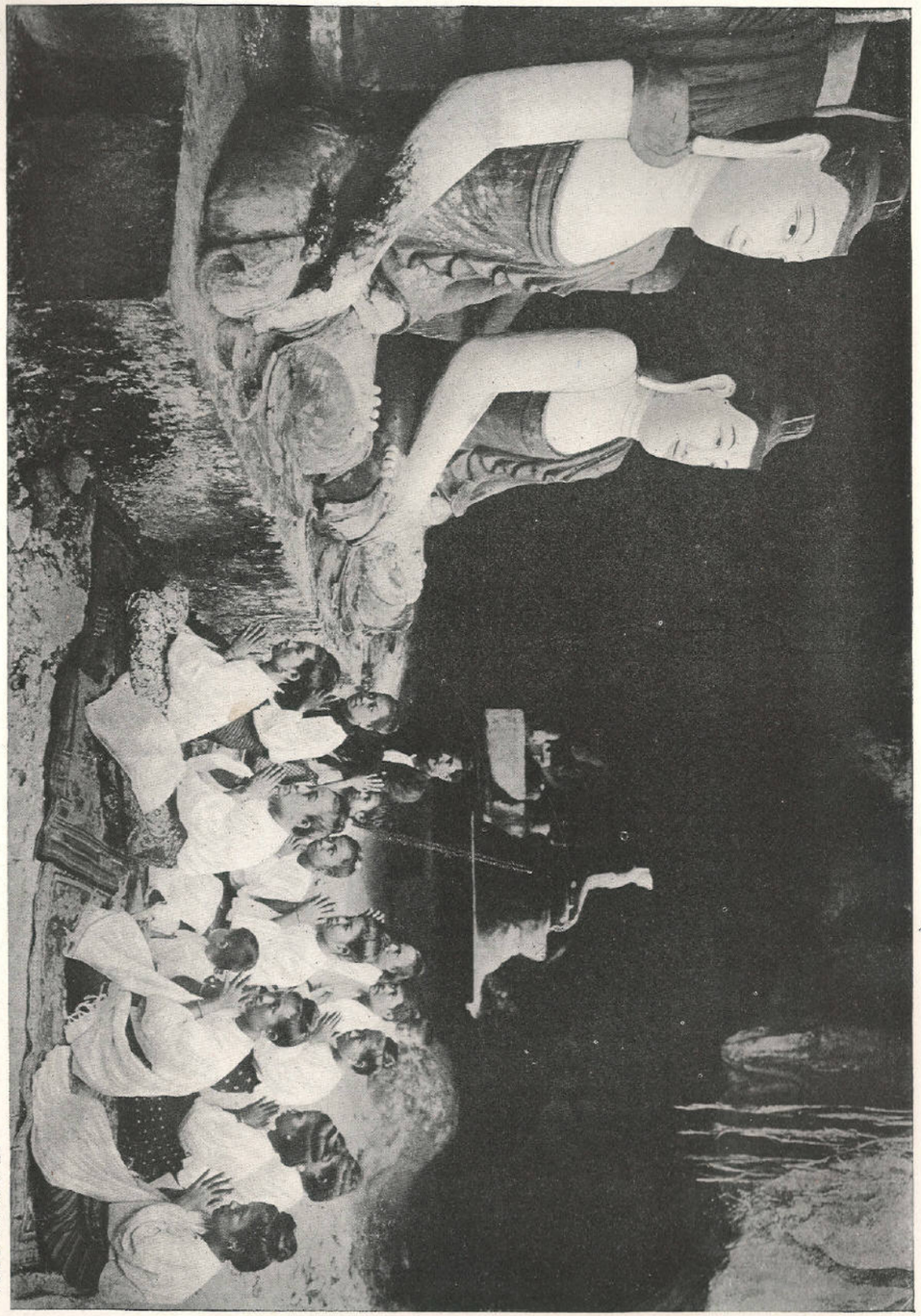
From Stereo copyright] *[Underwood & Underwood.*

THE CEREMONIAL CAR OF KRISHNA.

Great fêtes take place in India in honour of Krishna; Krishna is one of the nine incarnations of Vishnu, the Protector, the second manifestation of Brahma.

Much of this palace was brought from Amarapura, the Immortal City, lying a few miles to the south of Mandalay. The private audience halls were used for many years by the Upper Burma Club. A stop was put to this, and rightly, by Viscount Curzon of Kedleston when Viceroy of India; he feared that an accidental fire might destroy for ever that which remains the finest palace in a land of palaces—a gem of native architecture, unique in design and workmanship, and fulfilling in all respects the traditions of ancient Burma. King Theebaw, who succeeded his father on the throne in 1878, began soon to murder his relatives and misrule his kingdom. At last the British Government's patience, after many protests, was exhausted. King Theebaw was sent an ultimatum, and General Prendergast sailed up the Irrawaddy and deposed him. The annexation of Upper Burma to Great Britain was proclaimed. Theebaw was sent in 1885 to Rangoon. Later on he was taken to British India. He survives, and, although he is under British control and deposed from power, his life is made as comfortable as possible.

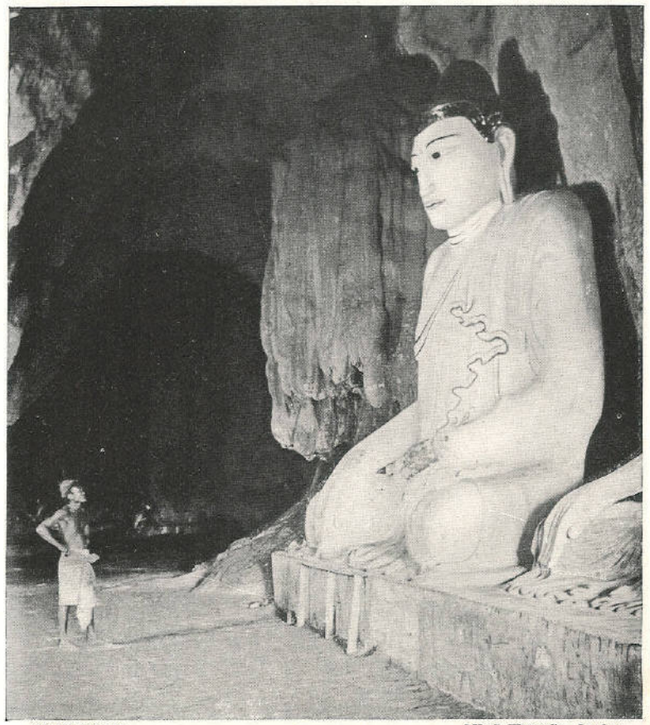
The Car of Krishna, Tanjore.—The curious vehicle seen here represents the ceremonial car of Krishna, one of the nine incarnations of Vishnu, the Protector. The modern Hindu religion acknowledges one God, called Brahma. During religious history, Brahma has given three personal manifestations: the first as Brahma, the Creator; the second as Vishnu, the Protector; and the third as Shiva, the Destroyer and Reproducer. With the first and third of these we have nothing to do; but Vishnu is the central being with which Krishna is associated. Vishnu, when represented, holds in one hand a quoit, in another a shell, in a third a club, whilst a lotus flower is held in the fourth. Vishnu has come down to earth on nine different occasions, and the advent of his tenth appearance is eagerly awaited. The forms of these first nine incarnations were as follow: (1) A Fish; (2) A Tortoise; (3) A Boar (Varaka); (4) A Lion (Narsingh); (5) A Dwarf (Vamana); (6) Parasu Rama; (7) Rama; (8) Krishna, and (9) Buddha. The traditional history of Krishna is curious: he is the God of the poor people, for, though of noble birth, his youth was spent amongst shepherds and peasants, from whom he learnt the laboured existence of the poorer classes. As a boy he killed the snake Kali by stamping his life out with his feet, and followed this up by raising the



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

GAUTAMA BUDDHAS IN THE BINGYI CAVES.

Burma is noted, amongst other things, for its caves. The Bingyi group is the least known but most interesting of the series. These caves are fifty-one miles from Moulmein, and are now the haunt of numerous native devotees.



Stereograph by] *[H. C. White Co., London.*

A GAUTAMA BUDDHA OF THE BINGYI CAVES.

No details as to the age of these figures have been ascertained. From time immemorial, the historical treasures of Buddhism have found refuge in these huge natural cavities. These figures are raised from the ground-level on roughly-hewn shelves.

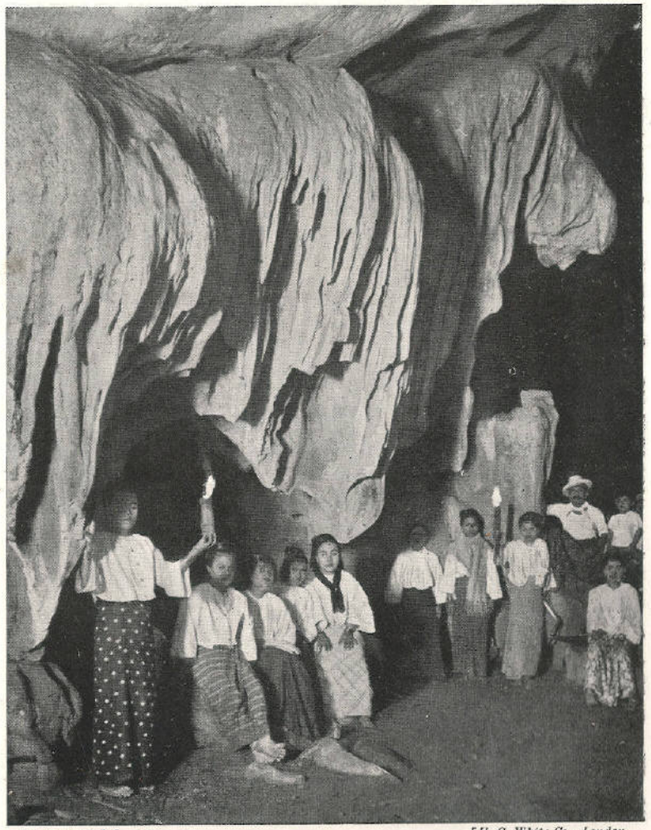
Mount of Govardhan (fourteen miles from Muttra) in such manner on his finger that the cowherds of the plain were protected from a violent storm created by Indra, the Rain-God, as a test of Krishna's divinity. Vishnu first appeared as Krishna at the village of Gokul, where sundry relics of antiquity are kept. Krishna was blest with innumerable wives and a large family; in all representations he is painted blue, and is standing on a snake, the tail of which he holds in one of his left hands. In his corresponding right hand is a lotus, and the second pair of hands frequently hold a flute which he is playing. It is a curious commentary on the status of this religion that the adoption of Buddha as the ninth incarnation of Vishnu was a compromise with Buddhism!

The popularity of Krishna may well be imagined when it is mentioned that Vishnu, in this incarnation, is said to deliver mankind from the most fearful miseries of life. These miseries are divided up into three sections as follow: (*a*) lust, anger, avarice, and any evil consequence resultant therefrom; (*b*) beasts, snakes, and danger from men; (*c*) demons. The final incarnation of Vishnu will also be as a man; the former human appearances being Krishna, described above, and Rama. On this tenth, and last, occasion, he will come down from above as a mounted warrior on a superb flying steed, and with a sweep of his arm he will shatter the earth, scattering it and its inhabitants over the heavens as dust. Since the date of this eventuality has been fixed safely ahead—to wit, in four hundred and thirty-two thousand years—it troubles none of the eastern worshippers overmuch. At that date, which will be by Brahman reckoning the fourth, or Kali age, the world will have become wholly depraved and worthy of immediate and complete destruction.

There are several Hindu festivals in which Krishna takes a leading part. The most important is called Holi, held fifteen days before full moon in the month of Phagun (March). This is a wild carnival, when free licence is permitted to everyone; the chief joy is the throwing of red and yellow powder over all and sundry. Janam Ashtami takes place on the eighth day of the dark half of Sawan (August), when Krishna is supposed to have been born at Gokul. On this day, no strict Hindu will eat rice, but he contents himself very fairly with fruit and other grains until the evening, when he washes before an image of the God whose natal day he celebrates.

The Bingyi Caves, Burma.—In the neighbourhood of Moulmein there are the five most remarkable series of caves ever discovered. They are known as the Farm Caves, on the Attaran River, ten miles from Moulmein; the Dammathal Caves, on the Gyaing River, eighteen miles from Moulmein; the Pagat Caves, on the Salween River, twenty-six miles from Moulmein; the Kogun Caves, on the Kogun Creek, Pagat, twenty-eight miles from Moulmein, and finally the Bingyi Caves, on the Dondami River, fifty-one miles from Moulmein. Only the first of these is much visited, whilst the last, of which photographs are given, have only been scientifically explored in quite recent years. The Bingyi Caves are situated in some low hills three miles from the small village of Binlaing, on the Binlaing or Dondami River; the entrance is reached after crossing a pool of very hot water, from which a stream descends to the valley below, and after a climb up the hillside of about one hundred feet. The main cave is deep and dark, requiring especially strong lights for adequate exploration. At the farthest end is a pool of water flush with the floor and by it a pagoda so situated as to be lighted from a hole in the roof or, more correctly, the hillside. Just outside the entrance is another pagoda, which is unusual, and down the transept—if the word may be used—are, or have been, a series of pagodas, or chaityas, with images of Gautama Buddha arranged on shelves along either side. The Buddhas are represented as dressed in monks' robes, their curly hair drawn up into a knot on the top of the head and the lobes of their ears stretched out so as to meet the shoulder. Quite recently the caves of Burma have received a well-merited attention, having been carefully explored, cleared and cleaned, and, in many cases, repaired. Hence, numerous devout people flock to them and pray to the gods erected in such profusion. In the early days of their discovery as caves worthy of closer notice, exploration was hindered by the presence of myriads of bats. So many were collected here that the caves were noisome from their droppings and dead bodies which, in many places, covered the floor to the depth of several feet.

These groups of caves are now a favourite resort of picnic parties, both of the European and native population, and most of the



Stereograph by] *[H. C. White Co., London.*

THE BINGYI CAVES.

The structure of these caves, probably due to prehistoric seismic disturbances, is here well illustrated. Only in recent times have they been explored and cleaned for careful inspection.

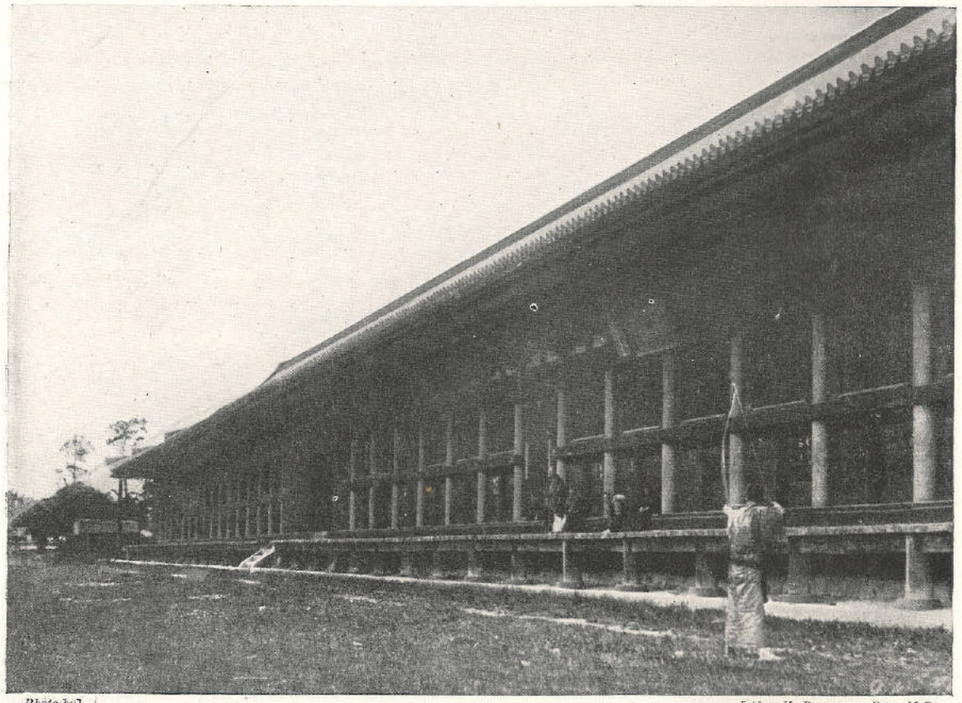


Photo by] [*Alan H. Burgoyne, Esq., M.P.*

THE TEMPLE OF 33,333 GODS.

This temple was founded in 1132 by the Emperor Toba; it has a length of 389 feet, and is filled from end to end with representations of Kwannon. Archers test their skill against its length, and are greatly looked up to if able to send a shaft from one end to the other.

difficulties there were in reaching them are gradually being overcome by the energy of tourist agencies. They are all situated in isolated limestone hills, which rise picturesquely and abruptly from the alluvial plains surrounding them. It is believed that these caves may have been excavated by the action of the sea in prehistoric times, and they are to this day in most cases full of stalactites and stalagmites. It is quite obvious, even after a most cursory examination, that at one time every available spot held an image of one of the many incarnations of Buddha; their fragments lie on every hand, representative of all periods and all ages.

The secrets of these caves still untapped must form a remarkable field for inquiry, but enough has been said to show how rich they are in historical associations and how well worthy of more detailed study. Many of the manuscripts and terra-cotta tablets already found have served to clear up difficult points in Burmese history—the caves would seem, therefore, to have been the hiding places of those precious relics, nearly always historical, which from age to age are handed to the priests for preservation.

San-ju-san-gen-do, the Temple of Thirty-three Thousand Three Hundred and Thirty-three Gods.—Probably the longest temple in the world is the San-ju-san-gen-do at Kyoto, its dimensions being an over-all length of three hundred and eighty-nine feet and a breadth of fifty-seven feet. Here are housed no less than thirty-three thousand three hundred and thirty-three representations of Kwannon, the Goddess of Mercy. In 1132 Emperor Toba, having been deposed, founded this temple and placed in it the first one thousand and one images, which were added to by the Emperor Go-Shirakawa, he giving no less than one thousand one hundred

and sixty-five. In 1249 a disastrous fire destroyed both building and goddesses, to the dismay of all who were associated with it. Seventeen years later, in 1266, the Emperor Kameyama ordered it to be rebuilt and filled it from end to end with images of the Thousand-Handed Kwannon. Thus it stood for some centuries, falling more and more into disrepair, until in 1662 the great Shogun Ietsuma restored it as it now stands.

A more remarkable gathering of goddesses there cannot have been in the history of the world. Tier on tier, they fill the vast edifice from end to end, there being one thousand main figures, five feet high each, containing upon themselves further representations and carvings of Kwannon, which in their aggregate mount to the enormous total of thirty-three thousand three hundred and thirty-three. Each image is perfectly worked and superbly lacquered in gold; three hundred are due to the art of Kokei and Koei, two hundred were executed by Unkei, and the remainder by the equally famous Shichijo-Dai-busshi. One feature worthy of notice is that, though in each case the deity represented is the same, each figure differs from the other in some particular—the arrangement of the many hands, of the clothes, or of the ornaments. In the centre of these serried rows is one large figure, of which we give a picture. This also is a Kwannon, and round about her are posed the Bushu, or Eight-and-Twenty Followers. Around this central Kwannon is woven an interesting tradition. The ex-Emperor Go-Shirakawa was troubled with persistent headaches, and made a pilgrimage to the shrines of Kumano to pray for relief. He was directed to apply to a celebrated Indian physician, then residing in a temple of his capital. On his way there he fell asleep and dreamed that a monk of stately presence came to him and told him that, in his former state, he, the Emperor, had been a pious monk of the name of Renge-bo. Renge-bo had for his merits been promoted in the person of Go-Shirakawa to the position of emperor. But Renge-bo's

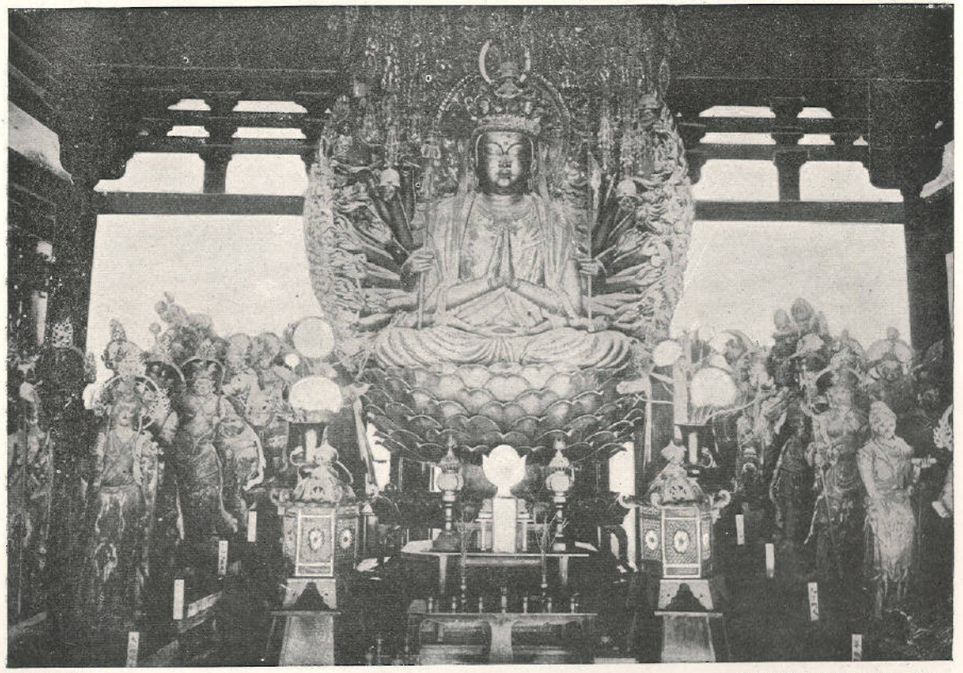


Photo by] [*Alan H. Burgoyne, Esq., M.P.*

THE TEMPLE OF 33,333 GODS

This central figure is said, by tradition, to have the skull of Renge-bo, a famous monk, embedded in its head

skull lay uncared for in a river and from it sprang a willow-tree; whenever this tree shook in the breeze the head of Go-Shirakawa began to ache. At the conclusion of the story, the Emperor awoke and set out to find the skull, in which quest he proved successful. Having attained his object and banished his headaches for ever, he caused the skull of Renge-bo, his former self, to be embedded in the head of the large Kwannon that now forms the centre of these thirty-three thousand or so similar representations.

A visitor to this temple gives the following quaint description of his impressions: "They are a tawdry, motley company, these tiers of gilded goddesses, whose serried ranks, a hundred yards long and a full battalion strong, fill the vast building from end to end. The images, many of which are of great age, are continually being restored. In a workshop behind the vast stage an old wood-carver sits, his life occupation being the carving and mending of hands and arms, which are



Photo by] [*J. Matsuoka.*

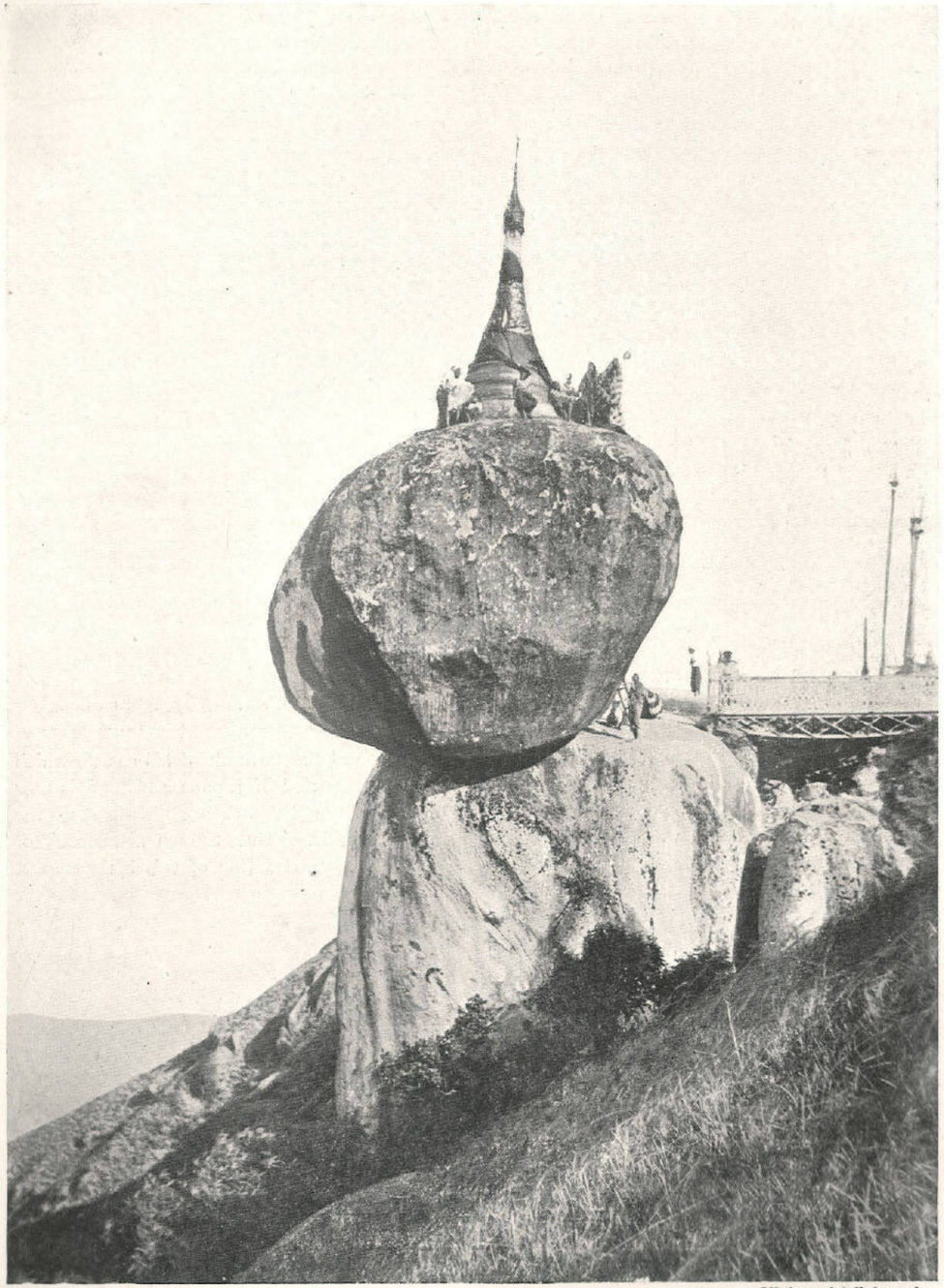
THE IWAKUNI BRIDGE, JAPAN.

Spanning the Nishiki-gawa River, this bridge has a length of five hundred feet. The stone piers supporting its arches are bound together with lead. No known bridge is richer in historical associations.

constantly dropping off like branches, from the forest of divine trunks—for Kwannon is a many-limbed deity, and few of the images have less than a dozen arms. Rats scuttled over the floors and hid in the host of idols as we made our way round them; and at the back of the building we were stopped by an old priest, who sat at the receipt of custom and demanded a contribution from every visitor. One day, as I suddenly turned a corner in this temple, I saw a tourist, who supposed no one was looking, deliberately break a hand off one of the gilded figures and put it in his pocket. It is strange to what acts of vandalism the mania for collecting useless relics leads some people."

In the old days it was the custom for skilful archers to try how many arrows in succession they could shoot from one end of the temple balcony to the other. This sport was designated "o-ya-kazu," or the "greatest number of arrows." Many Japanese may still be seen enjoying this game, and an archer is seen in the act of releasing a shaft in the photograph.

The Iwakuni Bridge, Japan.—On the Inland Sea, in the district of Suwo, is a busy little fortified town called Iwakuni, situated at the mouth of the river Nishiki-gawa. Iwakuni was



From Stereograph] [*Underwood & Underwood.*

THE KYAIK-TI-YO PAGODA, BURMA.

This temple is situated 3,650 feet above sea-level and can only be reached from the parent rock by means of ladders Kyaik-ti-yo is the name of the northern summit of the Kelasa Heights, in the Shwegyin district of Burma



Photo by] *[J. Mansfield.*

THE SPONGE ROCKS OF ENOSHIMA, JAPAN.

The sacred isle of Enoshima is one of the loveliest spots of the Japanese archipelago. It is famed far and wide for its curious rocks, which many believe are fossilized sponges. Amongst these are found giant crabs, stretching ten feet from claw to claw.

originally the headquarters of a famous Daimyo, Kikkawa, and the position of his castle, which successfully withstood all assaults during the most troublesome period of Japanese history, is now marked by a charming temple dedicated to Kato Kiyomasa. Around this there still is kept up the original park in which the warlike Daimyo took so great a pride. But though historically of interest and importance, the main feature, the one extraordinary attraction, of this little seaport is the great bridge spanning the Nishiki-gawa River. Kintaikyo, the "Bridge of the Damask Girdle," is famous to the whole world, and no structure has better right to be included amongst terrestrial wonders. From end to end it is nearly five hundred feet, the five curved arches resting on massive stone piers, which to secure them the one to the other are bound together with lead. The custom followed for the preservation of this bridge is to repair one arch every five years; this led to the entire structure being practically renewed four times in each century.

The Kyaik-ti-yo Pagoda, Burma.—The Kyaik-ti-yo Pagoda has been described as the most curious object in Burma. Here we see an edifice about twenty feet high, erected on a huge boulder, so balanced on the edge of its parent mass that it rocks in any passing breeze. Indeed, viewed from the position whence the photograph was taken, it would almost seem as though the laws of gravitation themselves had been set at naught.

The history of this curiosity is writ large for all to see: first comes the handiwork of Nature, driving from around the hard, rocky core those softer materials, which at one time made it part of the base upon which it rests. Wind, rain and heat have all played their part here; rain has softened the friable matters; the sun, scorching down from all sides, has cracked and disintegrated

these until they were but dust; and, last step of all, the winds have caught this up and cast it far and wide, leaving the giant rock precariously poised as we see it to-day. Here, doubtless, it was found many years ago; the finder rocked it, and, no doubt, ground its base a little firmer into the socket containing it. Thus, despite lapse of time, it rests firmer and more secure to-day than ever in its history.

At one period came a holy man directed (as they all are) by a *nât*, or spirit. Imbued with the faith that was in him, he erected a pagoda on its summit, and to this little temple pilgrimages are undertaken year in, year out. Tradition relates that beneath the rock lie relics of the great Gautama Buddha, and that at certain seasons of the year it floats in space with the pagoda on its back. These relics are supposed to be the hairs from Buddha's head, and, as if to testify to their sanctity, there lies before the pagoda a great mass of human hair cut off from the heads of pilgrims and left there as a sacrificial offering. The frontispiece of Part I. of this work gave a view of the Sampan Pagoda on the Kelasa Hills. It is a coincidence out of the ordinary that the only two such structures based upon rocks cast loose by the hand of Nature should both be found in Burma. But of the pair any unbiased observer must give the palm for originality, precariousness of position and interest of historical association to that at Kyaik-ti-yo.

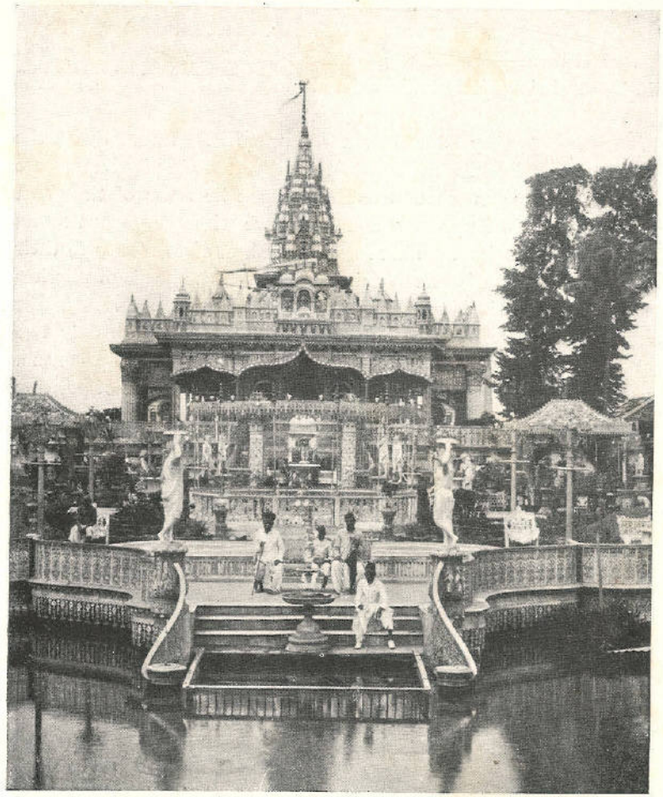
The Sponge Rocks of Enoshima, Japan.—Four miles from Kamakura, the once populous capital of Eastern Japan, is a delightful little peninsula, formed at high tide into an island. This is Enoshima, the home of sea-treasures. Well equipped with first-class native inns, Enoshima is a popular holiday resort for European residents in Japan, who are fond of the sea-bathing to be got there and the excellent sea-fishing. To the curious, however, the fisheries of the glass-rope sponge (*Hyalonema sieboldi*) is a fascinating feature; this and the ordinary sponge is found in immense quantities, and it is for these things that the tiny town has become most noted. Shells, corals and marine curiosities of all sorts are part of the life of Enoshima. Back to the earliest days the island or peninsula of Enoshima has been sacred to Benten, the Goddess of Luck, who, to save the children of Koshigal from being devoured by a voracious dragon, married the monster and thereafter held him in check. To this day the natives of Enoshima believe there is a subterranean passage connecting the large cave on the far side of the island with Fuji-yama.



Stereograph by] *[H. C. White Co., London.*

THE BADRI DAS TEMPLE, CALCUTTA.

Built by the Jains, India's most famous architects, no specimen of their work surpasses this in beauty and design.



From Stereo copyright] *[Underwood & Underwood.*

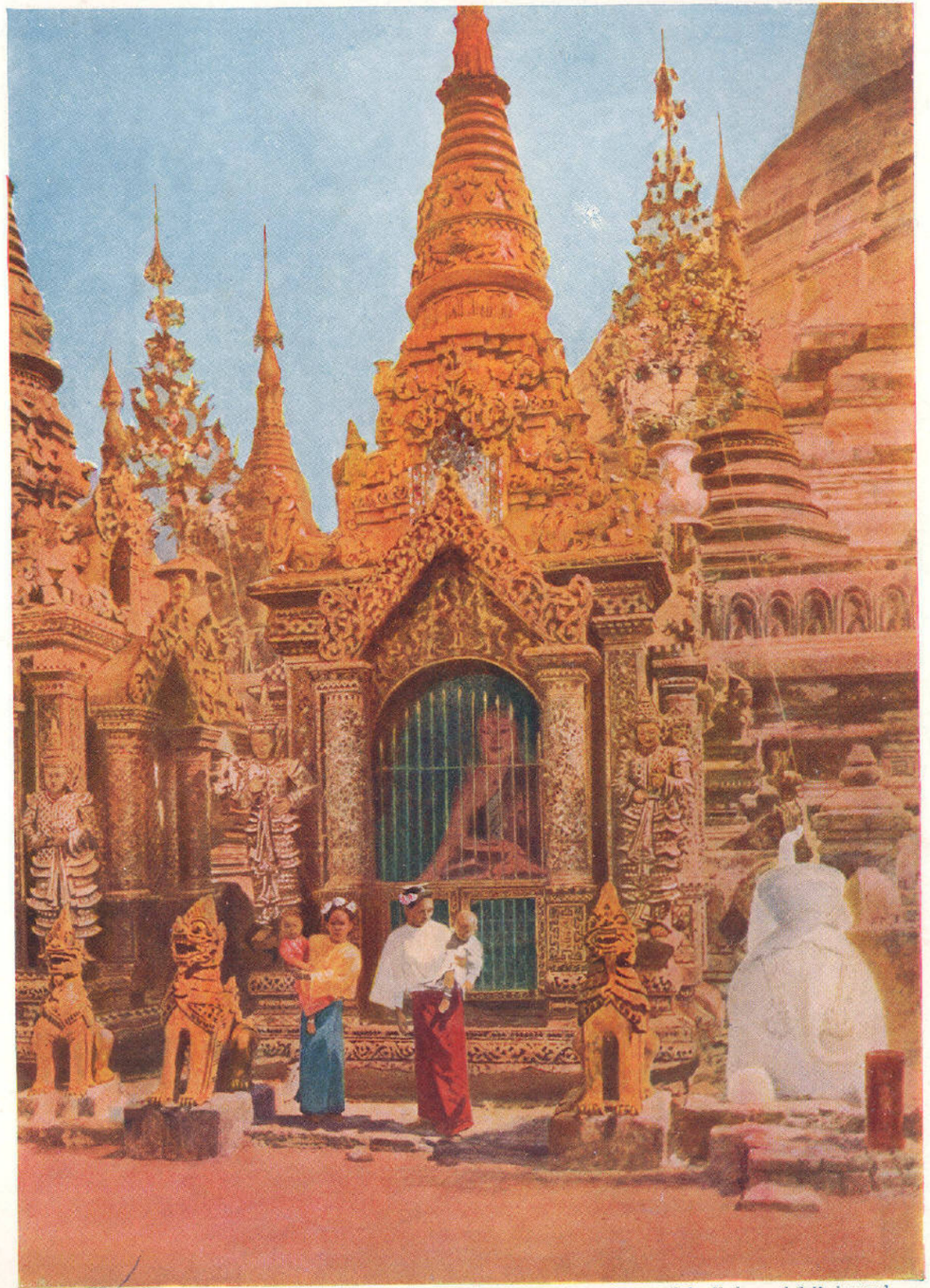
THE JAIN TEMPLE, CALCUTTA.

Around the temple are gardens and ponds which vie in picturesqueness with the building itself. The Jains were a wild people with a marvellous aptitude for erecting exquisite and lasting buildings.

This cave is one hundred and twenty-four yards deep and thirty feet high at the entrance.

Yet even without this garb of legend, it were hard to find a more charming spot than Enoshima. A long, weak-looking bridge connects the little peninsula with the mainland, and the inhabitants take small heed to the repair of this structure, preferring, perhaps, that visitors to their little Eden should patronize the many boatmen who depend for a living largely on the payment they receive for their ferrying. At the landing-stage a fine *torii*, one of those quaint arch-like erections that are amongst the most striking features of Japan, faces you, and small bronze tortoises, exquisitely carved, are placed in natural positions at the base of the great uprights, which also are of bronze. Then rises a steep and rocky path to the shrines perched on the hill above; along each side of this, decked in green foliage, and with all the charm of nature to support their natural quaintness, are many old inns, and the Japanese equivalent to our "curiosity shops." Here are displayed, and readily sold, many marvellous things from the sea. Mr. H. G. Ponting narrates a delightful little story, whereby he shows how the unwary traveller is hoodwinked. "Down on the rocks wrinkled veterans of the island earn a living by waylaying visitors to the Dragon's Cave, and inducing them to throw small coins into the water, which are caught as they slowly sink. They also dive for shellfish, and infallibly bring one up from the clear green depths! Noticing that every time a diver plunged in he first retired to the cave for a moment, I became suspicious, and, stopping one old fellow, just as he prepared to plunge, found he had a crayfish concealed in his breech-clout. This exposure of the trick caused uproarious merriment amongst them all!"

The Jain Temple, Calcutta.—Though the strain of Oriental ornamentation runs through the whole of the architecture of India, there are, nevertheless, clearly recognized styles of building that have developed in well-defined periods. Perhaps the most famous builders, and certainly the most painstaking, were the Jains. The central idea governing all Jain temples is a series of ornate squares divided by, and supported on, rows of carved columns. The word "simplicity" does not apply to their conceptions, and in most cases the temples were erected on sites where, from every



Painted by G. H. Edwards. *From a photograph by Underwood & Underwood.*

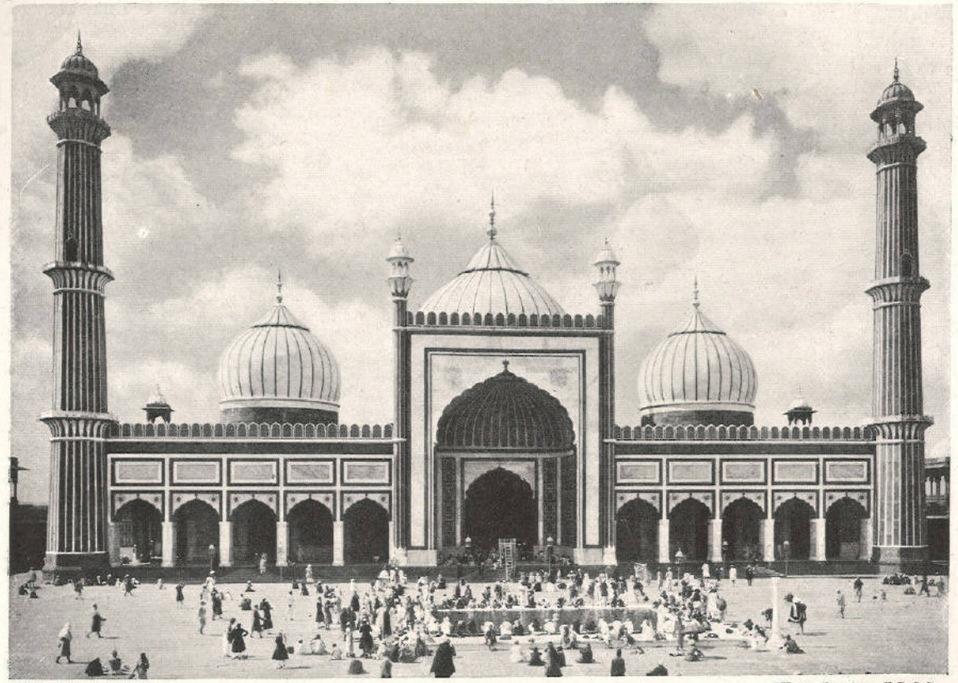
THE SCHWAY DAGÔN PAGODA.

Surrounding the main Pagoda, which is covered with pure gold from top to bottom, there is a platform crowded with small shrines, colossal animals, and figures of various kinds, all combining to make a magnificent effect.

point of view, the detailed beauty of their ideas could receive adequate publicity and admiration. Minarets, domes, points, spires jut out everywhere, colours being blended in perfect confusion to render the curious buildings even more picturesque.

On pages 4 and 5 (Part I.) were given views of the Dilwarra Temples on Mount Abu, with some account of the Jain religion. Here we have a building by the same people, and yet quite different in appearance. This temple is situated in the Badri Das Garden, Calcutta, and is dedicated to the Tenth Tirthankar-Sitalnath-Ji. The main building is of white marble, and the exquisite ornamentations both within and without are carefully preserved.

The Jains frequently constructed a number of temples in a group, as at Parasnath, Palitana and Girnar, whilst their love of the picturesque induced them to place their designs in entirely opposite



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

THE JAMA MASJID, OR GREAT MOSQUE, DELHI.

This is India's greatest mosque, and the second largest in the world, 201 feet long by 120 feet broad. It was built by Shah Jehan in the first half of the seventeenth century, 5,000 men being employed upon the work for six years. Its most precious relic is an alleged hair from the beard of the Prophet, which is red in colour.

places. Mount Abu temples are situated high on a hill; others are to be found in deep and secluded valleys. The two towers of Fame and of Victory at Chitor are splendid specimens of Jain work, with remarkable carved pillars. Pieces dating from the tenth century are to be found in the great mosques of Kutab Minar, south of Delhi, and in Ajmer Ahmedabad. Of modern Jain work the most notable examples are the temple of Hathi Singh (A.D. 1848) at Ahmedabad, the hundred-year-old Delhi temple, and that at Calcutta described above.

CHAPTER V.

By PHILIP W. SERGEANT.

The Jama Masjid, Delhi.—The Jama (Jumma) Masjid, the "Great Mosque" at Delhi, is the second largest Mohammedan place of worship in the world, and has as its chief treasure what is said to be an actual hair, red in colour, from the beard of the Prophet. It was built by the famous Shah Jehan, grandson of the Emperor Akbar, during the years 1631–1637 A.D., in honour of his daughter Jehan Ara Begam—whence comes its original title of the Masjid Jehannama, though it is universally known by the name given above. Five thousand men, it is said, were employed on the construction of the building, and the cost was ten lakhs of rupees.

The Jama Masjid is not, perhaps, the finest mosque in India, being eclipsed in beauty by the Moti Masjid, the "Pearl Mosque," which Shah Jehan put up at Agra. But it is, nevertheless, a

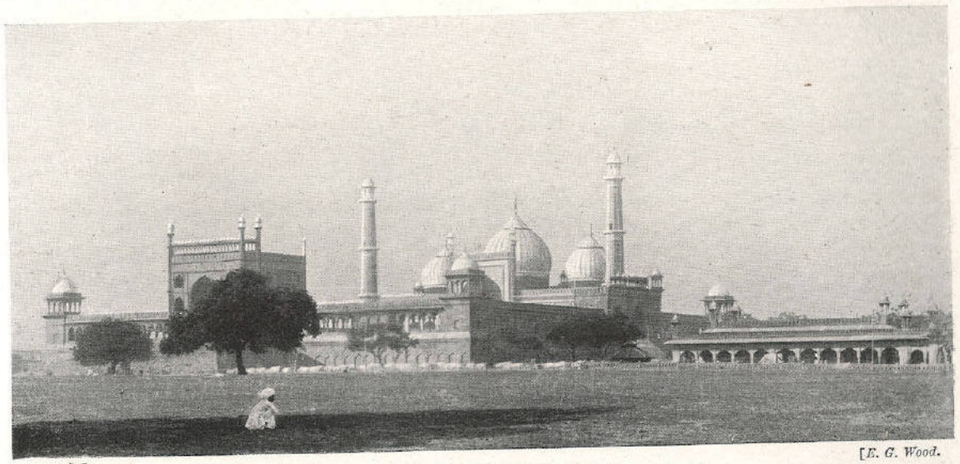


Photo by] [*E. G. Wood.*

THE GREAT MOSQUE, DELHI.
General view, showing how the mosque is raised above the plain

very imposing piece of architecture. The whole is raised up from the plain on a high platform built round an outcrop of rock. At each of the angles of this platform is a tower, and three magnificent flights of steps lead up to the main and the two side gateways. All round runs an arcaded cloister, open at both sides, which is, like all the exterior parts of the building, of red sandstone. Upon the platform the visitor entering by the principal gate finds a courtyard three hundred and twenty-five feet square, paved with granite inlaid with marble, and having in the centre a large tank for the ablutions of the faithful. Across this lies the mosque itself, with its door in a line with the main gateway. In its construction red sandstone and white marble are mingled, the three large domes being of pure marble, while the minarets at each of the front corners, one hundred and thirty feet high, combine the two materials in alternating stripes, as is plainly shown in two of our photographs. On the top of these minarets are marble pavilions, which can be reached by staircases; and there are also four smaller pavilions, two over the corners of the doorway and two on the flat part of the roof.

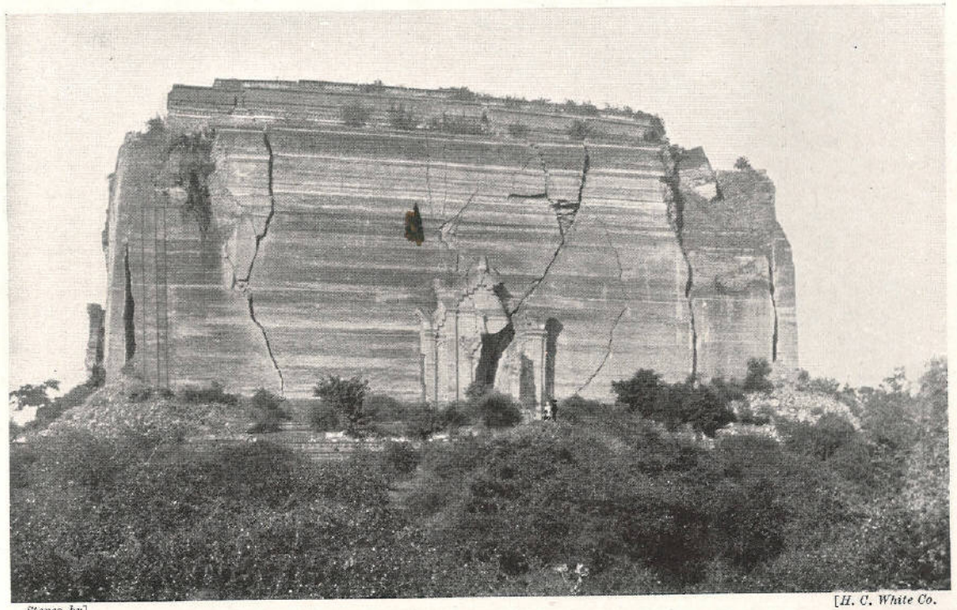
The mosque is an oblong, two hundred and one feet long by one hundred and twenty feet broad.



From Stereo copyright] [*Underwood & Underwood.*

THE GREAT MOSQUE, DELHI.

View of the courtyard, 325 feet square, on the last day of the annual season of fast in Ramadan, the ninth month of the Mohammedan year. The mosque itself, as well as the court, is filled with worshippers. As the large portal is in the middle of the façade and the building is set symmetrically in the courtyard, it may be seen that not more than two-thirds of this vast outdoor congregation is in sight



Stereo by] [H. C. White Co.

THE MINGOON PAGODA, BURMA.

"Bodawpaya's Folly" is the largest mass of brickwork in the world, although the king who built it died before he could carry it to more than a third of the height he intended. In 1839, twenty years after his death, an earthquake split it from top to bottom and otherwise damaged it.

Within, the whole pavement is of white marble, and the walls and ceiling are lined with the same, so that there is a generous display of marble throughout the building.

The great front doors are never opened except for the admission of royal persons and the representatives of royalty, like the Viceroy of India. Before them stands a pulpit presented eighty years ago by a pious donor, who wished that all gathered in the courtyard might be able to hear the voice of the preacher.

It is on the last day of Ramadan, the Mohammedan equivalent of the Christian Lent, that the Jama Masjid presents the most extraordinary spectacle; but it is a spectacle not willingly allowed to the eyes of unbelievers. On that day, not only the mosque itself but the whole vast courtyard also are filled with worshippers just released from their month of fasting all day from food, drink and smoke—that is to say, if they are orthodox Mohammedans, and have not had a partial dispensation on the ground of being labourers. Some idea of the scene may be gathered from the photograph on page 131, though only about two-thirds of the congregation in the courtyard can be seen.

The "Great Mosque" of Delhi played its part in the Indian Mutiny, being strongly held by the rebels during the assault which followed the siege of 1857. It was not, however, seriously damaged in the struggle and has since been excellently restored, the Government co-operating with munificent native rulers. It remains to-day a fine testimony to the artistic taste of Shah Jehan, and even those who do not much admire its general colour-scheme of red and white are bound to admit the charm of its lines.

Mr. H. C. Fanshawe, in his "Delhi Past and Present," says: "The Jama Masjid should be visited with the morning sun shining on it, and, if possible, under the full moon, which gives a lovely softness to the façade and domes: it is specially beautiful when it can be seen of a morning with a bank of dark clouds behind it."

The Mingoon Pagoda on the Irrawadi, Burma.—On the western bank of the Irrawadi, about seven miles from Mandalay on the opposite bank, there stands the greatest mass of brickwork on earth, in the shape of an unfinished pagoda resting on a five-terraced platform of four hundred and fifty feet square. On the uppermost terrace rises a pile two hundred and thirty feet square, slightly contracting as it goes up, and one hundred feet high. On this again three terraces are placed, bringing the total height up to over one hundred and sixty feet. From a small model which stands near it on the river-bank it is gathered that it was intended to carry the pagoda to a height of five hundred feet, in which case it would have been the largest single building in the world. As it is, though only about a third of it is completed, it contains six or seven million cubic feet of brick, and is easily the biggest example of this kind of structure which is known to exist.

The builder was Bodawpaya, a Burmese king of vast ambitions and cruel character, who died in 1819 A.D. He worked on the pagoda, by means of the forced labour of his subjects, for about twenty years, and gave much personal attention to its erection. Underneath it he is supposed to have buried great treasure. After Bodawpaya's death none of his successors seem to have made any attempt to complete his work, and in 1839 an earthquake rent it from top to bottom and dislodged great quantities of brickwork, beside wrecking two gigantic lions which had been set



A GLACIER-TABLE.

The photo shows a Glacier-Table of extraordinary size met with by the Bullock Workman Expedition in the summer of 1908 on the Biafo Glacier in Baltistan. Height of ice-shaft, 3.8 metres (12 feet 5½ inches); length of boulder-top, 5 metres (16 feet 5 inches); total height, 5.5 metres (18 feet ¾ inch).

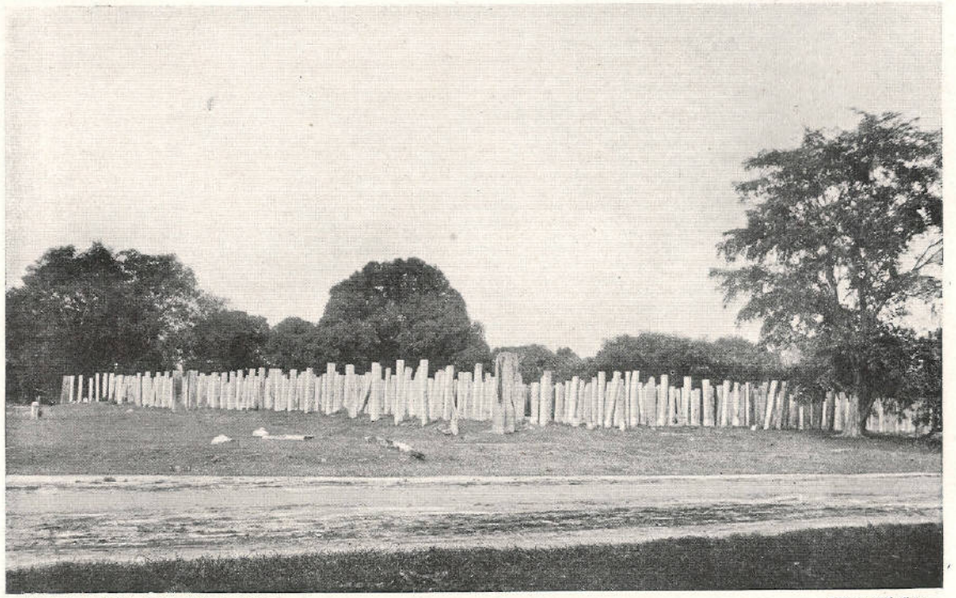


Photo from "The Book of Ceylon," by] [*Henry W. Cave.*

THE BRAZEN PALACE, ANURADHAPURA, CEYLON.

The only remains of the once greatest monastery in the world are 1,600 rough-hewn granite pillars, which were originally cased in bronze and supported a building nine stories high.

up near the eastern entrance. Along the principal rent in the pagoda the feet of sightseers have worn a smooth path, by which it is possible to climb to the summit and obtain fine views toward Mandalay and in other directions.

The story of "Bodawpaya's Folly," as it might be called, sounds like a tale of Egypt in the time of the pyramids, and yet the building of the pagoda was still in progress a hundred years ago!

Huge Glacier-Table in Baltistan.—The Biafo Glacier in Baltistan ("Little Tibet"), on the Northern frontier of Kashmir, is one of the two largest glaciers known outside the Arctic regions, and certainly one of the most magnificent in the world. It extends for thirty-five miles; and, according to the enthusiastic account of those intrepid climbers, Dr. and Mrs. Workman, every step up it "carries one to different scenes of varied and ever-increasing grandeur, until it becomes impossible to look in any direction upon a commonplace outline or into a vista of monotonous or banal colour." One of the curious phenomena to be met with upon the Baltoro is the glacier-table, of which the photograph gives an example, found on the lower portion of the glacier in the summer of 1908.

These tables are formed in the first instance by the fall of a great boulder upon the snow-clad surface of the glacier, compressing the snow underneath until it becomes much denser than the surrounding snow. Then the action of the sun leads to the melting of this surrounding snow, while that under the boulder, being sheltered from the rays and hardened by the downward pressure, combined with alternate thawings and freezings, turns into a shaft of ice which makes the support of the "table." The warmth of the ground, reflected from the sun, is sufficient to make the shaft smaller in diameter than the rock-covering above, and as time goes on the shaft begins to suffer further diminution, especially on the southern side—owing to the fact, explained by Dr. Workman, that the sun passes over the tables somewhat to the south and warms the southern face more than the northern. Gradually, therefore, the boulder begins to tilt over to the south, and at last

it slides off entirely, leaving behind the upstanding ice-shaft, now reduced to the form of a pyramid.

The measurements of the particular table illustrated here were as follows: total height, 5.5 metres (over eighteen feet); height of ice-shaft, 3.8 metres; length of boulder top, 5 metres.

The Brazen Palace, Anuradhapura.—Among the many wonders of the great ruined Buddhist city of Anuradhapura, in the North Central province of Ceylon, few are more wonderful than the Lohamahapaya, or "Great Brazen Palace," although all that remains of it is the sixteen hundred monolithic pillars of granite on which the building was formerly upreared. These pillars, once sheathed in beaten bronze or copper, cover an area of about two hundred and fifty feet square and are arranged in forty rows six feet apart, those of them which are still unbroken standing twelve feet out of the ground. Originally, it is said, they supported a magnificent structure nine stories high, each of the upper stories being somewhat smaller than the one below, with, no doubt, a terrace round it which could be used for walking by day or for sleeping in the open on hot nights. The roof was covered with beaten bronze plates. The principal room was the great audience-hall, in which the pillars were overlaid with gold, while in the centre there stood, under a white canopy, an ivory throne with golden lion's-claw legs. The old Cingalese chronicle makes each floor contain a hundred rooms, but this is questioned by modern critics as highly improbable.

The Brazen Palace was built in the second century B.C. by a king named Dutthagamini, to commemorate his victory in single combat over the Tamil usurper Elala, who had descended on Ceylon from Mysore and seized Anuradhapura, driving out the native line which had ruled in Ceylon for four centuries. It was designed as a royal monastery for a thousand monks.

In a subsequent reign the number of stories was reduced from nine to seven, and then at the beginning of the fourth century A.D. a king named Mahasena, an apostate from Buddhism, almost entirely destroyed the building.

Either Mahasena, on his reconversion, or his son (for the accounts vary), rebuilt it with five stories only. The removal of the seat of government from Anuradhapura was followed by the gradual falling to pieces of what had once been the largest monastery of its day; and it is long since



Stereo by] [*H. C. White Co.*

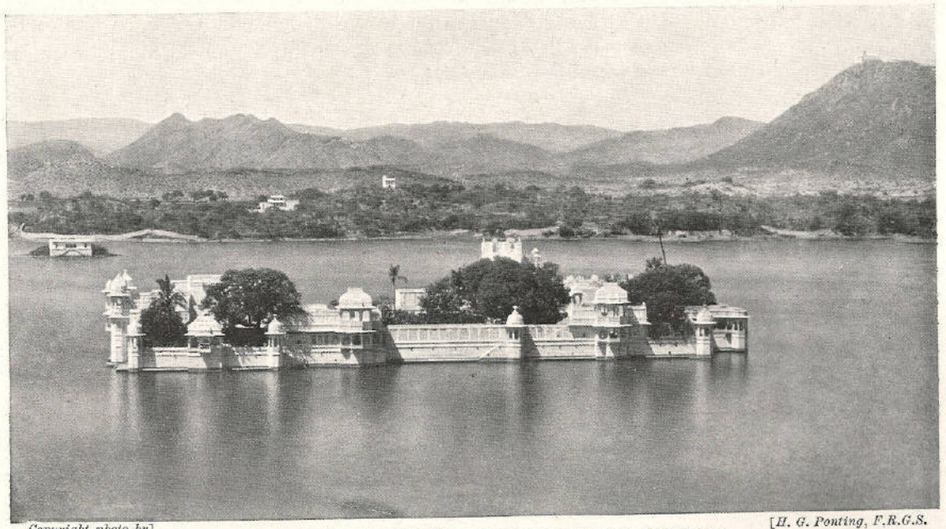
THE BRAZEN PALACE.

Each pillar stands twelve feet above the ground, and there are forty rows of forty each covering an area of about 250 feet square.

anything of it has been left to view except the sixteen hundred pillars which the modern tourist sees.

Island Palace, Pichola Lake, Udaipur.—The late James Fergusson, who did so much for the introduction to Europe of the knowledge of India's architectural beauties, said of the two island palaces in the Pichola Lake at Udaipur (Oodeypore): "I know of nothing that will bear comparison with them anywhere." The nearest rivals to them in Europe he found in the Borromean Islands in Lago Maggiore, Northern Italy; but he declared the Indian beauty-spots far superior.

The two palaces are known as Jagmandir and Jagniwas respectively, of which the former is represented in the photograph. This island is completely enclosed within the walls of the palace (whereas in the case of the other island the trees in places overhang the water), and its area of four acres contains not only the palace buildings, but also three distinct gardens, divided from one another by arcaded cloisters, in which grow oranges, mangoes, and other fruit trees, and a few palms, cypresses and plantains. The buildings are beautifully white, and the photograph brings



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

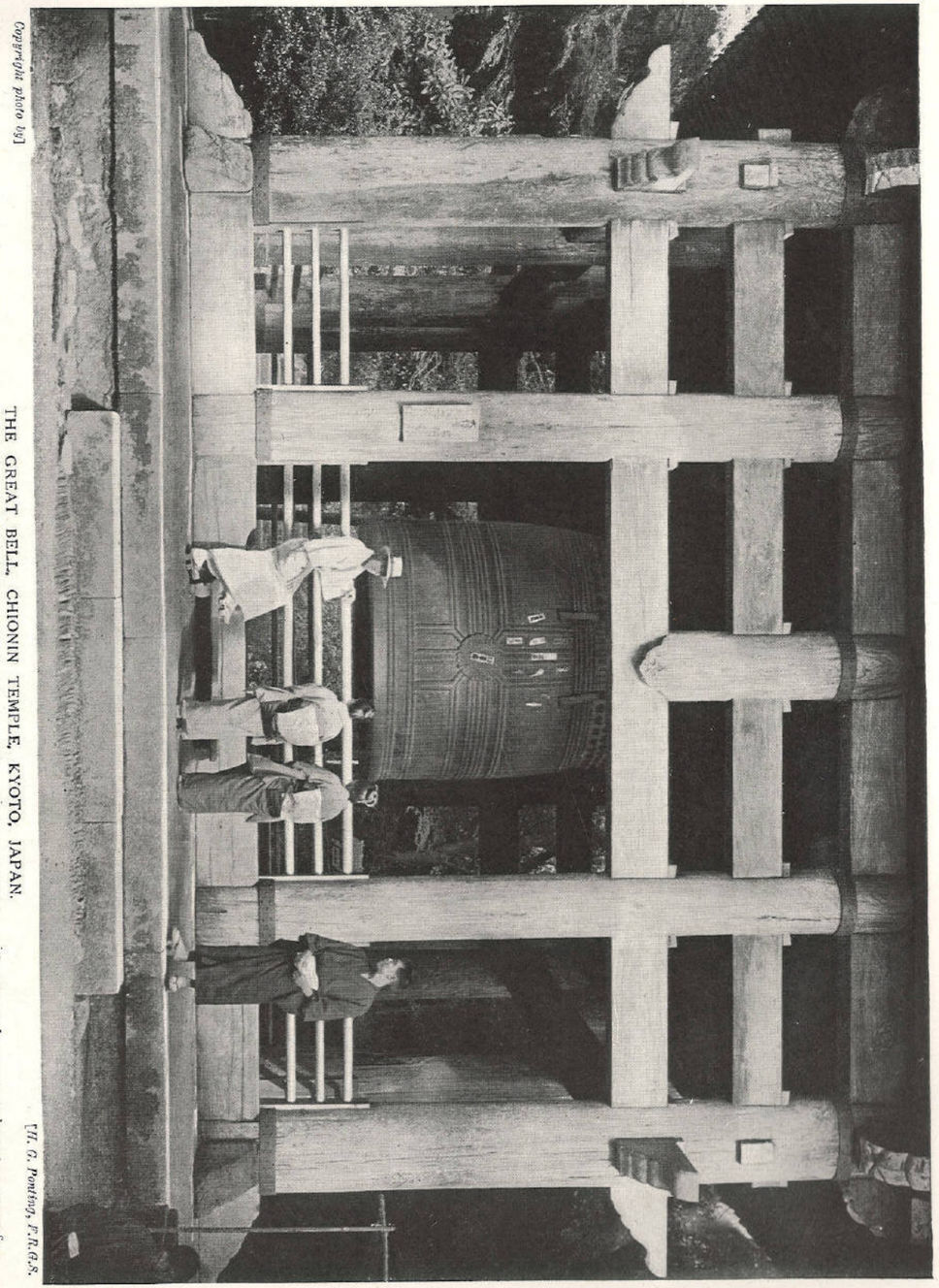
THE BEAUTIFUL WHITE LAKE-PALACE AT UDAIPUR.

This photograph represents one of the two beautiful palaces erected on islands in Lake Pichola at Udaipur, capital of the Indian native State of Mewar. It was taken from a window in the royal palace of the Rana, overlooking the lake. It is from this island that Outram is said to have swum ashore, in spite of the crocodiles in the lake.

out admirably the dazzling effect of the whole, as well as the beauty of much of the detail, such as the stone trellis-work in the arcades overlooking the lake. The two halls, of two stories each, on the side of the island facing Udaipur Palace, are also shown, and that at the northern end, a square with twelve pillars in the centre and a deep verandah all round.

The two island palaces are both attributed to Jagat Singh, Rana of the Rajput State of Mewar, of which Udaipur, "the City of the Sunrise," is the capital. They would thus date from the seventeenth century; while Pichola Lake was formed three hundred years earlier by Udai Singh, the Rana of those days, when he fled before the conquering Akbar, and, taking refuge in the mountains of Mewar, founded a new capital. He built a dyke in the valley and so formed a lake two miles and a quarter long by a mile and a half at the greatest width.

Outram, the "Bayard of India," is said once to have swum from the Jagmandir to the shore, in answer to a taunt from the Rana of Mewar. The presence of many crocodiles in the lake made this feat one of no little danger.



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE GREAT BELL, CHIONIN TEMPLE, KYOTO, JAPAN.

This is the largest bell in Japan, and one of the largest in the whole world. It is nine feet across and nearly eleven feet high, weighs seventy-four tons, and requires twenty-five men to ring it properly.

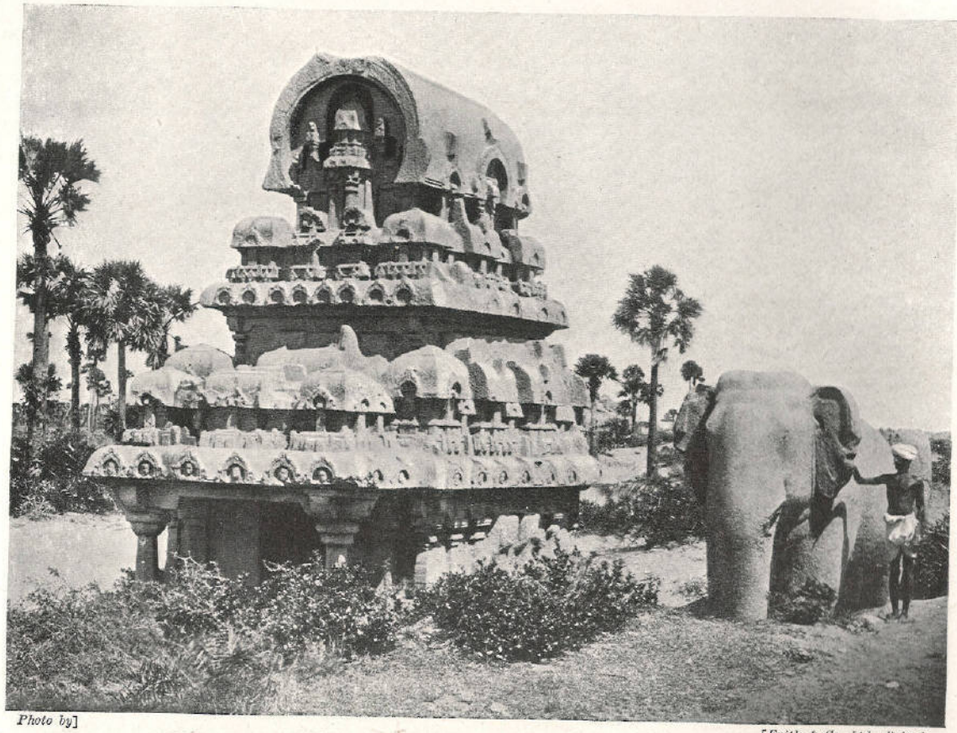


Photo by] *[Frith & Co. Ltd., Reigate.*

"SAHADEVA'S RATH," THE OLD DRAVIDIAN MONOLITHIC TEMPLE.

At Mahabalipur there are five monolithic temples hewn out of the granite rock by the Dravidians, in about the sixth century. Beside the fifth temple, which is shown in the illustration, there stands a large granite elephant, which was formerly buried in a mound.

Visiting Udaipur lately, Pierre Loti found the island palaces rather dilapidated and their gardens overrun with weeds. Nevertheless, he draws a charming word-picture of their somewhat saddened beauty.

The Great Bell, Chionin Temple, Kyoto.—In the picturesque Chionin monastery, standing on a pine-clad hillside at Kyoto, and belonging to the Jodo sect, one of the most influential divisions of modern Japanese Buddhism, two of the chief treasures are a set of screens painted by celebrated artists in the early seventeenth century and a bell hanging in a pavilion in the grounds, which dates from about the same time, having been cast in 1633. Kyoto possesses the two largest bells in Japan, the other being that in the temple of the Daibutsu, which was cast eighteen years earlier. The Chionin bell—it is nearly eleven feet high as against the Daibutsu bell's fourteen feet—is of the same diameter, nine feet, and weighs seventy-four tons against the other's sixty-three. The method of ringing it is by striking with a great wooden beam against the gilded chrysanthemum, which may be plainly seen in the photograph, in the lower centre of the bell. It is said that it requires no less than twenty-five men to manipulate the beam so that the bell may ring properly. But its voice is seldom heard. Visitors are not allowed at the Chionin monastery, as at the Daibutsu temple and at Nara (where is the third largest bell in Japan), to pay a small sum for the pleasure of hearing the sound. Perhaps it is because of its being so rarely rung that it is said that, once heard, the tone of the Chionin bell can never be forgotten.

It may be interesting to the reader to give for the purpose of comparison the weights of some of the other great bells of the world. The largest is that at Moscow, the "Tsar bell," which weighs one hundred and ninety-eight tons. This has never been used, having been cracked at the foundry. Moscow has another, however, which is the largest bell in use, weighing one hundred and twenty-eight tons. The Mingoon bell, on the Irrawadi, near the brick pagoda, is ninety tons. Peking has one of fifty-three and a half tons. Our bells in this country are mere pigmies in comparison, the Great Bell at St. Paul's, which is the heaviest, being only seventeen and a half tons.

Monolithic Temples at Mahabalipur, near Madras.—At a point on the south-eastern coast of India, between Madras and Pondicherry, are some of the most important architectural remains in the whole peninsula, including what are supposed to be the oldest examples of the Dravidian rock-hewn temple. They are, at any rate, the oldest at present discovered, and are assigned by some authorities to the seventh century A.D., by others to the century before. The Dravidians (who inhabited part of India long before the Aryan invasion, and may practically be called aborigines), however intellectually inferior they were to the Aryans, were gifted architects; and to this apparently Turanian people must be attributed the largest amount of originality which is displayed in Indian temple-construction.

As might have been expected, the rock-hewn monuments have withstood the wear and tear of time better than any others, and hence for ancient Dravidian work in its most perfect form it is to such monolithic temples as those at Mahabalipur that we must look. Notwithstanding their age they have lasted extremely well, and their granite lines have suffered but little in the course of twelve or thirteen centuries.

Although the place is commonly called in English "Seven Pagodas" (after a native legend

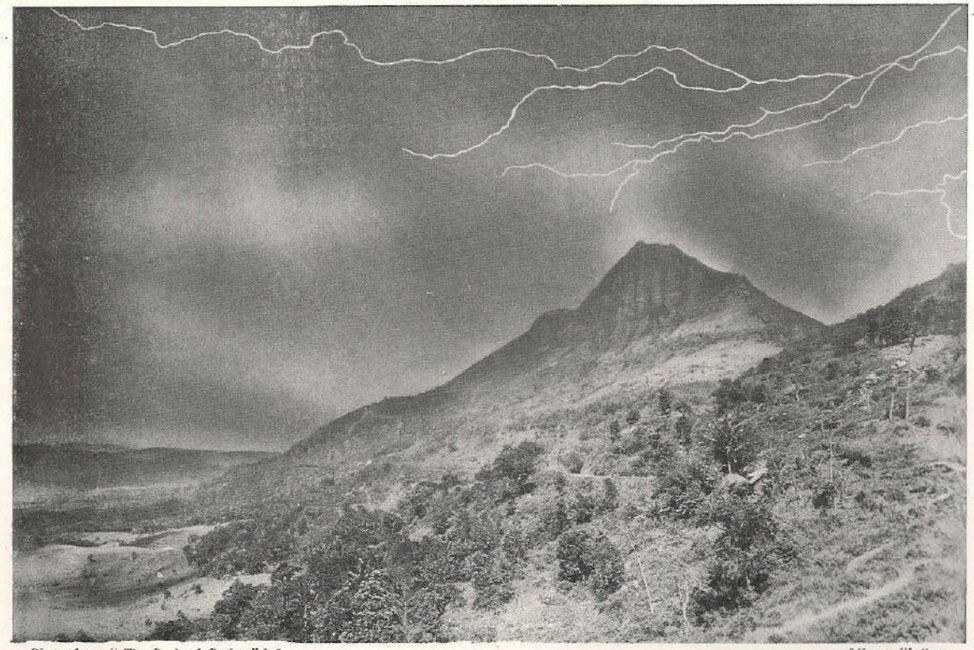


Photo from "The Book of Ceylon," by] *[Henry W. Cave.*

A WONDERFUL LIGHTNING EFFECT ON ALLAGALLA MOUNTAIN

Allagalla Mountain, Central Ceylon, is remarkable for its majestic appearance during the numerous thunderstorms which visit it. Nowhere is a tropical storm more impressive The thunder seems to shake the whole mountain, and cataracts of water roar down its sides

which classes together the two temples on the shore, dedicated to Vishnu and Siva, with five others which are said to have been buried beneath the waves), the real interest attaches to a group of five monoliths, standing close together but not near the other two temples. These "five *raths*" (that is to say, chariots, from the shape of the shrines) lie four in a straight line and apparently all cut out of a single granite rock of gigantic proportions, and the fifth close to the others but a little detached and not in a line with them. It is this fifth, "Sahadeva's *rath*," which is represented in the photograph. "Though small," Fergusson's "History of Indian and Eastern Architecture" says, "it is one of the most interesting of the whole; but like the others, it is very unfinished, especially on the east side. Its dimensions are eighteen feet in length by eleven feet across, and about sixteen feet in height. It faces north, on which side there is a small projecting portico supported by two pillars, and within is a small empty cell."



From Stereo copyright] *[Underwood & Underwood.*

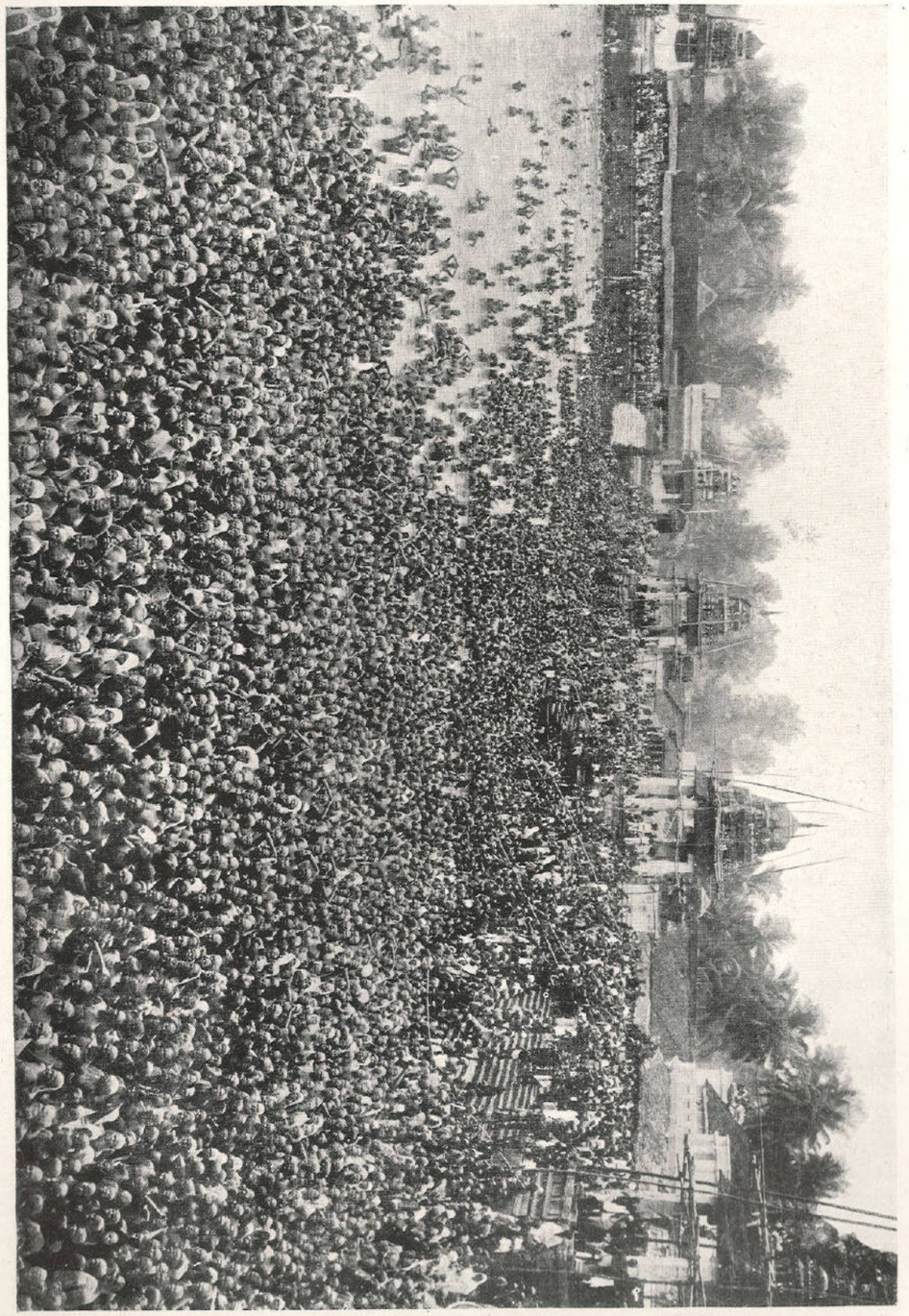
THE TOMB OF ABRAHAM, ISAAC, AND JACOB.

The photograph shows the staircase of the great mosque which now covers the supposed Cave of Machpelah, at Hebron, where the three patriarchs and their wives were buried.

There is no sure explanation of the fact that all these five monolithic temples are unfinished. For some reason or other the constructors left all of them with parts merely blocked out more or less roughly. It has been suggested that a race from the north, in temporary possession of this part of Madras, began the *raths*, but was driven out before they could be completed. Archæologists, however, have not yet satisfied themselves or each other with regard to the problem of Mahabalipur.

Beside the fifth temple there has been brought to light a large granite elephant, shown in the photograph, which was formerly buried in a mound that can be seen in earlier pictures adjacent to the temple.

Altagalla Mountain.—This three-thousand-three-hundred-and-ninety-four-feet-high peak, not far from Nuwera Eliya, is one of the finest sights of Central Ceylon. A precipitous mass of granite, it towers above beautiful valleys and never fails to impress those who look up at it from the railway which has been carried along its side. The mountain is always majestic, says Mr. Henry W. Cave, but especially after excessive rainfall has caused cataracts to dash down from the peak into the valleys, increasing in volume as they go. He continues: "Tea grows upon its steep acclivities, and those who are occupied in its cultivation on these giddy heights are enviable spectators of the most varied and beautiful atmospheric scenes that are to be found in Ceylon. Unsettled weather is extremely frequent and is productive of an endless variety of cloud and storm effects. . . . At one time a vast sea of mists is rolling in fleecy clouds over the lowland acres, and the summits of the hills are standing out from it like wooded islands; at another every shape of the beautiful landscape is faultlessly defined and every colour is vivid beneath the tropical sun; then an hour or two will pass, and rolling masses of dense black vapours will approach the mountain.



MILLIONS OF HINDUS BATHING IN THE SACRED RIVER GANGES.

The Ganges rises in the Himalayas, Siva's legendary abode. At Benares, where the water is of a greenish tint and somewhat thick with mud brought down from the mountains, Hindu pilgrims bathe in it to cleanse themselves from both disease and sin.

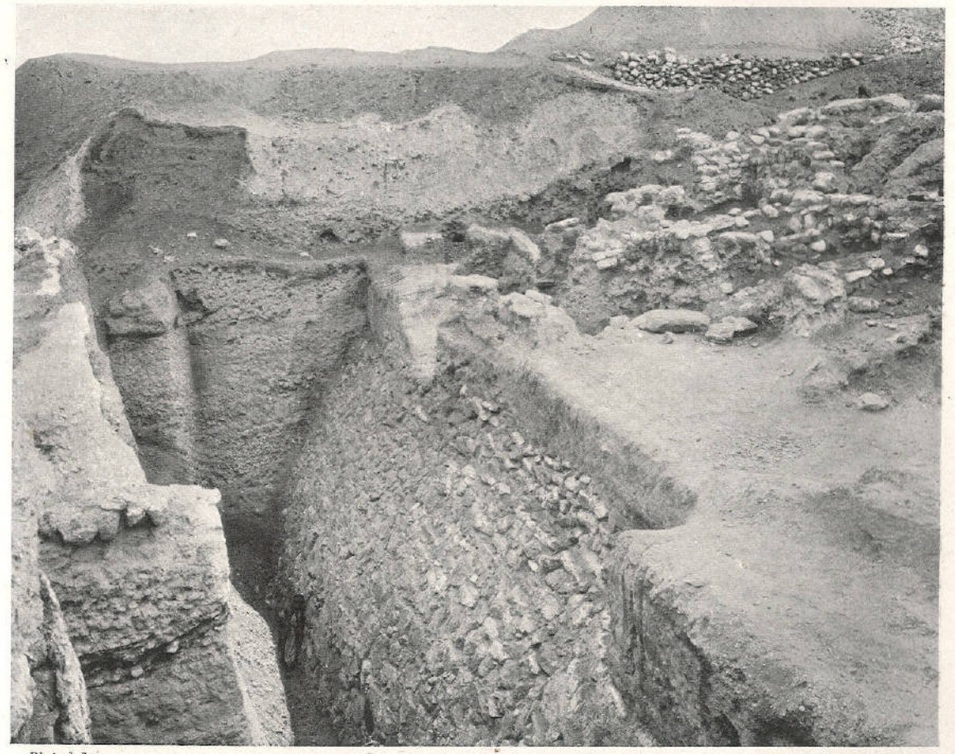


Photo by] [*American Colony, Jerusalem.*

THE WALLS OF JERICHO.

The excavations which have been carried on since 1907 on the site of the ancient Jericho have revealed a wonderful piece of Canaanitish architecture, which proves that Joshua's capture of the place was indeed a great feat. The photograph shows two of the features of the great walls—the courses of large stone-blocks which were laid over the rock foundations, and the remains of the mud-brick top wall

while the sunbeams play on the distant hills; now the sun becomes obscured, a streak of fire flashes through the black mass, and immediately the whole mountain seems shaken by the terrific peal of thunder—thunder of a quality that would turn any unaccustomed heart pale. Then follows a downpour at the rate of a full inch an hour; the cascades turn to roaring cataracts, the dry paths to rushing torrents and the rivulets to raging floods. The rice-fields suddenly become transformed into lakes and the appearance of the valleys suggests considerable devastation by water; but it is not so: the torrent passes away almost as suddenly as it comes, and the somewhat bruised and battered vegetation freshens and bursts into new life as the heavy pall of purple cloud disperses and the gleams of the golden sun return to cheer its efforts."

The Cave of Machpelah.—Among the various places in Palestine connected with Biblical history a special authenticity is claimed for the sepulchres of the patriarchs Abraham, Isaac and Jacob, and their respective wives, Sarah, Rebekah and Leah. It will be remembered that, on the death of Sarah, Abraham purchased from Ephron the Hittite, for four hundred shekels of silver, "the field of Machpelah"—or "the field of the Machpelah," as it is said the correct translation should be—at Hebron in the land of Canaan. In this field was a cave in a hillside, which was used as the last resting-place, not only of Sarah, but also of Abraham himself, his two successors, and their wives. Overlooking the modern Hebron is a large Mohammedan mosque,

which stands over an underground cave, said by the continuous tradition of the last eight centuries to be this identical cave-tomb. Before the beginning of the twelfth century A.D. there is no certain record, but it is known that at this period pilgrims were wont to visit the spot. The old Jewish traveller Benjamin of Tudela writes:

"At Hebron there is a large place of worship called Saint Abraham, which was previously a Jewish synagogue. The natives erected there six sepulchres, which they tell foreigners are those of the patriarchs and their wives, demanding money as a condition of seeing them. If a Jew gives an additional fee to the keeper of the cave, an iron door, which dates from the time of our forefathers, opens, and the visitor descends with a lighted candle, crosses two empty caves, and in the third sees six tombs, on which the names of the three patriarchs and their wives are inscribed in Hebrew characters. The cave is filled with barrels containing the bones of people, which are taken thither as to a sacred place. At the end of the field of the Machpelah stands Abraham's house, with a spring in front of it."

Whatever the nature of the earlier building on the site, the Crusaders in the second half of the twelfth century built a church there, which the Mohammedans converted into a mosque, known as *El Haram*. The celebrated cave is beneath the foundations of this, which are of hard red rock. The cave, however, is most jealously guarded. According to an account given by Vere Monro in 1835 (which he apparently got from a Mohammedan), it

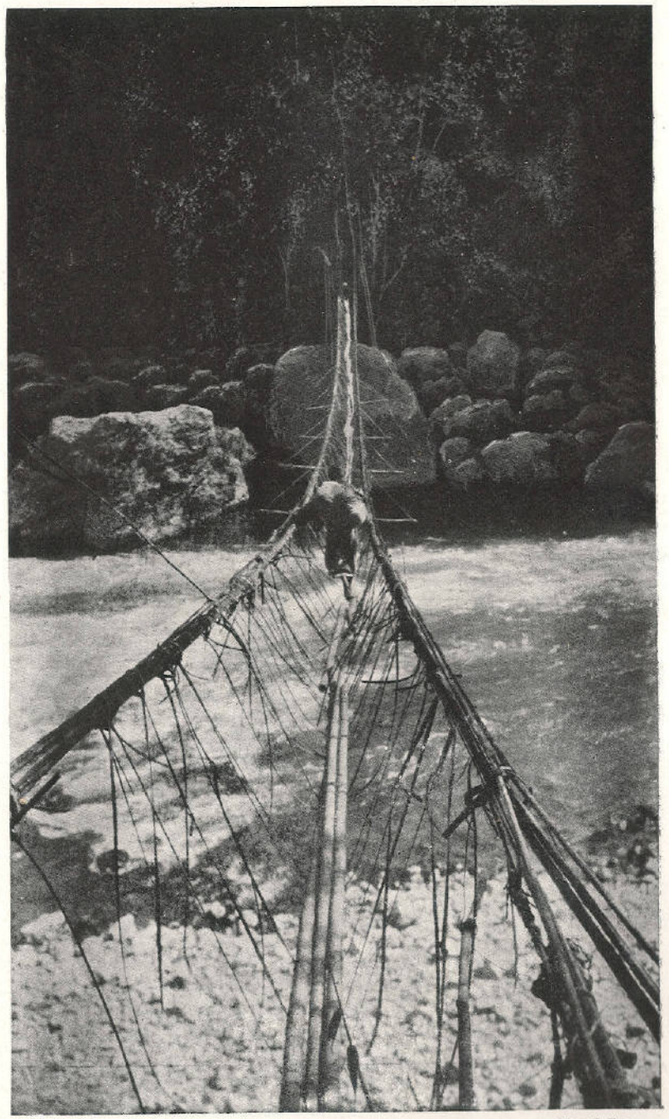


Photo by] [*David Fraser.*

A CANE BRIDGE IN SIKKIM.

The bridge consists of three parts: the split canes, which provide the rails on either side: the unsplit bamboos, two or three together, which make the gangway: and the withes, bark-strands, or strips of cane that form the loops in which the gangway hangs between the rails.

was never entered, but was constantly illuminated by a lamp lowered by cords through the floor of the mosque. Jews were allowed to peep at it through a small hole, but Christians were strictly warned off. Describing a visit in 1865, H. B. Tristram writes: "We were permitted to ascend the staircase which rises gently from the south-east corner of the enclosure, having the massive stones of the Haram wall at our left, smooth and polished like marble. The enclosure embraces not a level space, but the side of a very steep hill, just such as would contain a sepulchral cave."

The visitors then were not allowed to see more than the staircase of the mosque. Things have changed but little since that day. The wall of the Haram, some fifty feet high, prevents the inquisitive eye from seeing more, even of the mosque, than its guardians choose, and the question as to what lies now in the cave still remains unanswered. "The discovery of Jacob's Egyptian wrapping (the mummy will be missing)," says the Rev. F. W. Birch, "beneath the great mosque would virtually settle the site of the cave of Machpelah." But there is no opportunity at present even for making a search.

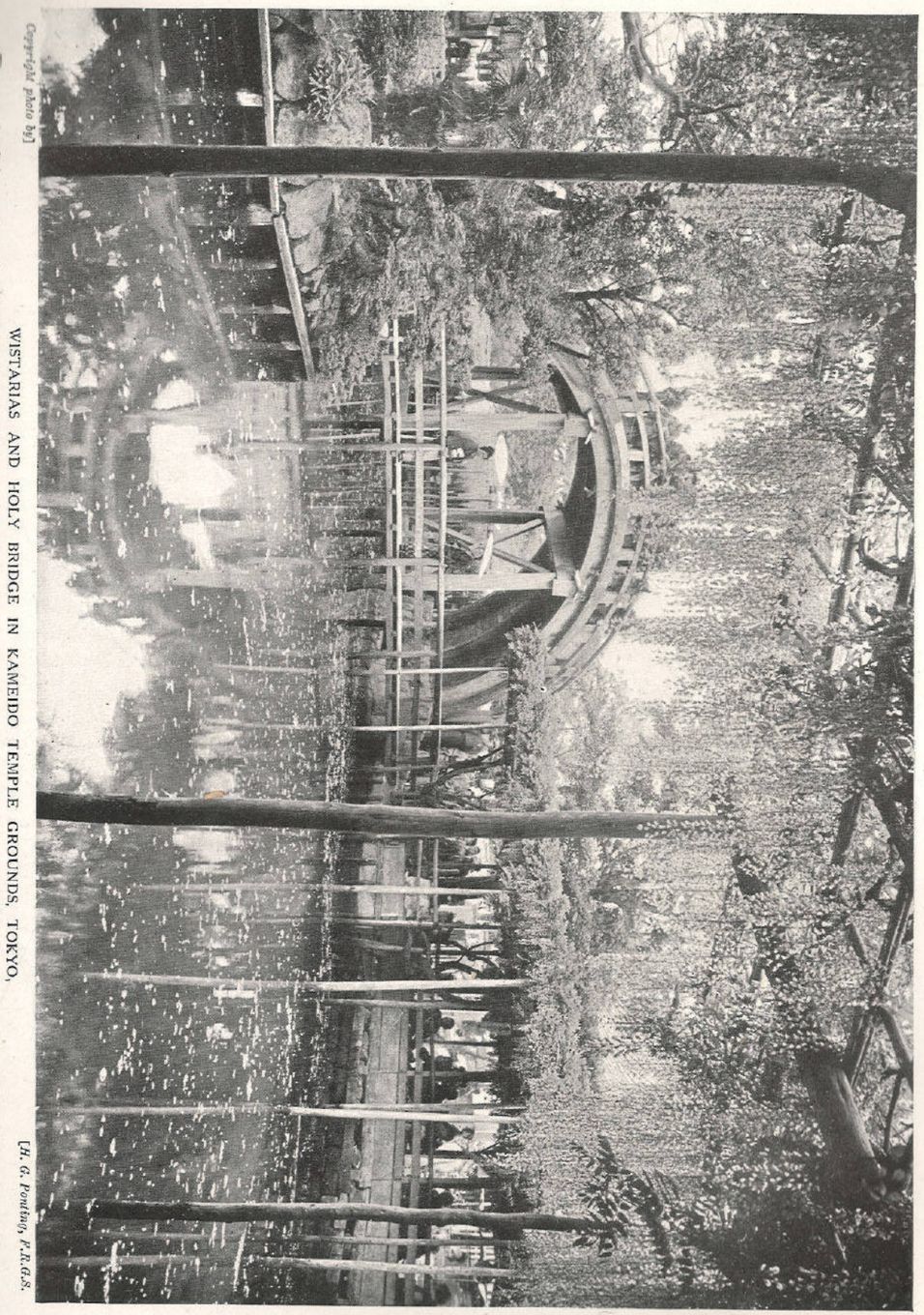


Stereo by] [*H. C. White Co.*

A NORTH CHINA TOMB.

In North China the character of the tombstones varies very little. There is a slab in front of the tomb, and immediately above the inscription of this there is engraved the head of a reptile. The stone, which is placed in a perpendicular position, rests upon the figure of a tortoise.

The Sacred Water of the Ganges.—Few scenes of religious observance are more remarkable than those which may be witnessed in connection with the ablutions of Hindu pilgrims in the river Ganges, where it flows past Benares, Northern India's holiest city. The Ganges is said to spring from Siva's head. It rises, in fact, in the Himalayas, Siva's legendary abode, and it is to a city which particularly venerates Siva that it comes when it reaches Benares. Therefore the devout are receiving special edification when they visit Benares and dip themselves in the sacred stream. Ganges water is of a greenish tint and somewhat thick with the mud brought down from the Himalayas. In addition, it receives a heavy burden at Benares of flower-offerings and funeral ashes, to say nothing of the dead bodies of ascetics of unusual sanctity, which it is customary to entrust to the stream. Nevertheless, the water is esteemed to have wonderful virtue and to be able to cleanse from both disease and sin. Baths are taken by men, women and children alike, either in the river itself, in tanks filled from it, or in holy wells in the city. The great tank of Pischamochan ("Deliverance from Demons") is much frequented by pilgrims, as to wash in it is considered a most efficacious way of driving out evil spirits. Western observers are wont to shudder at the sight of so many and so various specimens of humanity bathing together in one spot—and in water already so polluted; but the pilgrims enter the tank with the utmost joy and faith.



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

WISTARIAS AND HOLY BRIDGE IN KAMEIDO TEMPLE GROUNDS, TOKYO.

The grounds of the temple to the god of learning in Tokyo are remarkable for the beautiful display of wistaria, trained on trellis-work overhanging fish-ponds, in April and May. Visitors who can cross the semi-circular bridge over the principal pond are supposed to do special honour to the patron god.



From Stereo copyright [*Underwood & Underwood.*

GIANT WISTARIA AT KASUKABE, TOKYO.

This thousand-year-old tree covers an area of 60 by 100 feet.

The Walls of Jericho.—Few excavations of recent times have had results of a more interesting nature than those on the site of the ancient Jericho, and they have revealed that the Jews had every right to be proud of their capture of the Canaanitish fortress.

Four years ago there stood at a distance of a mile and a half from the modern Jericho a huge oval mound, known as Tell es-Sultan, about four hundred yards long by one hundred and eighty yards at its greatest breadth, and rising from forty to fifty feet above the level of the surrounding plain, with a few smaller mounds standing on the top. Professor Sellin began work on this, aided first by the Austro-Hungarian Government and then by the German Oriental Society. He has unearthed a tremendous surrounding wall and part of the interior of the town, including the citadel within the northern end of the oval. The outer wall proved to consist of three parts. The lowest section was a solid natural rock foundation, with a few feet of loam and gravel on it. On this was built a stone wall about sixteen feet high, the two lower courses being of enormous blocks, in some cases as large as six feet by three, while in the subsequent ones the stones grow gradually less in size. The stone wall itself also diminishes in thickness as it ascends, being eight feet at its base. The top section is of mud-brick, which reaches now to a height of about eight feet, but may originally have been considerably higher. Towers of mud-brick project at intervals round the whole enclosure.



Stereo by] [*H. C. White Co.*

Wistaria blossoms in swaying garlands in Kameido Park, Tokyo

Such a fortification must indeed have been difficult to capture, especially as in the central tier of the wall the spaces between the blocks were filled with smaller stones as a protection against the besiegers' tools. The builders were very skilful craftsmen. Those who have examined the remains of both Jericho and Troy find strong resemblances between the walls just described and those of the "second city" discovered by Professor Schliemann at Troy, and it is suggested that the architects had something in common, or learned from the same masters.

The citadel at Jericho is hardly less interesting than the outer fortifications. Its walls are built in much the same way, but they are double, with a space of eleven to twelve feet between them. Two towers rise at the two northern angles. Within is what the writer of an article in the *Builder* describes as "a perfect warren of small houses," with only a single thoroughfare among them, as is the case with many Eastern bazaars of to-day. These houses, of which one is in a very fair state of preservation, seem to be later in date than the city walls, and to belong to the period after the Jewish capture of the place. The Canaanites, between the seventeenth and fourteenth centuries B.C., erected the walls, and probably the greater part, if not all, of the citadel; but the Jews, while utilizing the shell, remodelled the interior. A thorough examination of the finds, however, is necessary before anything can be deduced as to the history of Jericho after its fall before the army of Joshua. Two interesting points have come out already—one, that much Egyptian pottery was in use; the other, that under the floors of some of the houses were earthenware jars containing the bodies of infants.

The sand which composed the mound of Tell es-Sultan has had an excellent preservative effect, and now that much of it has been cleared away, it is possible to realize vividly how imposing a place Jericho must once have looked from the plain for miles around.

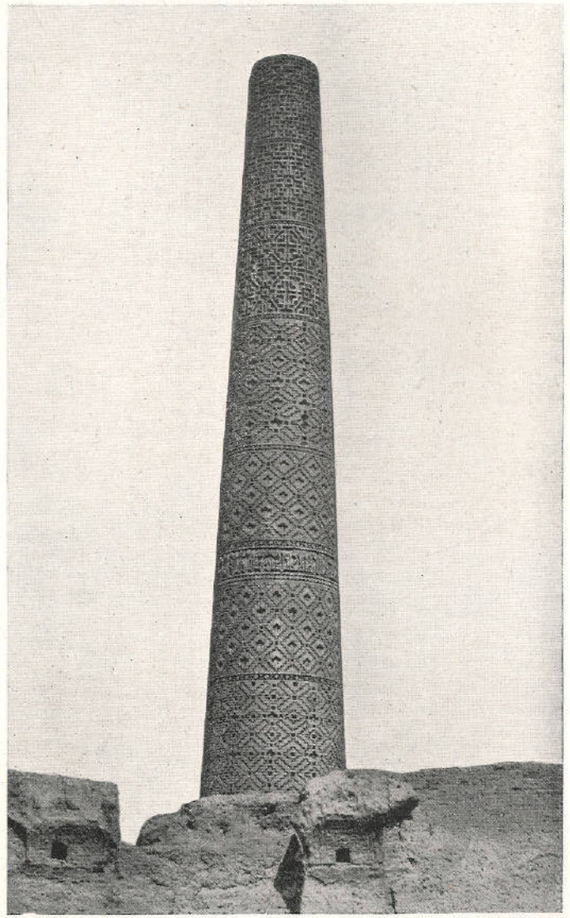
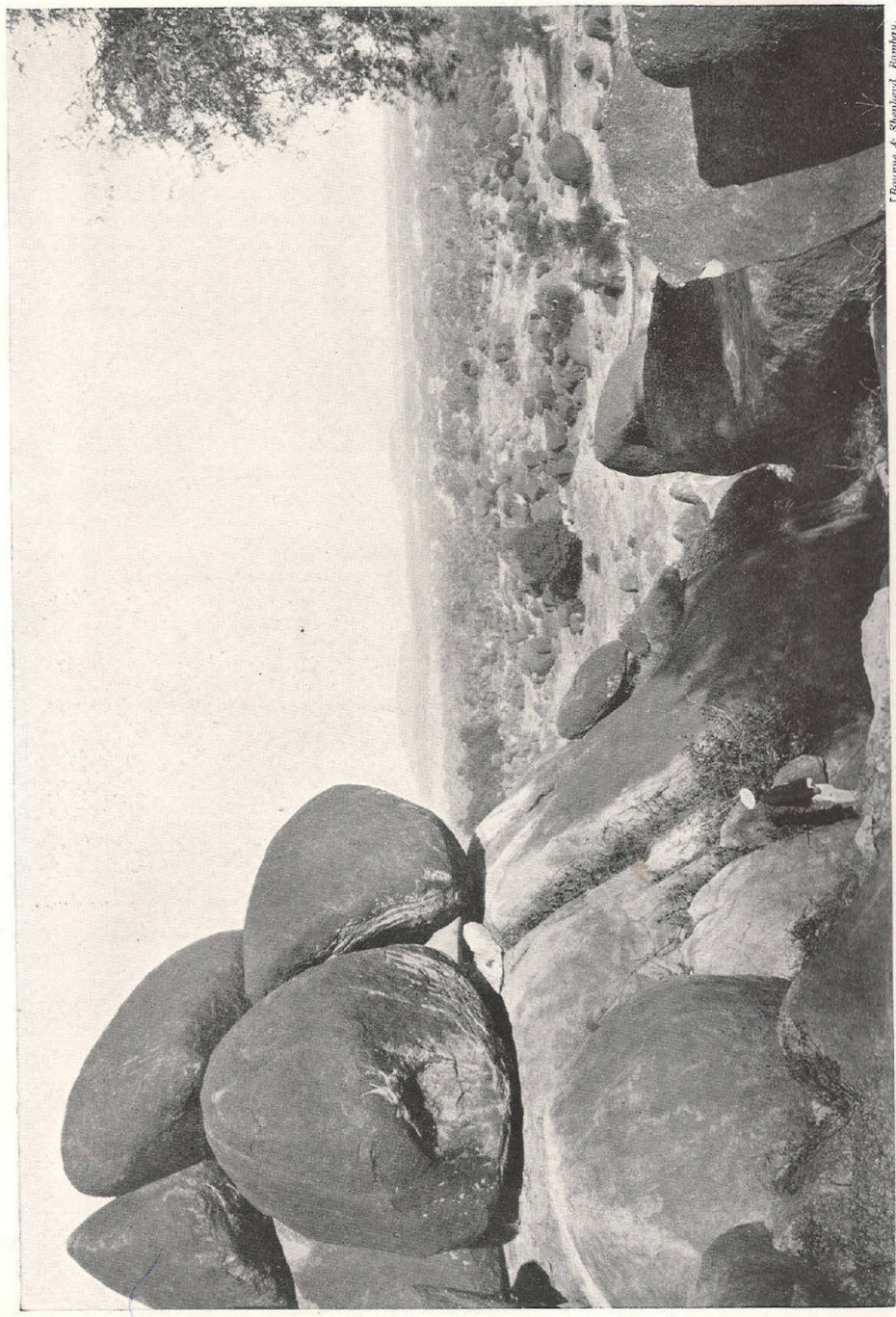


Photo by] [*Pr. Abdollah Mirza.*

THE MINAR AT DAMGHAN.

This tower apparently belongs to the early days of the Mohammedan domination in Persia. It is the most noteworthy object among the extensive remains of what was a great city until two disasters in the seventeenth century brought it to ruin

Cane Bridges in Sikkim.—A bridge constructed chiefly of the bamboo cane, which grows abundantly along the banks, is the ordinary means of crossing the rivers of Sikkim. That which is illustrated in the photograph is suspended over the Tista, a tributary of the Brahmaputra. In appearance it much resembles the iron, rope and plank bridge in Tibet already described; and also the all-rope bridge over the Astor River, North-West Provinces, of the crossing of which Colonel Algernon Durand gives a vivid account in his "Making of a Frontier." Indeed, the general plan of these bridges is the same all along the northern boundary of India. The only differences are in the materials used. Wherever possible, a high take-off is secured on both sides of the stream to be traversed, thus allowing for the inevitable sagging in the centre. The ends are made fast to rocks or trees. In Sikkim the bridge itself consists of three parts—the split canes which provide the rails on either side; the unsplit bamboos, two or three together, which make the gangway; and the withes, bark-strands, or strips of cane that form the loops in which the gangway hangs between the rails.



HUGE GRANITE BOULDERS, JABALPUR

These boulders, in spite of their huge size, have been worn by the action of the weather in just the same way that pebbles are worn by the sea.

Photo by] [*Bourne & Shepherd, Bombay.*

That it is an unpleasant sensation to pass along one of these frail structures over a raging torrent can easily be imagined. In her "Lepcha Land," Mrs. Donaldson writes of such an experience: "As it was impossible to cross without picking one's way very carefully along the swaying line of bamboo, the unaccustomed eye was dazzled and bewildered with the tumultuous white-crested water dashing over the boulders—it being completely visible to the traveller, as there were practically no sides to the bridge and nothing between him and the dangerous waters beyond the slender bamboo line, not more in width than half the length of his foot."

These cane bridges are sometimes as much as three hundred and fifty feet long. They are renewed every year; or, at least, should be, for often the task is neglected, and then the supports give way after the rainy season, with the result of accidents and even deaths in the waters beneath.



Photo by] [*Bourne & Shepherd, Bombay.*

DEODAR BRIDGE, SRINAGAR, KASHMIR.

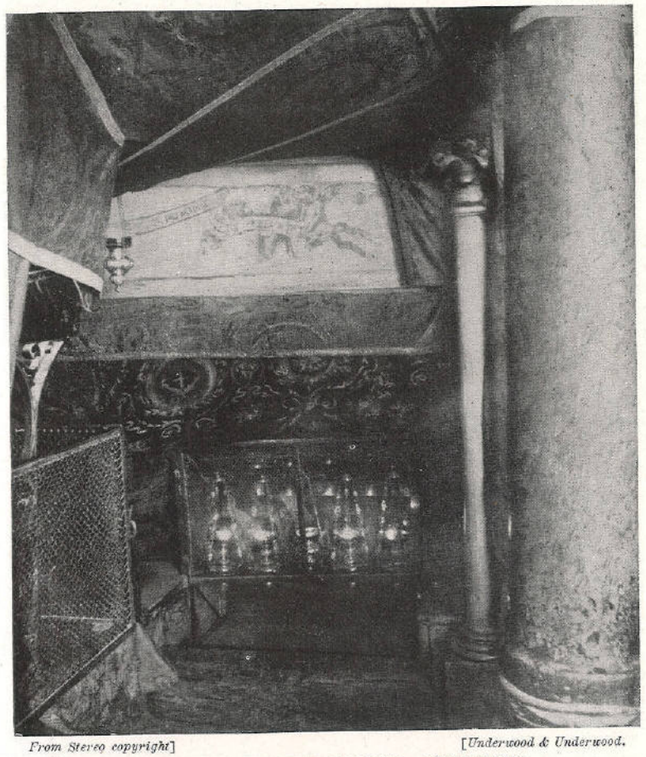
The foundations of the bridge are made of old boats filled with stones and sienite. Above these are piled up logs of the deodar in alternate layers at right angles to each other. On the top of these more logs are laid on the cantilever principle, and the roadway is carried over these.

A North China Tomb.—Nowhere in the world is the tomb so much in evidence as in China—north, south, east, or west. The veriest globe-trotter has this fact forced on his attention as he visits the coast ports. Vast cemeteries surround the big towns, and isolated graves are scattered broadcast over the hillsides. There is a great variety in the style of these tombs, according to their age, their locality, and the rank of their occupants; but everywhere they are a feature of the scene which cannot be overlooked. In the south the prevalent type is the horseshoe-shaped grave. In East Central China one finds many mausoleums built of brick, with the coffins raised above the ground upon trestles. In the north tombs with a superstructure such as is represented in the photograph are common, for the more illustrious dead, at least. The character of the tombstone varies less. The Rev. J. H. Gray, though he was speaking chiefly from his observations in the neighbourhood of Canton, might have been describing the picture before us when he wrote: "The slab which is placed in front of the tomb of a duke, marquis, or earl, is ninety Chinese inches high and thirty-six Chinese inches wide. Immediately above the inscription there is engraved a

representation of the head of a reptile thirty-two inches broad, called by the Chinese *Lee*. The stone, which is placed in a perpendicular position, rests upon the figure of a tortoise thirty-eight inches thick."

The tombstone of each descending class is marked by a diminution in size, and the carving on the top of the stone changes according to the rank of the person buried under it.

The epitaph gives the name and generation of the deceased, the days of his birth and death, his titles, the names of his sons and grandsons, the village in which he lived, and in some cases a summary of his virtues.



From Stereo copyright [*Underwood & Underwood.*

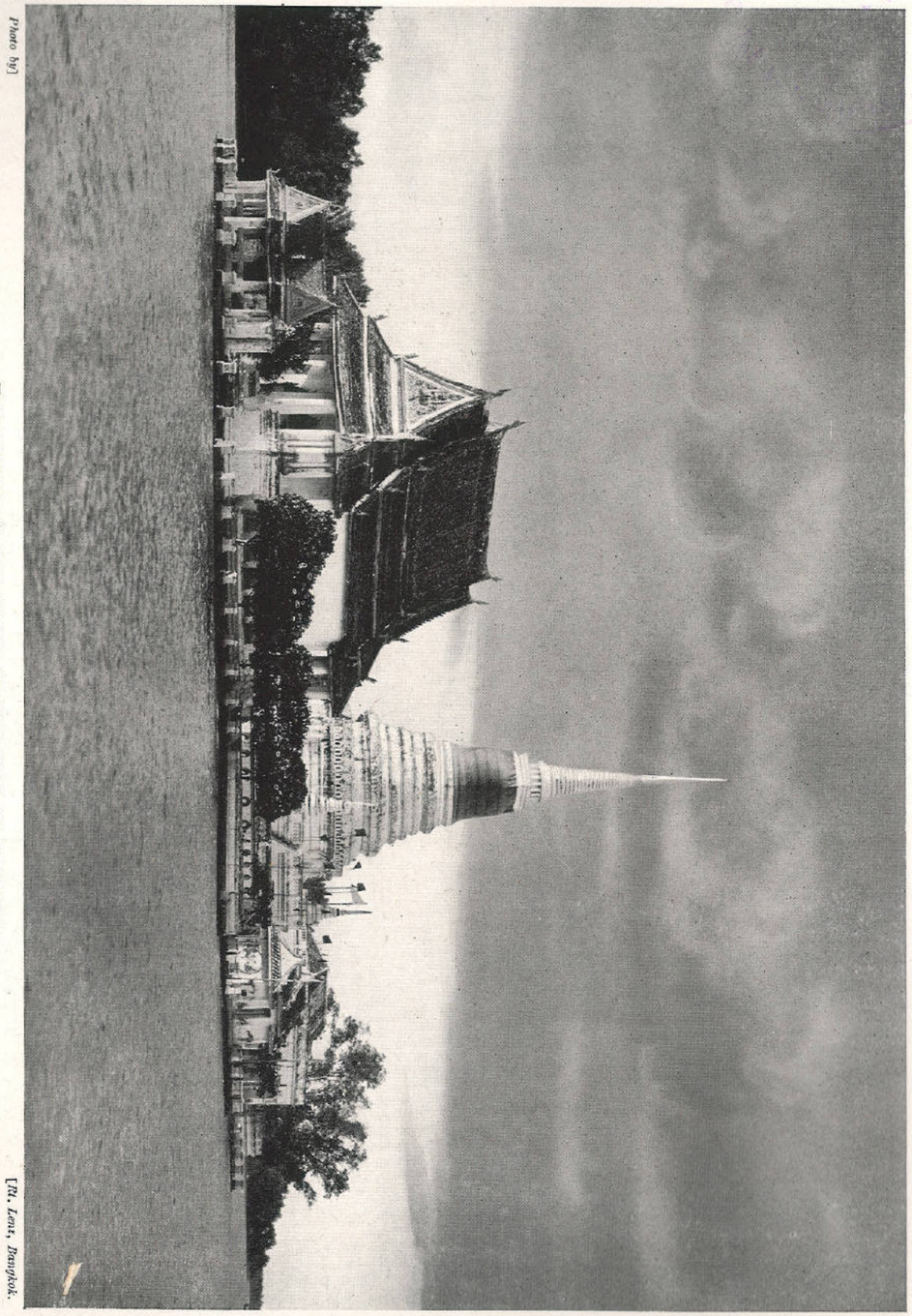
THE SHRINE OF THE MANGER, BETHLEHEM.

In the crypt under the Church of St. Mary, which the Emperor Constantine erected on the site of the inn at Bethlehem, are shown both the spot where Jesus Christ was born and a facsimile of the manger in which He was laid. The original manger, discovered by Constantine's wife, it was said, was carried away to Rome

Japan's Giant Wistarias.—Japan is happy in possessing the lovely wistaria among its common plants. But, although it grows wild about the country, the Japanese devote much attention to the training of it, so as to make of its strong green cables and purple and white flower-tassels the most fascinating arbours, roofs, verandahs, etc. After the cherry-blossom season is over, toward the end of April, the wistaria becomes the chief attraction of temple enclosures, tea-houses and private gardens. Supported by trellis-work, the plant attains to dimensions which in some cases are truly astonishing.

The most beautiful example of the Japanese culture of the wistaria is to be seen in the grounds of the Kameido temple at Tokyo, in making pilgrimages to which the natives at least can combine æsthetic satisfaction and pious observance. For the temple is dedicated to Tenjin, the god of learning and of handwriting, whose history is rather interesting. In the ninth century A.D. a certain Sugahara Michizane won for himself the title of "The Father of Letters." He was banished, but afterwards canonized as the god Tenjin, on account of manifestations of the wrath of Heaven. The Kameido temple is not in itself very magnificent nor well kept, but, at any rate, its wistarias make it a popular resort. About half of the grounds (which are said to have been laid out in imitation of some at Sugahara's place of exile) consists of fish-ponds, surrounded by flagged paths and roofed over with wistaria, growing so thickly on the wooden trellis that the view of the sky is almost completely shut out. Concerning the pendant trails of blossom, Mrs. Hugh Fraser says in "A Diplomatist's Wife in Japan": "Their odorous fringes hang four or five feet deep in many

Photo by]



[*R. Lenz, Bangkok.*

THE PAGODA IN THE RIVER, ON THE WAY TO BANGKOK

The Klang-nam Temple, on an island in the Menam River, is one of the first sights which help to form a visitor's impressions of Siam. It is a shrine much resorted to by the peasantry every October.

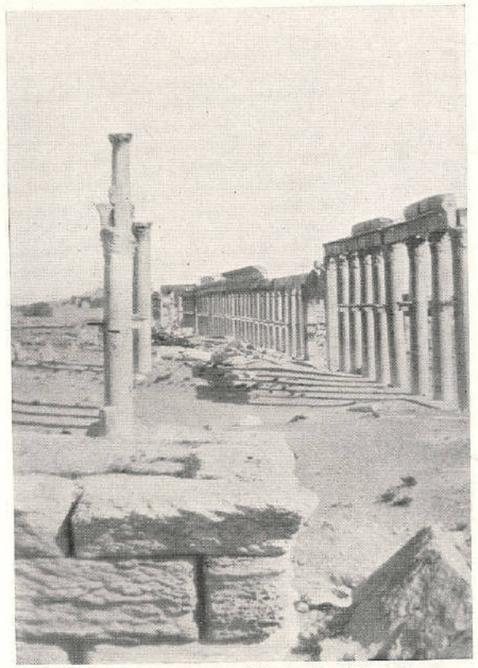


Photo by] [The American Colony, Jerusalem.

THE RUINS OF PALMYRA.

Palmyra, built on the site of Solomon's foundation, "Tadmor in the wilderness," remains to this day the completest collection of ruins in Syria, the walls at the period of the Palmyran republic's greatness having a circumference of about a dozen miles, as their vestiges show. The photograph represents a view looking westward along the Grand Colonnade, which ran down the centre of the main street and consisted of 1,500 columns in a double row

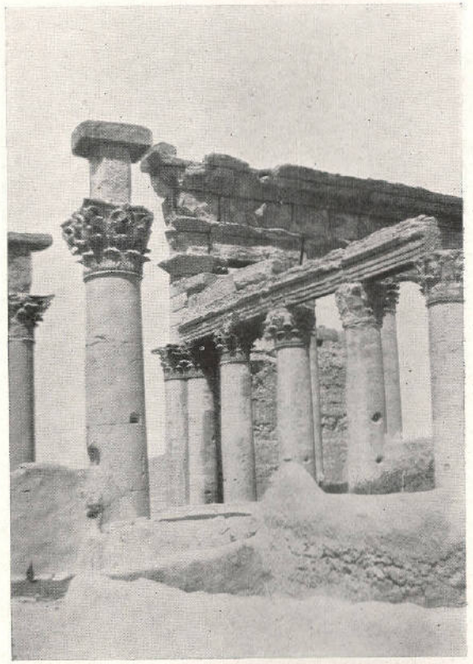


Photo by] [The American Colony, Jerusalem.

THE TEMPLE OF THE SUN, PALMYRA.

The area covered by the ruins of this Temple is about a mile in circumference. Part of the building, including the inner shrine, is in a fair state of preservation, and the columns, with their beautiful capitals, charm the eye of the modern visitor. The Bedouins, who now dwell in the place, have chosen the Temple in which to erect their huts of clay, as the photograph shows in the foreground

places. Little breezes lift them here and there and sway the blooms about, so as to show the soft shadings from pale lilac to dark purple, and the flowers as they move shed drift after drift of loose petals down on the water, where the fat red goldfish come up expecting to be fed with lard-cakes and rice-balls."

The semi-circular bridge in the photograph of the Kameido wistaria-arbour spans what is called the "Pond of the Word 'Heart'" from its fancied resemblance to the shape of the Chinese character for "heart." It leads to the main entrance to the temple and has a quaint superstition attached to it. Those who can walk in clogs over its high arch are supposed to do special honour to the patron god. The task is no easy one, as may be imagined. Mrs. Fraser describes amusingly how she and another European lady once performed the feat in boots, ignorant of the fact that they were thereby doing honour to the deified Michizane.

Among the celebrated wistarias in Japan there is also another at a place called Kasukabe. This covers an area of no less than sixty by one hundred feet and is reputed to be five hundred or even a thousand years old. When it is in full bloom it presents a truly extraordinary spectacle, which is much enhanced by the crowd of visitors who gather under its trellis-supported branches.

The Damghan Tower.—Among the extensive ruins of Damghan, situated on the Teheran road, Northern Persia, and just on the outskirts of the Great Salt Desert, the most striking object is

certainly the *minar* represented in the photograph. This high tower, with its surface of ornamental brickwork (curiously like basket-work in appearance, and showing how the compulsory avoidance of the use of animal figures stimulated the ingenuity of the Moslem architect), cannot be precisely dated, but it has inscriptions in the old character known as Kufic, and should probably be assigned to the early days of the Mohammedan domination in Persia. Damghan's former greatness is attested by tradition as well as by the remains of its buildings. In the seventeenth century, however, two great disasters befell the place: first an earthquake, which killed forty thousand of its inhabitants; and then capture by the Afghans, who slew another seventy thousand. The city must have suffered heavily, as well as its people, from these two blows, and seems to have been allowed gradually to fall into the state of ruin in which it is to-day.

There is a curious legend connected with the neighbourhood. Not far from the *minar* and other remains of old Damghan is a spring, which is said to resent any pollution of its waters by raising a great storm. A Shah of Persia once, it is told, having heard this tale and disbelieving it, ordered his suite to throw dirt into the spring. Straightway a great wind arose and swept away all the tents of the Shah's encampment. High winds are certainly prevalent around Damghan, and no doubt the spring is often accidentally polluted, which is sufficient to keep the quaint story alive to this day.

Gigantic Boulders, Jabalpur.—The district of Jabalpur (Jubblepore), in the northern division of the Central Provinces of India, has been mentioned once in connection with the beautiful Marble Rocks already illustrated and described. The boulders represented in the present photograph are very different in appearance, but are no less interesting in their way. They are the remains



Photo by] [The American Colony, Jerusalem.

TRIUMPHAL ARCH, PALMYRA.

One of the most striking features of the ruins, the arch erected to commemorate the Emperor Aurelian's victory over Zenobia, which brought the independent career of Palmyra to an end.



Photo by] [*The American Colony, Jerusalem.*

THE GRAND COLONNADE, PALMYRA.

The western half of the Grand Colonnade appears above. The brackets which stand out about half-way up the columns served to support the statues of celebrated Palmyrans, or benefactors of the city. The arch on the extreme right formed part of an arcade which cut across the double row of columns at right angles.

of great blocks of granite, marked out originally by joint-planes in the rock, and afterwards rounded by the action of wind and weather until they have assumed a shape much resembling that of many of the pebbles which we find on the sea-shore. Sir T. H. Holland, Professor of Geology at the University of Manchester, writes that "small hills composed of such apparently loosely piled blocks of granite, or granitoid gneiss, are common in various parts of peninsular India, as, for instance, near Jubblepore, in Northern Hazaribagh, in North Arcot, Salem, Bellary and Mysore." In some places the boulders have been worn into various fantastic shapes, in others they have been carved by human hands as they lay. The photograph shows very clearly the huge size of the Jabalpur specimens and the smoothness of their weather-worn surfaces.

Deodar Bridge, Srinagar, Kashmir.—Unfortunately for lovers of the picturesque, the two bridges in Srinagar which used to recall to mind Old London Bridge, in that they had shops running along them from end to end, have recently been robbed of their chief attraction. The bridges remain, but the shops have been cleared away. Doubtless this is an improvement from the point of view of the health of the place. But visitors to the "City of the Sun" go in search of quaint sights rather than of sanitation.

The bridges themselves, however, are very interesting. The Jhelum River, the Hydaspes of the classical writers, forms the real high street of Srinagar, cutting the town in two and having most of the principal business-houses built along its banks. It is spanned by seven bridges, all built according to the same general plan. A bridge in Kashmir is constructed in an extremely ingenious way, which seems peculiar to the country. The foundations are made of old boats filled with stones and sunk at the requisite points. On the top of these, which project just above the water-level in summer-time, is placed an erection of rough-hewn logs of the deodar, which grows

so plentifully in Kashmir. The logs are piled up in alternate layers at right angles to each other, as children often build with sticks. On the top of these again more deodar logs are laid on the cantilever principle, and the roadway is carried over these. In order to protect the piers against the force of the stream coming down and to minimize the resistance, planks of deodar are built in a V-shaped cutwater, and placed in front of the sunken boats. The photograph brings out admirably most of the details.

The deodar wood, a kind of cedar, seems to be remarkably proof against rot, and the common-sense underlying the construction of the bridges is proved by the way in which they have held out against the periodical heavy rushes of water. In 1893, however, very heavy floods carried away six out of seven of Srinagar's bridges. They have since been rebuilt in the same old style.

The Shrine of the Manger, Bethlehem.—Among all Christian places of pilgrimage, the greatest authenticity is claimed for the chapel of the Nativity in the crypts of the fine Church of Saint Mary at Bethlehem. It has been pointed out that Jerome (whose tomb is also in the crypts) was born but a few years after the Emperor Constantine built the original church; and he says that it was on the site of the former inn of Bethlehem that the emperor built. The Mohammedans, compelled by miraculous intervention, according to the legend, spared the place; so that the alterations which have been made since Constantine's days have been due to Christian restorers and enlargers of the church. That the hand of the destroyer was feared at one time is proved by the striking insignificance of the main entrance down to the present time, the west door being so small that the visitor has to stoop to enter by it. Nowadays, however, the great majority of the inhabitants of Bethlehem are Christians, mainly of the Greek and Latin Churches. Bethlehem, Nazareth, and Cana, indeed, are the three most Christian localities in the Holy Land. The chief danger at Bethlehem lies in the rivalry of the different sects. The Greeks and Armenians used to share the guardianship of the spot until, through the agency of Napoleon III., in



Photo by] [*A. H. Finn, Esq.*

SOUTHERN APPROACH, SHWAY DAGON PAGODA

This is the most frequented entrance to the great open-air cathedral facing the road which leads up from the river-bank through the heart of Rangoon. The spire of the pagoda appears in the background, over the trees, while near the middle of the picture is one of the quaint gigantic leogryphs which guard the entrance on either side.

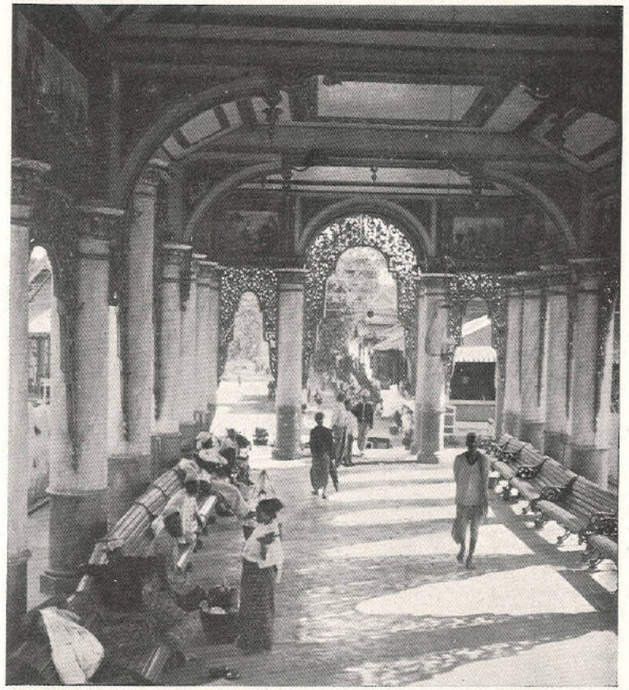


Photo by] [*H. C. White Co.*

Entrance colonnade to the Shway Dagon, in which visitors can shelter from the heat of the tropical sun

1852, the Latins were also admitted into an inharmonious partnership.

Perhaps the best brief description of a visit to the traditional place of the Nativity of Jesus Christ is that given by Mr. Rider Haggard: "The transept and aisle of the basilica," he says, "have been walled off during the last century, so that all the visitor sees as he comes in is the noble naked nave and its aisles, supported by pillars, each hewn from a single rock. This part of the building is remarkable for its disrepair and neglected aspect" (owing to its being the joint property of the warring sectaries, he explains). ". . . After admiring the nave and aisles we passed into the transept and apse, where we saw the gorgeous altars of the various sects, and, alongside, the Latin church of Saint Catherine. Then we went down some steps into the chapel of the Nativity. It is lighted by many lamps of a good size, and marble-lined throughout. Beneath the altar a plain silver star is let into the pavement and with it the inscription: *Hic de Virgine Maria Iesus Christus natus est.* . . . Close at hand, at the foot of a few steps, is a kind of trench lined with marble, said to be the site of the manger in which the Lord was laid, the original (of course, discovered by the Empress Helena) having been despatched to Rome."

The altar with the silver star, described above, is at the east end of the crypt, directly under the choir of the Church of Saint Mary. The Præsepium, or shrine of the Manger, faces it obliquely in an angle of the rock. Both have, no doubt, gone through many alterations since the days of Constantine and Helena. The priests of the Latin rite have charge now of the manger, in which they have laid a waxen image to represent the infant Christ.

Island Temple in the Menam River.—Visitors to Bangkok arriving from the south, up the Menam, are sure to have their attention attracted by one beautiful sight after they have crossed the river-bar and passed between Paknam village, on the right bank, and the fort which faces it on the left. Described by Mr. Warrington Smyth, in his "Five Years in Siam," as "one of the prettiest and most characteristic things of the kind in the country," the Klang-nam *prachedi* and its accompanying buildings give a pleasant first impression of Siam. The snowy-white bell-shaped edifice crowned with a tapering spire, which a broad band of scarlet cloth divides from the bell, stands out boldly against the sky and the verdure of the river-banks; and the triple roof of the *bawt* (the principal room of the temple, in which the seated figure of the Buddha is lodged) allures with its ridge-ends and eaves curving up into horns, which to the Eastern eye represent the heads of snakes, though to the Westerner they often suggest rather the shape of a flame.

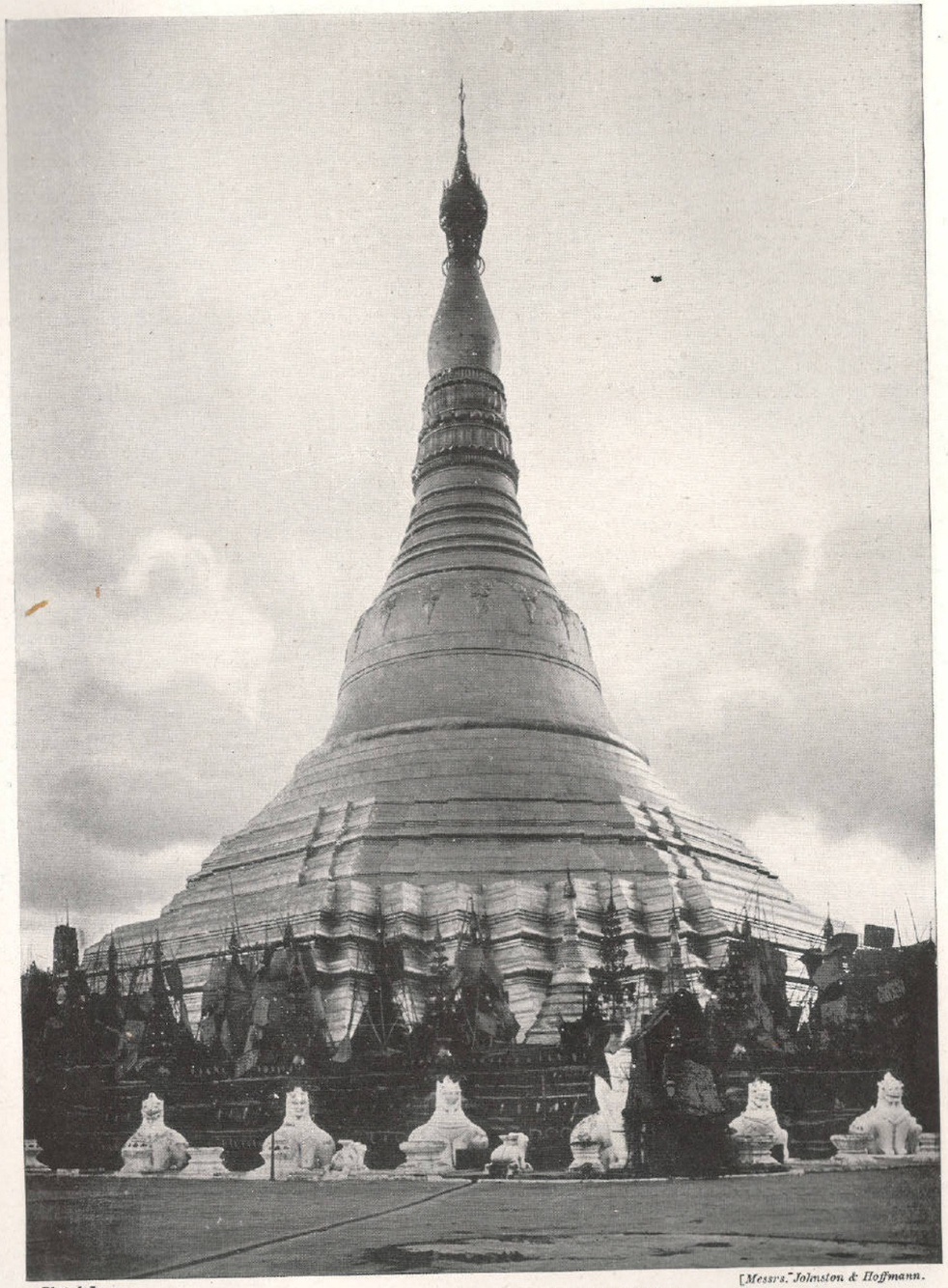


Photo by] [*Messrs. Johnston & Hoffmann.*

SHWAY DAGON PAGODA, FROM THE NORTH.

This huge cone, 368 feet high (and therefore taller than St. Paul's) is the central point of what is certainly one of the "Seven Wonders" of the modern world. It is covered with real gold from its pinnacle to its base, and the vane at the top is set with over 4,600 diamonds, emeralds and rubies. Underneath the gold is solid brick, while buried in its foundations is a gold relic-casket said to contain four hairs from the head of the Buddha—whence it is sometimes called the Pagoda of the Sacred Hair.

The Klang-nam island temple is picturesque rather than historically interesting. At one season in the year, however, it is the goal of many thousands of Siamese peasants eager to combine a cheerful excursion by water with the "making of merit" dear to the unsophisticated hearts of the Buddhist populace in this part of the world. Merit is made in this instance by the presentation of offerings of clothes to the monks, who naturally extend a hearty welcome to their lay friends and encourage them to pay their respects to the shrine. Mr. Warrington Smyth draws a charming picture of the festival, which takes place when the floods are at their height in October. "From sunset on to dawn," he says, "the little isle lies in a blaze of brightness in the great dark river; the crowded boats come and go into the ring of light, and the long peaked yards of the fishermen stand inky against the glare. The deep bass of the monks intoning in the high-roofed *bawt* swings across the water, with the subdued mirth and chatter of the never-ending stream circling round the pagoda. Laughing, love-making, smoking and betel-chewing, the good folks buy their offerings, and none omit a visit to the *bawt*, to light their tapers before the great Buddha."

The name Prachedi Klang-nam, by which this temple is known, may be translated "the pagoda (or shrine) in the waters."

The Ruins of Palmyra.—Lying about one hundred and fifteen miles distant from one another and on opposite sides of the great range known as Anti-Lebanon, Palmyra and Baalbek are the two most wonderful ruined cities of Syria. Baalbek is perhaps the finer, but Palmyra is marvellous enough, and has a far more romantic history—thanks to its association with Zenobia, "Queen of the East," who attempted to rival the great Cleopatra, claimed by her as a kinswoman, and dispute the sovereignty of the world with Rome.



From Stereo copyright] [*Underwood & Underwood.*

A pause on the steep stairway formed by the lower sections of the central pagoda, Shway Dagon This view gives an idea of the manner in which the whole platform is crowded with spires, chapels, pillars, artificial trees, etc., gifts of merit-making Burmans to the great shrine

The foundation of the city is ascribed to Solomon, who "built Tadmor in the wilderness" (2 Chron. viii. 4), doubtless on the site of an ancient trading-post; for Tadmor, or Palmyra, is on the desert route between the Persian Gulf and the Mediterranean. From the time of Solomon to that of Antony it vanishes from history, though there is a legend of its capture and destruction by Nebuchadnezzar. When it emerges again we find it an independent republic, which

managed to secure, and survive for some time, the friendship of Rome. To this period—roughly, the first three centuries A.D.—are to be ascribed nearly all the present remains of Palmyra. The Emperor Hadrian patronized the place and named it after himself, Hadrianopolis, while about the end of the second century it was made a Roman colony, keeping its own elective senate. But the inscriptions discovered among the ruins show the buildings to have been the work of the Syrian inhabitants. The great Temple of the Sun was plundered and damaged after the revolt which followed Aurelian's capture of Palmyra in 270; but Aurelian directed that it should be restored to its former state, apportioning a very large sum to the work.



Photo by] [*Bourne & Shepherd, Bombay.*

Curious figures representing *Nats*, the Burmese equivalent of fairies, on one of the innumerable erections on the great platform of the Shway Dagon Buddhism, in Burma, has tolerated the belief in these beings, which is firmly implanted in the hearts of the peasantry

This Temple of the Sun (within the ruins of which the whole of the Bedouin population of Tadmor today lives in huts built of clay) covers no less than six hundred and forty thousand square feet, and is over a mile in circumference.

The innermost shrine has a magnificently carved ceiling, still intact. But, alas! there is little else of the temple which can be so described.

The two other principal sights of Palmyra are the Grand Colonnade and the Triumphal Arch. The former, which ran down the central street of the city, from the Temple of the Sun, for a distance of over four thousand feet, is estimated to have included fifteen hundred columns, fifty-seven feet in height, in a double row, each having a bracket for the support of statues. These inscriptions show to have represented celebrated Palmyrans, among them Zenobia and her husband Odenathus. The second photograph of the Colonnade shows a bit of the central arch, which formed part of an arcade originally intersecting the two rows of columns.

The threefold Triumphal Arch was set up to commemorate Aurelian's victory over Zenobia, which enabled him to lead her to Rome to walk behind his car—that degradation which her much-admired Cleopatra had escaped with the aid of the asp.

The Shway Dagon Pagoda, Rangoon.—If it were necessary to pick out "Seven Wonders of the Modern World" to match the old list of seven mentioned in the Introduction of this book,

and if we were compelled to restrict the modern list, like the old, to the works of man's hands, then certainly the Shway Dagon Pagoda, the great open-air cathedral of the capital of Burma, would have one of the first claims to inclusion. No visitor from the West, however little he may be touched by sympathy with the spirit of the East and with the Burmese development of the Buddhist religion, can look upon it unmoved. And even the most materially minded must be forced to reflect, if only by the prodigious outlay of wealth which has been lavished by those thirsting to "make merit" with their gifts to the shrine, which, according to legend, encloses a gold relic-casket containing four hairs from the Buddha's head.

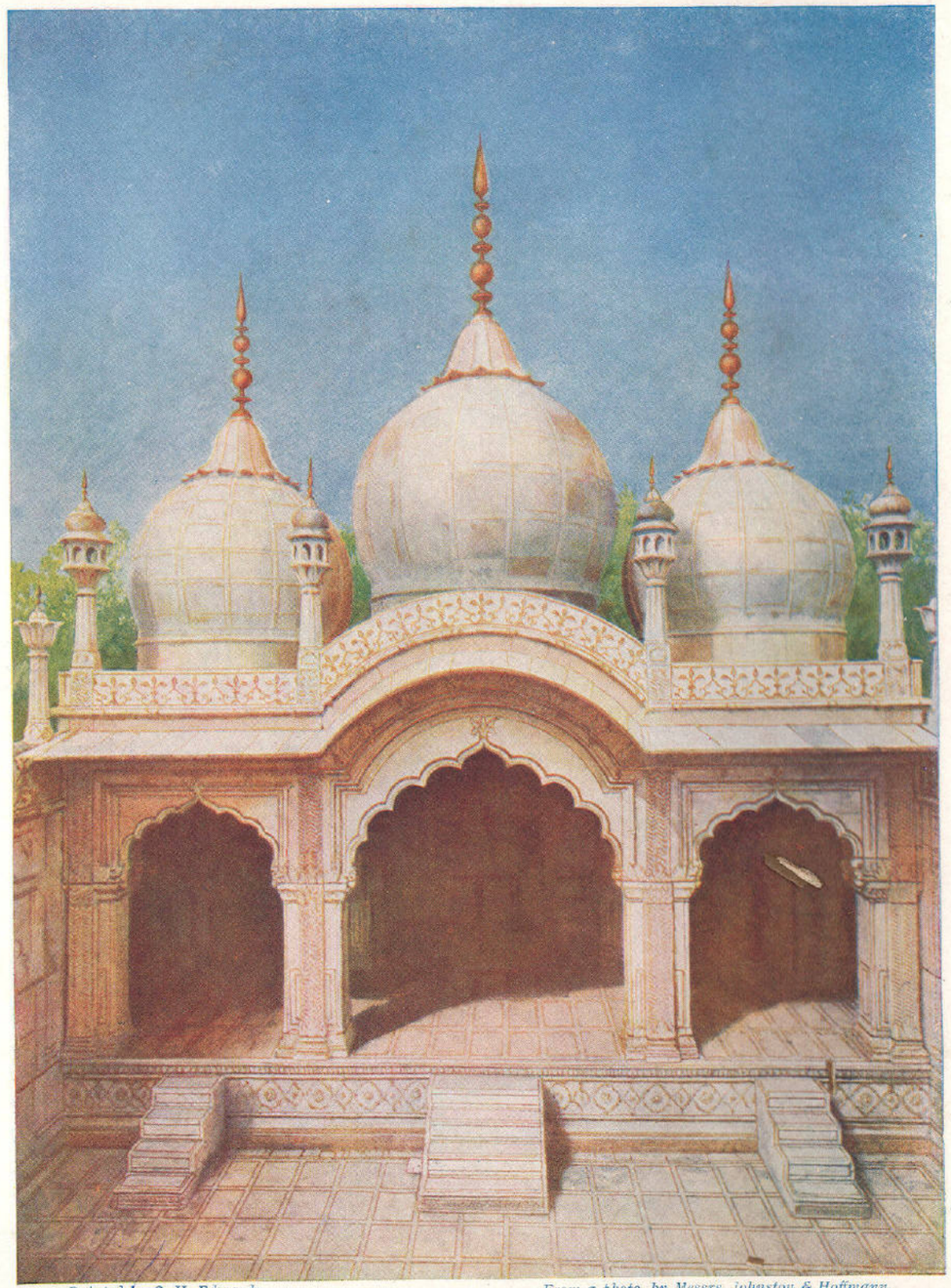
The great glory of the place is the central pagoda itself, at the base of which the casket is said



Photo by] [*Perceval Landon, Esq.*

A view showing the strange medley of the richly decorated tapering spires which greet the visitor to the Shway Dagon.

to be buried. The total height of this tapering pyramid is three hundred and sixty-eight feet; from top to bottom its solid brickwork is covered with a layer of pure gold, which is completely renewed once in every generation. Formerly this was done entirely with gold-leaf. But at the beginning of the present century a new departure was made by the substitution of gold plate for leaf in the upper part, which is fifty-nine feet high. The surface to be covered was two thousand seven hundred square feet, and the cost of the operation was five hundred and fifty thousand eight hundred and eighteen rupees (thirty-six thousand seven hundred and twelve pounds). The lower part is still covered with gold-leaf, which, apart from the periodical renewal, is daily put on by pious pilgrims, who climb up and with their own hands affix a few leaves. The gold plating was substituted above owing to the inaccessibility of the upper section of the pagoda, and its consequently poor appearance after the annual rains had washed away much of the leaf.



Painted by G. H. Edwards. *From a photo. by Messrs. Johnston & Hoffmann.*

THE PEARL MOSQUE, DELHI.

Though only sixty feet square, Aurangzeb's little mosque of white marble is wonderfully beautiful when seen at close quarters. In grace, simplicity, and perfect proportion, it has been said, this Pearl Mosque cannot be surpassed. Particularly noteworthy is the curving parapet with its rich tracery of tendrils, relieving the monotony of the white façade.

It is not only the gold covering which gives the pagoda its material value. The *hti* (tee) alone —the seven-ringed part of the pinnacle, which can be seen under the vane in the first and third photographs—cost sixty thousand pounds, and is hung with one hundred bells of gold and about fourteen hundred of silver. As for the vane, it is a mass of diamonds, emeralds and rubies, to the number of over four thousand six hundred. Yet nothing of these jewels can ever be seen from below. "One cannot but recognize the nobility of sentiment underlying this matter," writes Mr. Scott O'Connor. "In a like spirit, one sees placed at the climbing pinnacles of some grey cathedral in Europe the fine work of the artist lavished on hidden gargoyles and saintly figures far out of reach of the thronging world below. . . . But it is only in Burma, so often accused of superficiality, that men put a great ransom in jewels where no eye can testify to their splendour."

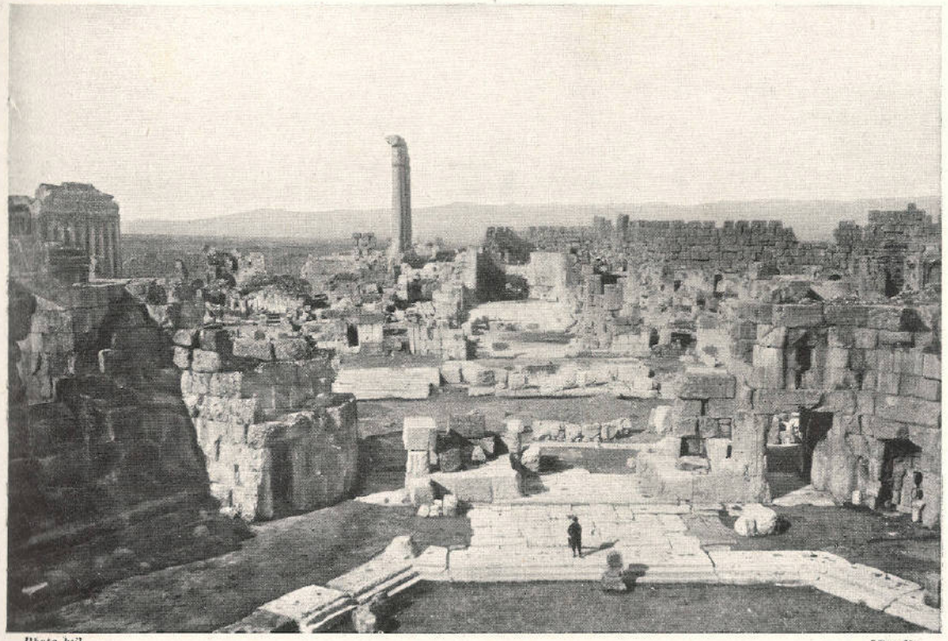


Photo by] [*Bonfils.*

THE RUINS OF BAALBEK, SYRIA.

The ancient Heliopolis, the "City of the Sun," of which there are such wonderful remains, is one of the most mysterious cities of antiquity. It was obviously a place of the highest importance, yet next to nothing is recorded about it in Jewish, Greek, or Latin authors. Its most notable ruins are the Temple of the Sun (of which the six great columns stand out so plainly) and the Temple of Jupiter.

It is practically impossible to describe the Shway Dagon in detail (as is pointed out by Mr. Scott O'Connor, whose own description of it in that beautiful book "The Silken East" is the most satisfactory in the English language), owing both to the elaboration of its architecture and to its constant changes as the pious Burmans add new feature to new feature. Fresh chapels, columns and figures are continually being set up, so that in the course of a few years the aspect of all except the great golden cone in the centre changes very greatly. We must be content, therefore, to notice a few of the most notable points about the shrine.

The Shway Dagon stands on a height one hundred and sixty-six feet above the level of Rangoon. The platform which surrounds the main pagoda is about fourteen hundred feet round, and is ascended by four flights of steps facing north, south, east and west. Of these, the southern, the most used by visitors, is shown in our first photograph. The road in front of the steps leads up



Photo by] [*Bonfils.*

THE TEMPLE OF JUPITER, BAALBEK.

Although this must have been a far less imposing structure than the great Temple of the Sun, it is in a much better state of preservation. Like the larger temple, it is remarkable for the largeness of the stone blocks used in its construction.

from the Rangoon River right through the city. The entrance colonnade, which is a late addition, is remarkable for the complexity of its roof. On either side sits a gigantic leogryph, of which one appears in the photograph.

On the platform the mass of small shrines, etc., is positively bewildering. Some idea of the effect can be gathered from the fourth picture, taken from the actual side of the central pagoda. With the aid of this the reader may be able perhaps to realize the strange medley of tapering spires, richly decorated chapels, golden trees with crystal fruit, and tall pillars covered with vermilion or with glass mosaic, which greets the eyes of the visitor to the Shway Dagon. The figures, too, which surround the pagoda are worthy of study, whether they be of *Nats*—the fairies or nature-spirits of primitive Burma, tolerated by Buddhism because the belief in them is ineradicable among the Burmese peasantry—or of elephants and the various fabulous beasts that share with the elephant the animal world as it appears in the temples of the Far East. In few places on earth can there be seen so curious and charming a blend of the beautiful and the grotesque as on the platform of Shway Dagon. And in the midst rises the great golden mass which, in the words of Mr. H. Fielding, seems to shake and tremble in the sunlight like a fire, while, as the wind blows, the tongues of the bells at its summit move to and fro, and the air is full of music, so faint, so clear, like " silver stir of strings in hollow shells."



Photo by the] [*Photochrom Co. Ltd., London.*

COLUMNS OF THE TEMPLE OF THE SUN, BAALBEK.

These six great columns are almost all that remains of the great Temple of the Sun, which the Roman Emperor Antoninus Pius erected, probably on the site of an earlier shrine of the Syrian god Baal. The disappearance of the bulk of the temple was due partly to the general introduction of Christianity throughout the Empire, partly to the conversion of the site into a fortress by the Arabs in the Middle Ages.

CHAPTER VI.

By PHILIP W. SERGEANT.

Baalbek, the "City of the Sun."—This famous ruined city, lying north of Damascus and close to the foot of the Anti-Lebanon range, remains to this day somewhat of a mystery, although the excavations of German archæologists, which began in the year 1900, have helped to solve some of the problems in connection with it. There is very little that is known for certain of its history, considering how important a place it was through its situation on the land-route from Egypt to Asia Minor and Europe. No recognizable reference to it is found in the Old Testament. Greek and Latin writers of the period when it was a great Roman colony are strangely silent about it. An early Christian author says that "Antoninus Pius built a great temple at Heliopolis, near Libanus in Phœnicia, which was one of the wonders of the world," but he does not gratify our curiosity with details. In fact, it may be said that there are practically no sure records about it except the stones of its ruins.

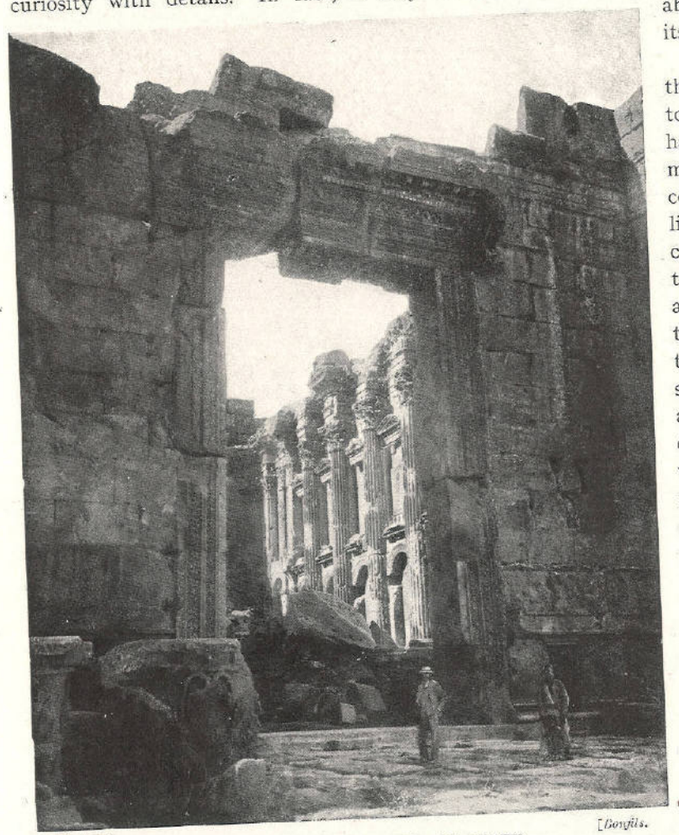


Photo by [*Bonfils.*

THE TEMPLE OF JUPITER, BAALBEK.

The portal of the smaller temple at Baalbek is in a sufficiently good state of preservation to show how fine must have been even the less important of the two shrines at this marvellous city

The chief temple, mainly the work of the Emperor Antoninus Pius in the second half of the second century A.D., must have been a stupendous concern, although unhappily little remains beyond six tall columns with a cornice on the top and three enormous stones, all over sixty feet long, fourteen feet high, and about twelve feet thick. These three stones, known to archæologists as the Trilithon, formed part of the supporting wall at the western end of a huge artificial mound, roughly eight hundred and fifty feet by four hundred feet.

On this mound Antoninus raised his mighty temple, its courtyards and portico, fifty feet above the original level of the ground, from which a long flight of steps led up to the entrance. It seems to have been intended at first to place gigantic blocks of stone similar to the Trilithon on the north and south sides of the temple; and there is in the ancient quarries just outside Baalbek one of them, seventy-one feet long, thirteen high and fourteen thick, and estimated to weigh no less than three million pounds. (A photograph will be found in the Introduction.) It is supposed that the architects found it impossible to move this, the mightiest stone ever hewn, and so left it in the quarries and abandoned the idea of placing such blocks on the north and south sides, completing the temple foundations without them.

The building was apparently finished in the course of the third century. Then came the official adoption of Christianity in the Roman Empire. Theodosius closed this last of all the pagan temples, but did not go so far as to destroy it. He seems to have been content to erect a church upon its courtyard, probably utilizing some of the temple materials to do so. The church was rebuilt later, but when the modern excavators dug down they found still embedded in its pavement the old stone altar, twenty-eight feet square, which had stood before the temple steps. This seems to date from the time of Antoninus, not from the præ-Roman period, as was at first supposed; but there may have been an earlier altar to the Syrian god Baal before. Baal was a sun-god, and Antoninus's temple was dedicated to Jupiter in his aspect of the sun-god—whence the name Heliopolis, City of the Sun.

After the Christians came the Arabs in the Middle Ages, who converted the whole of the great platform into a fortress, using up much of the temple buildings for its walls, but happily leaving a few remains to us to wonder at to-day.



Photo by [*The Fleet Agency.*

GRAVES OF THE FORTY-SEVEN RONINS, TOKYO.

These are the actual graves of the heroes of a tale of barbarous chivalry made familiar to the West by numerous writers on Japan. The affair took place at the beginning of the eighteenth century, but the cemetery is still unceasingly visited by pilgrims. On the large tomb (that of the lord of Ako, whose death the ronins avenged) may be seen the visiting-cards of those who have paid their respects to the memory of the dead.

So these six columns and the Trilithon record the remarkable history of a spot first Syrian, then pagan Roman, then Byzantine Christian, then Arab—and now no man's.

The smaller ruin, which is on a lower mound to the south of the Temple of the Sun, was a shrine of Jupiter in his more ordinary Roman aspect. Much more of its structure is still standing, including some fine columns and a good deal of the main walls. Some surprisingly large hewn stones were used in its construction, if none to match the giants of the Temple of the Sun. It had a flight of thirty-five steps leading up to it, which have been discovered embedded in the Arab building which covered part of it in mediæval times.



Stereograph by] [*H. C. White Co., London.*

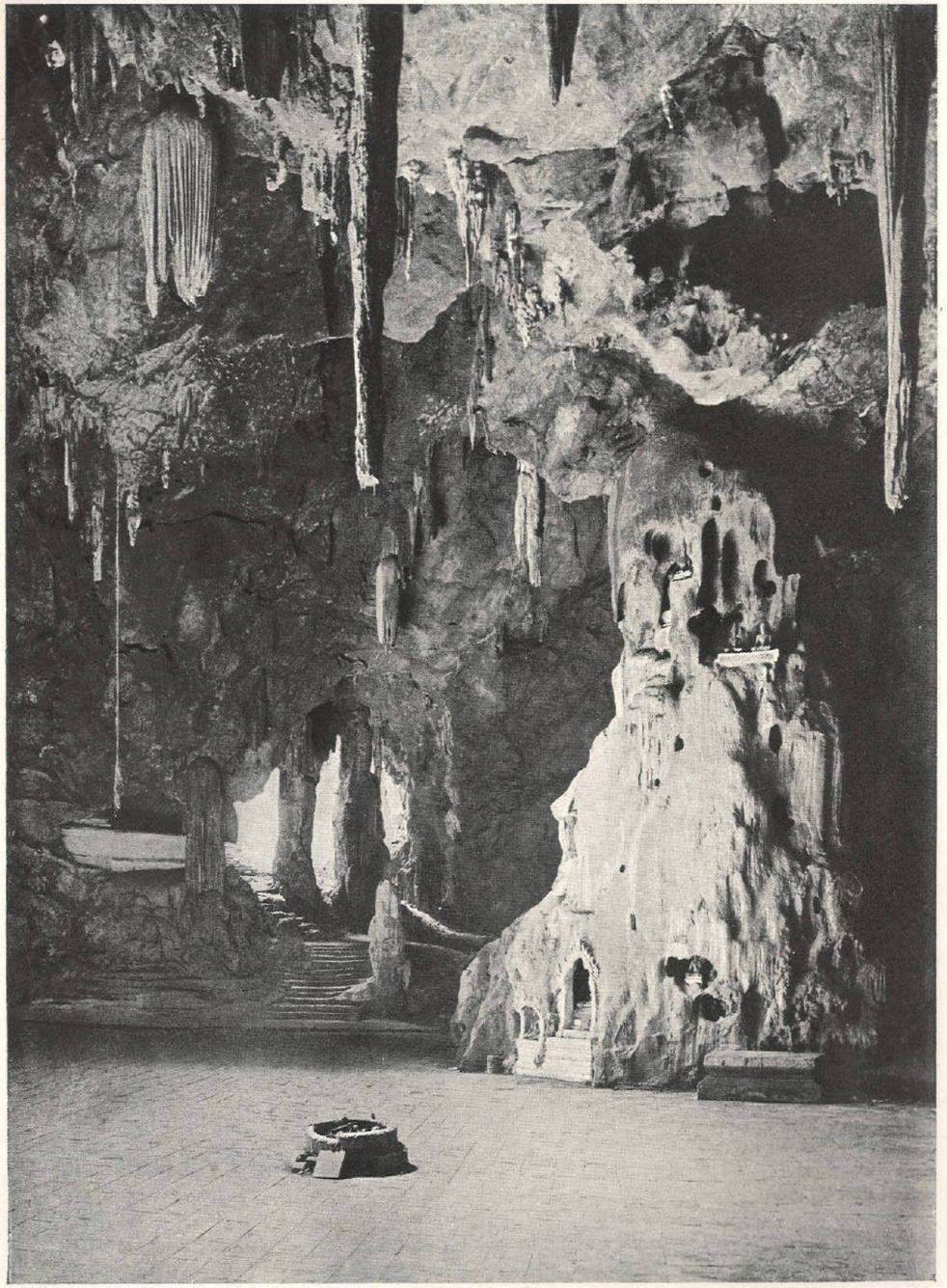
THE MOST BEAUTIFUL GATE IN THE WORLD.

This title is claimed for Akbar's arch in front of the courtyard of the mosque at Fattehpur-Sikri, near Agra. Both the signs of Hindu influence and an inscription quoting a saying of "Jesus, on whom be peace!" show the toleration of the great Mohammedan.

Of the Christian remains at Baalbek nothing seems very ancient, except perhaps the triple apse at the west end of the church in the great court-yard. This is attributed to Theodosius's reign (378–395 A.D.), the rest of the church being the work of restorers.

Of the Baalbek of to-day Mrs. G. Lowthian Bell writes: "The great group of temples and enclosing walls set between the double range of mountains, Lebanon and Anti-Libanus, produces an impression second to none save the temple group of the Athenian Acropolis, which is easily beyond a peer. The details of Baalbek are not so good as those at Athens. . . . But in general effect Baalbek comes nearer to it than any other mass of building, and it provides an endless source of speculation to such as busy themselves with the combination of Greek and Asiatic genius that produced it and covered its doorposts, its architraves and its capitals with ornamental devices, infinite in variety as they are lovely in execution."

The Graves of the Forty-seven Ronins, Tokyo.—No tale of old-time Japan is more impressive than that of the revenge exacted by the forty-seven loyal retainers of the lord of Ako for their master's death. Western visitors to Tokyo are naturally drawn to the little cemetery on the hillside, known as Sengakuji, where lie buried the remains of the heroes whose story has long been familiar to them through the works of various writers on Japan. It is perhaps unnecessary to repeat here how Asano Takuni-no-kami, in return for a series of insults, struck a court official and was forced therefore to commit suicide; how his retainers in consequence became *ronin* ("wave-men" *i.e.*, attached to no master), and determined to wreak vengeance on the insulter; how, after a



ONE OF THE PECHABURI CAVE TEMPLES.

The whole of a limestone hill at Pechaburi, in Western Siam, is naturally hollowed out into caverns, which have been converted into Buddhist shrines and adorned with quantities of images on every jutting crag and in every recess. The cave represented in the photograph is illuminated through an opening in the hillside. Others have to be seen by torchlight.



Stereograph by] [*H. C. White Co., London*

PRINCIPAL ALTAR IN THE FIVE GENII TEMPLE, CANTON.

The Temple of the Five Genii is dedicated to the gods presiding over Earth, Air, Water, Metal, and Wood, who sit upon the high altar, with five stones at their feet which are supposed to be the petrified bodies of the rams upon which they rode to visit Canton.

long interval, they broke into his castle one snowy winter's night, slew him, and carried his head to their master's grave; and how then they all solemnly committed suicide, in the approved Japanese way, and were buried in the same cemetery. All this occurred at the beginning of the eighteenth century; but to this day pilgrims of all classes of society have never ceased to come to Sengakuji to pay their respects to the memory of the Forty-seven, to place little offerings of evergreens in the bamboo vases and burn incense-sticks before the tombstones, and finally to leave their visiting-cards—for in China and Japan alike, this token of homage is never omitted at the grave.

There are in the cemetery, as even the merest sightseer is bound to notice, not only the large tomb of Takuni-no-kami and the smaller ones of the Forty-seven, but also a forty-eighth small tomb. In this was buried the body of a man from Satsuma, who committed suicide in remorse

for his conduct toward Kuranosuke, the leader of the ronins. The latter, in order to put his dead lord's enemy off the scent and disguise his intentions of revenge, gave himself up temporarily to riotous living, and was seen lying drunk in the gutter at Kyoto. Thinking he had forgotten his duty, the Satsuma man spat in his face and reviled him. When he heard of Kuranosuke's deed and death, he came to Sengakuji and killed himself in front of his grave. Having thus expiated his offence, he was buried with those whom he had misjudged.

In the courtyard of the temple (which lies below the graveyard on the hillside) there is a chapel where, ranged beneath a gilt figure of Kwannon, goddess of mercy, stand some wooden images of the lord of Ako and the faithful Forty-seven. The carving is good and extremely realistic, the faces being coloured in natural hues and the clothing lacquered. To this chapel, as to the cemetery itself, visitors repair to pay their respects.

Marvellous Gateway at Fattehpur-Sikri.—The great Akbar built Fattehpur-Sikri, not far from Agra, and made it his favourite abode. According to the story, the Mohammedan prince was returning home from the conquest of Khandesh, having in his company his Hindu wife, and rested at the foot of the hill on which he afterwards built. It happened that the twin children of the royal pair had just died, to their great grief. On the hill dwelt a hermit of much sanctity, who promised Akbar that he should have another son if he would set up a palace here. Akbar accepted the proposal, and in due time the son, Jehangir, was born.

The buildings at Fattehpur-Sikri are mainly of the red sandstone of which the hill itself is composed. Owing, no doubt, to Abkar's wife having been a Hindu princess, strong Hindu influence is evident in the architecture, even of the mosque—which, by the way, Fergusson considers one of the finest in all India. As for the gateway in front of the mosque, critics have not hesitated to call it the most beautiful in existence.

"To speak of it as a gateway conveys no meaning of the building," says Mr. G. W. Forrest. "It is a triumphal arch, and compared with it the Arch of Constantine or the Arch of Titus is poor. . . . The grey and pink sandstone columns, the marble ornaments, the bold,



From Stereo copyright] [*Underwood & Underwood.*

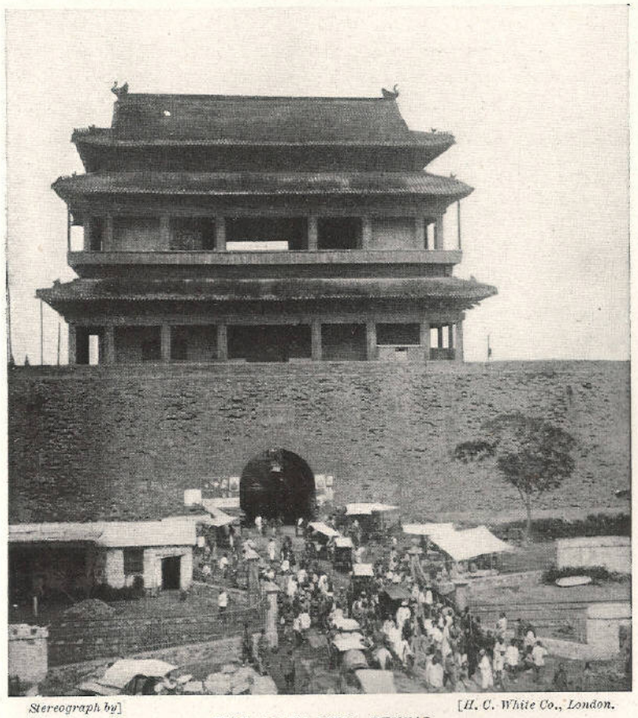
THE WALLS OF PEKING.

This picture might be labelled "unchanging China," for from times immemorial similar trains of camels have made their way to Peking from the Mongolian deserts and returned with a change of commodities. The actual walls which we see in the background, however, only date from the fifteenth century, as far as their brick casing is concerned. Previously Peking was walled with beaten earth only.

flowing Arabic characters on the white ground, all lend grace to one of the finest portals in the world."

Strange to say, on this memorial of his victory, Akbar caused to be carved the following among other inscriptions: "Said Jesus, on whom be peace: The world is a bridge, pass over it, but build not a house upon it. The world is but an hour, spend it in devotion, the rest is unseen."

Between the gateway and the mosque is a courtyard five hundred feet square, with a cloister running all round it; and on the right side of this, after entering through the gate, is a tomb built entirely of white marble. This covers the remains of the holy man who induced Abkar to settle at Fattehpur-Sikri, and who was thus honoured in return for the birth of Jehangir. Close at hand are the remains of Akbar's palace; but the whole place is deserted now. Happily the beautiful gateway still stands intact.



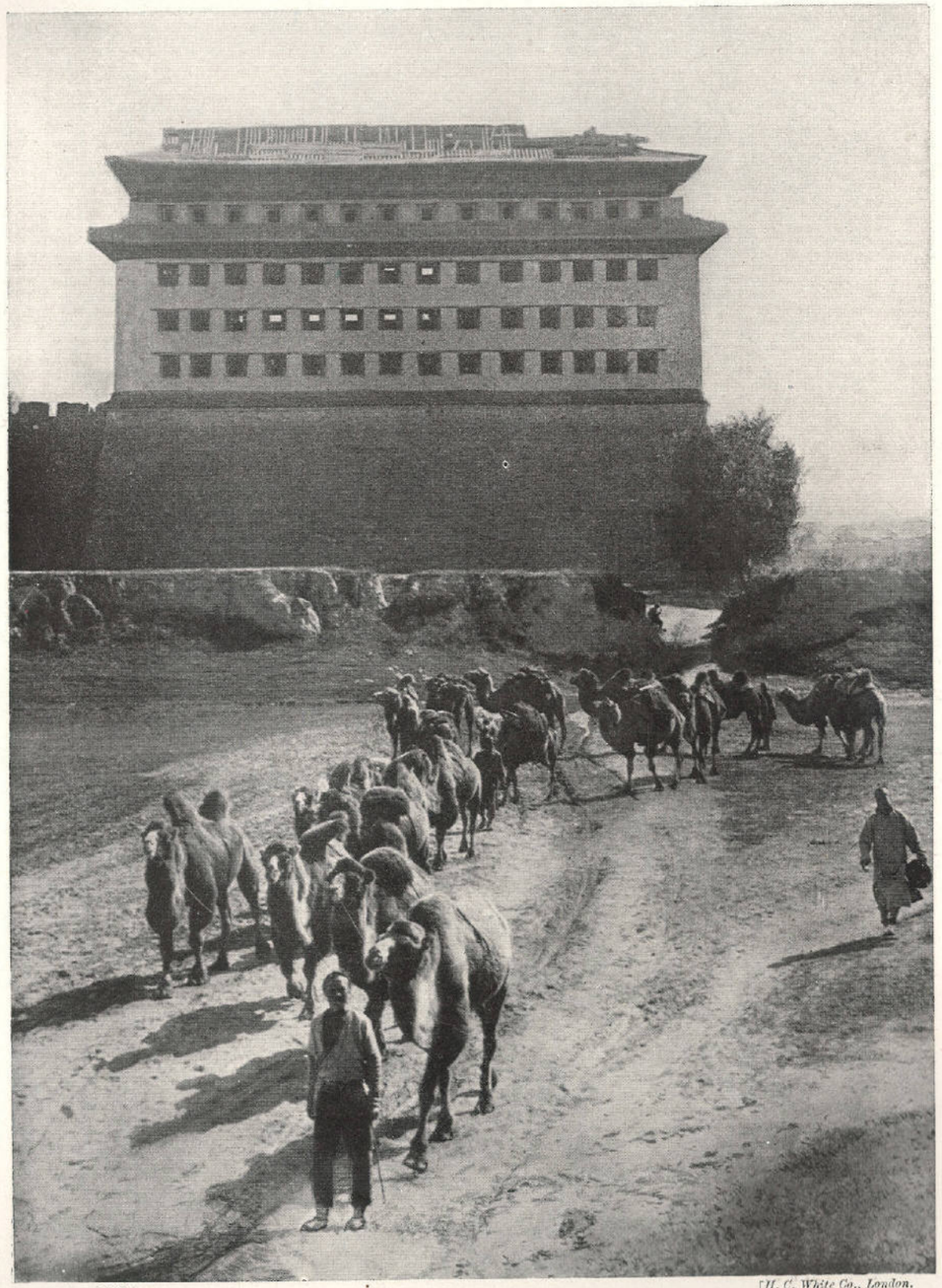
Stereograph by] [*H. C. White Co., London.*

THE HATA-MEN, PEKING

The Hata-men, or "Gate of Sublime Learning," in the wall which divides the Tartar from the Chinese quarter of Peking, played a great part in the historic siege of the Legations in 1900. The adjacent wall was one of the keystones of the defence.

Cave Temple, Pechaburi, Siam.—The town of Pechaburi, in Western Siam, although it is up-to-date enough to have a railway running to it from Bangkok, has its chief claim to attention in some wonderful limestone caverns in a hill, which pious Siamese have converted into underground temples to the Buddha. The hill is little more than a shell, so much is it honeycombed with these caves, and at its summit is a large hollow, which gave early observers from the West the mistaken impression that it was volcanic in origin. But its hollowing-out is to be paralleled elsewhere in the case of limestone outcrops.

Describing how the Pechaburi cave-temples are reached by stairways hewn out of the solid rock, Mr. Ernest Young continues: "One of them receives its light through a crater-like opening in the hillside; some of them are too dark to be visited without the aid of torches or lanterns. The floors have in all cases been nicely levelled and sanded, while one has been neatly tiled." [This is the cave represented in our photograph.] "Idols are arranged in rows round the sides, and Buddhas in standing, sleeping, or sitting postures occupy every jutting crag and hollow corner. Tiny holes, often hidden behind a gigantic image, lead into little, dark, dirty, damp recesses with plank-beds and torch-smoked altars, where hermits live, or years ago lived, in retirement. There is something almost grotesque in these cavern interiors. Huge stalactites and stalagmites shine in the light of the entering sun, or look gloomy and solemn in the fitful spluttering of the smoky torches."



Stereograph by] [*H. C. White Co., London.*

THE WALLS OF PEKING

This photograph shows a corner of the great walls of the Tartar city, the more important half of Peking, which shelters in its midst the one-time mysterious "Forbidden City." These walls are between forty and fifty feet high and no less than sixty feet thick at their base. Great towers surmount them at intervals, as at the angle represented above.

Nature has done much for the appearance of these cave-temples. But, as Mr. Young remarks, the grandeur and strength of the great pillars and deep recesses tend to make the gilded figures which man has introduced among them look more tawdry than when they are seen in their more suitable surroundings in brick and wooden temples.

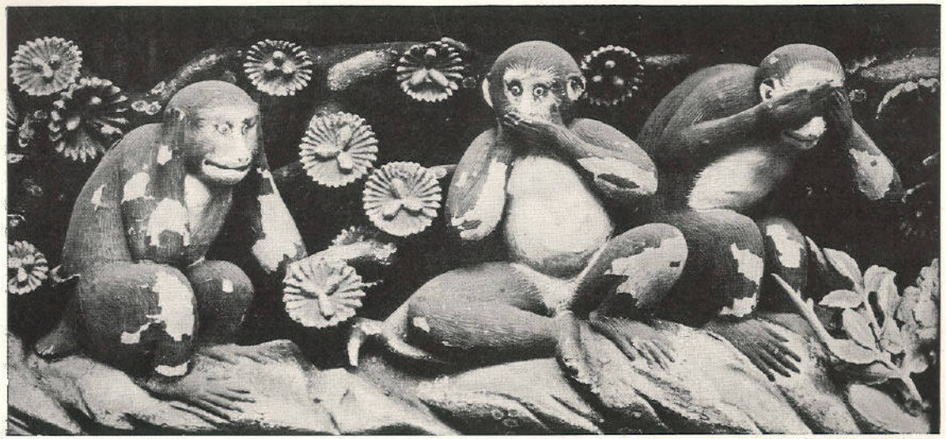
The total number of images in the series of caves at Pechaburi is very large ; but there is nothing like the accumulation seen in the cave at Moulmein, described in Chapter I. The Pechaburi shrines are certainly the more impressive for not having been made to look so much like old curiosity shops.

Temple of the Five Genii, Canton.—The Temple of the Five Genii (or Five Immortals, as it is also sometimes called by English writers) is one of the sights of Canton which tourists, wisely, make a point of visiting ; for it has many points of interest. Its name is due to its dedication to the five gods who preside over the elements of Earth, Air, Water, Metal and Wood. These divinities, according to the legend, once descended from heaven and rode into Canton upon five rams, bringing with them five kinds of grain as a gift, and bestowing a blessing upon the markets of the city. Then they rose into the sky and disappeared. The rams were left behind and took the form of five stones, which are now in the temple. The Five Genii sit in a row on the principal altar, strikingly vivid in their colouring, and at the feet of each is placed one of the petrified rams. To this quaint legend is due Canton's title of " the City of the Rams."



THE YOMEI GATE, NIKKO, JAPAN.

This is the most beautiful of the gateways in the temple buildings at Nikko—a place of which, taken as a whole, the Japanese say : Until you have seen Nikko, don't use the word *kekko* (beautiful).



From Stereo copyright "HEAR NOT, SPEAK NOT, SEE NOT EVIL." *[Underwood & Underwood.*

Marvellous carving of three monkeys, illustrating the above principle, over the doorway of one of the temple buildings at Nikko.

The temple has, besides these figures of the tutelary genii and their rams, a colossal footprint of the Buddha in black basalt ; a great bell in a tower in front of the main shrine, cast in the fourteenth century and said never to be struck without bringing ill-luck upon Canton (which, of course, explains why on one occasion, after a chance shot from a British warship had pierced the bell, the city was captured) ; and altars to a number of deities, whom the hospitable Five Genii permit to dwell in their temple. These lodgers include a Chinese form of Hanumân, the Indian monkey-god, who appears here clad in a brilliant silk robe, and the Gods of War, deified heroes from the past history of China.

This Temple of the Five Genii must not be confounded with that of the Five Hundred Genii, mentioned in Chapter III. That is situated in the western suburb, outside the city walls. This is in the Namhoi, or western half of Canton itself, not far to the left of the Namhoi Magistrate's Court.

The Walls of Peking.—There is nothing in the modern world more suggestive of Babylon and Nineveh than the walls of Peking as they stand to-day. Even the oldest part of their outer casing, however, only dates from the early fifteenth century, though no doubt their core of beaten earth is very much more ancient. It is their stupendous mass, rather than their actual age, which causes the mind to travel back to the great cities of the remote past.

The vision of the walls bursts upon the visitor to Peking with surprising suddenness, especially if he approaches by the road from the coast. Owing to the conformation of the vast plain, they are not to be seen at any distance from the south or east ; and as Peking has no suburbs, one reaches it abruptly, to find the walls looming up above one in a most awe-inspiring way, without a rival eminence in the landscape. A close examination of their condition, revealing the dilapidation of the fortifications of the Chinese city in particular, and the fact that the guns which seem to peep through the embrasures are only painted imitations, brings disillusionment ; but there still remains the enormous size to counterbalance all shortcomings.

The walls that surround the Tartar and Chinese cities (which lie toward one another in the position of a square placed upon the top of an oblong) are of a deep grey colour, and have at intervals great gateways, which have been not inaptly compared with Scottish baronial keeps, and high towers. Those of the Tartar city are both more massive and in better condition than the Chinese walls. They are about fifty feet high, with a six-foot crenellated balustrade on the top. In thickness they are sixty feet at the base, diminishing to fifty above. Nine gateways pierce them. Of these

the two most famous are the Chien-men, or "Front Gate," which leads to the main entrance of the Imperial City and the palaces, and was partly destroyed by fire during the siege of the Legations in 1900; and the Hata-men, or "Gate of Sublime Learning," which also played a big part in the siege, the adjacent wall being one of the keystones of the defence. These two and the third gate between the Tartar and Chinese quarters are shut nightly from one hour after sunset to the following sunrise. Over them and the six exterior gates on the north, east and west sides, are huge square towers, over eighty feet high. It is noticeable that the fortifications are kept in quite as good repair on the southern side, fronting the Chinese quarter, as on the others. But the distinction between Tartars (Manchus) and Chinese has been gradually obliterated, especially since the late Empress Dowager turned reformer after the Boxer troubles.

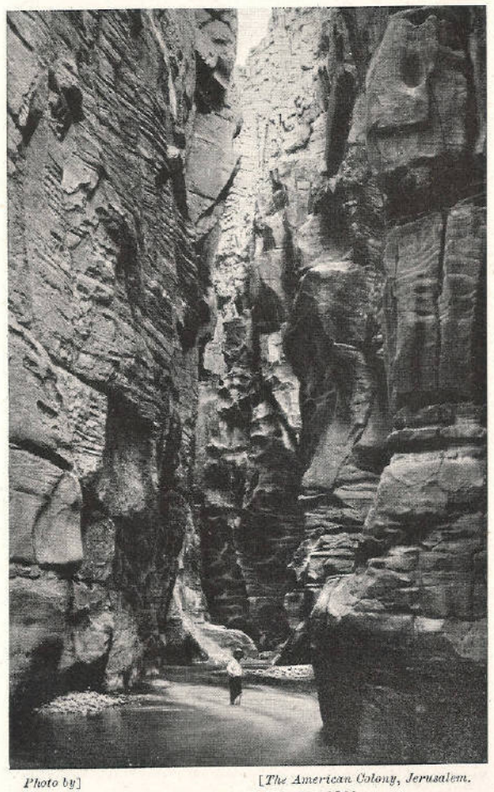


Photo by [*The American Colony, Jerusalem.*

GORGE OF THE ARNON.

The River Arnon, nowadays known to the Arabs as Wady Mojib, flows into the Dead Sea through a gorge not more than a hundred feet across, between sandstone cliffs as high in places as four hundred feet.

The walls of the Chinese city, built over a hundred years later than the casing of the Tartar walls, are about thirty feet high, and are much less impressive than the others, especially as they are in bad condition, and in places even have shrubs growing out of them. They are pierced by seven gates, if we exclude those communicating with the Tartar quarter.

Peking has also two other sets of walls, those of the Imperial and Forbidden Cities, which are within the Tartar city. These are pink, or rather faded vermilion, in colour, and are capped with tiles of imperial yellow. A deep and broad moat further protects the Forbidden City, otherwise the "Six Palaces," the innermost kernel of the Tartar section of Peking, to which the envoys of the Western Powers for so long strove unsuccessfully to penetrate, and to which now again even their official visits are so jealously limited.

The Gateways of Iyeyasu's Temple, Nikko.—In earlier chapters of this work some of the marvels of beautiful Nikko have been mentioned, including the collection of magnificent buildings which lead up to the tomb erected over the remains of Iyeyasu, the first Shogun (roughly, "Mayor of the Palace") of the Tokugawa family. In the whole collection there is nothing more worthy of admiration than the various gateways leading into the three courtyards of the temple. Elaborate carvings decorate them all, and also the doorways of various buildings in the courtyards.

The first gateway is known as the *Ni-o-mon*, or Gate of the Two Kings, from two huge figures of guardian gods, which once stood in niches outside. These were removed when Buddhism was disestablished during the present Mikado's reign and Iyeyasu's temple handed over to the Shinto priests. The rest of the gateway was left intact, and is remarkable for its carvings of tapirs, of unicorns and other fabulous monsters, of elephants and tigers, intermingled with peony flowers in a most fascinating way. These carvings, however, are surpassed in interest by one which may be



Photo by] [*Messrs. Johnston & Hoffmann.*

THE LORD OF THE PLAIN, BIJAPUR

This huge bronze gun is the chief witness to the fact that Bijapur in Bombay Presidency was once the stronghold of a warlike people. An inscription shows that it was cast at Ahmadnagar, but no one knows how it was conveyed to Bijapur. Its size has apparently protected it from being moved from the ruins of the old citadel.



From Stereo copyright [*Underwood & Underwood.*

AERIAL ROOTS OF A SCREWPINE.
Peradeniya Gardens, near Kandy.

seen after one has entered the courtyard. It is over the door of the sumptuous stable of the sacred white horses kept for the use of the spirit of the mighty dead. On it are represented three monkeys, one of whom covers its ears, the second its mouth, and the third its eyes. Less artistic representations of this trio are common in Japan, carved on stone slabs, etc. The monkeys illustrate vividly the excellent principle of "not hearing, not speaking, and not seeing evil." It has been remarked how admirably Japanese artists succeed in portraying monkeys compared with many other animals which they introduce in sacred and other decoration. But they are, of course, familiar with the monkey, a native of Japan—which is not the case (need it be said?) with some of the other beasts.

The second gateway, the *Yomei-mon*, is a thing of exquisite beauty. Mrs. Bishop thus describes it in her "Unbeaten Tracks in Japan": "The white columns which support it have capitals formed of great red-throated heads of the mythical *Kirin* [a monster borrowed from the Chinese]. Above the architrave is a projecting balcony which runs all round the gateway with a railing carried by dragons' heads. In the centre two white dragons fight eternally. Underneath, in high relief, there are groups of children playing, then a network of richly painted beams, and seven groups of Chinese sages. The high roof is supported by gilded dragons' heads with crimson throats. In the interior of the gateway there are side-niches painted white, which are lined with gracefully designed arabesques founded on the *botan*, or peony. A piazza, whose outer walls of twenty-one compartments are enriched with magnificent carvings of birds, flowers and trees, runs right and left, and encloses on three of its sides another court, the fourth side of which is a terminal stone wall built against the side of the hill."

A curious feature in connection with this gateway is that one of the pillars supporting it has its pattern carved upside down. It is known as the "evil-averting pillar," and was designed to placate the jealousy of Heaven, which might have been aroused against the house of Tokugawa had the whole building been perfectly flawless!

The courtyard to which the Yomei gate leads was designed to be used chiefly for the recitation of the sacred liturgies in the June and September of every year, when Nikko observed festival. And the old customs are still kept up. Visitors to Nikko in summer or autumn have the opportunity of witnessing wonderful processions and dances, in which all the performers are clothed in genuine

costumes of Old Japan, brought forth for the occasion from the storehouses of the temples. Then, too, they may see the palanquins of the Shoguns, usually kept in a building in the second courtyard, borne in procession by seventy-five men each; and after them walking the sacred white horse, riderless—except, perchance, to the spiritual eyesight, which may be able to re-embody the mighty Tokugawa Shogun of three hundred years ago. The third courtyard is entered through the *Kara-mon*, the Chinese Gate, which is not so imposing as the others, but leads to a shrine of such luxuriant and fantastic decoration that the eye welcomes with relief the severe simplicity of the Shinto altar in its midst.

The Arnon River Gorge.—In Israelitish days the Arnon formed the southern boundary of Palestine beyond the Jordan—at least, after David had finally broken up the power of the Ammonites, as narrated in the Second Book of Samuel. Earlier still, when Moses led the Twelve Tribes into the Promised Land, the northern bank of the Arnon was the first spot in the subsequent territory of Israel at which he pitched his camp. When the country east of Jordan was conquered the Tribes of Reuben and Gad settled here, having the Moabites as their neighbours in the south.

The Arnon thus has an interesting place in Palestinian history, and allusions to it in the Old Testament are not a few, especially with reference to its position as Israel's southern boundary beyond the Jordan.

Nowadays the Arnon is known to the Arabs who form the scanty population of the country east of the Dead Sea as the Wady Mojib. It is a poor stream except after the winter rains have swollen it, for it takes its rise in a dry region and normally collects but little water in its journey of forty-five miles to the Dead Sea. It enters the Dead Sea through a magnificent gorge, and the cliffs on either side rise sheerly to a height varying from about a hundred to as much as four hundred feet. They are formed of sandstone, beautifully traced and corrugated, and redeem the Arnon from the insignificance of which it might otherwise be accused.

It seems probable that the river was once greater than it is now, for the way in which a passage has been cut through the sandstone

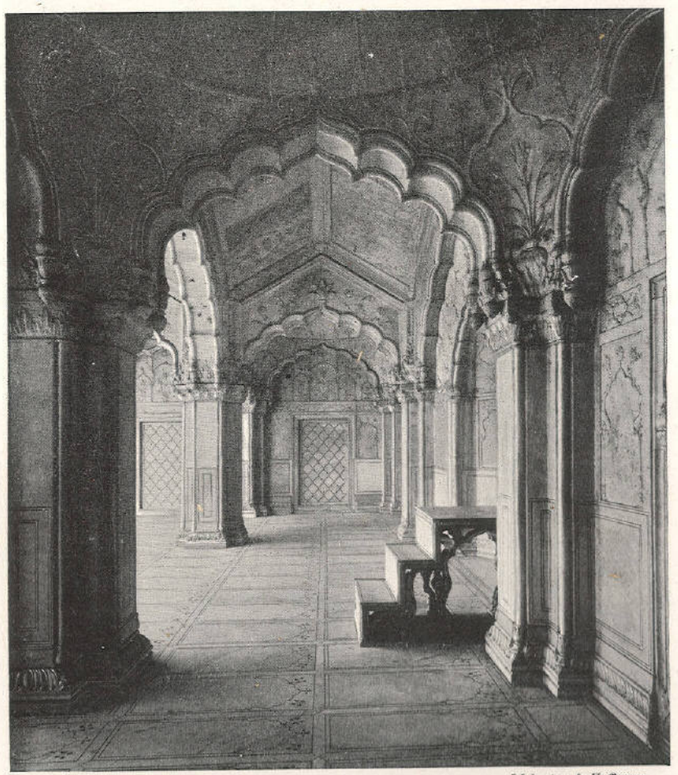


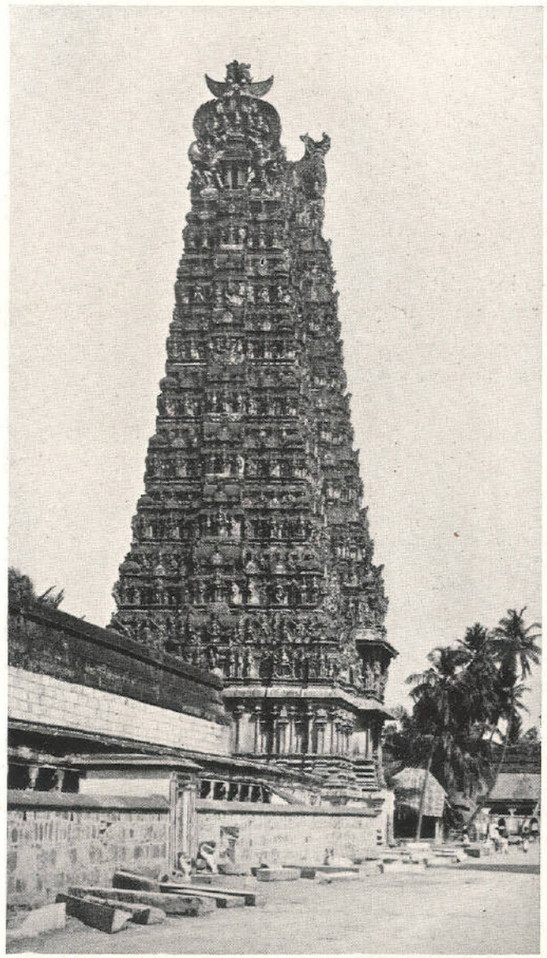
Photo by] [*Johnston & Hoffmann.*

PEARL MOSQUE, DELHI.

A view of the interior of Aurangzeb's beautiful little private mosque, which he added to the palace of his father, Shah Jehan. The carving of the marble is both rich and chaste.

argues considerable force. From the noise made by the waters as they flow through the gorge into the Dead Sea, the river took its name of old; for "Arnon" means "noisy."

Huge Sixteenth-Century Gun in India.—At Bijapur, in Bombay Presidency, are the remains of extremely powerful fortifications, and in the citadel some large pieces of ordnance, which show that the place was once the stronghold of a warlike people. As a matter of fact, we know that from about the middle of the fifteenth century there was an independent Mohammedan state of Bijapur, whose rulers joined with other Mohammedan chieftains in fighting against a strong neighbouring Hindu state. The fortifications are assigned to the middle of the sixteenth century, and the gun here illustrated was cast, according to an inscription on it, in 1548, at Ahmadnagar, sixty miles away. It is known by the name of *Malik-i-Maidan* ("The Lord of the Plain") and is of bronze. Its principal measurements are: length, fourteen feet three inches; muzzle diameter, five feet two inches; breech diameter, four feet ten inches; bore, two feet four and a half inches. Mr. James Douglas writes: "'Mons Meg,' at Edinburgh Castle, is nothing to it; and how it was placed in its present position is a question that no man yet has been able satisfactorily to answer."



From Stereo copyright [*Underwood & Underwood.*

A near view of one of the gopuras, or pyramids, of Madura's Great Temple, showing the inconceivable elaboration with representations of Siva and his consort, other deities, demons, bulls, etc., all painted in the most glaring colours.

In 1686 Bijapur, both state and city, was conquered by the Mughals, and the fortifications fell to ruins, though "The Lord of the Plain" and some smaller guns were left to bear witness to the wars of old.

Aerial Roots of a Screwpine, Peradeniya Gardens, Ceylon.—Many of the most striking sights in the exceedingly beautiful Peradeniya Botanical Gardens, four miles from Kandy, have already been described in Chapter II. But there is one so curious that it seems to merit an article to itself. The Gardens contain more than a score of varieties of the "screwpine" family, scientifically called the *Pandanaceæ*. Some of these are indigenous in Ceylon, but the majority have been introduced through the zeal of those who have had charge of the Botanical Department of the island, and came originally from Malaya, the Dutch Indies, the Nicobar and Andaman groups, Indo-China, Madagascar, and the Pacific islands. The screwpines are not only in themselves handsome objects, but also share with some other plants and



Photo by] [*Bourne & Shepherd, Simla.*

THE GOLDEN LILY TANK, MADURA.

This tank is one of the most picturesque features of Madura's Great Temple, with its green walks, its arcade all round, and its views of temple roof, elaborate sculptured pyramids and tall palm trees beyond, and above all the brilliant Indian sky.



Photo by] *[A. H. Finn, Esq.*

Some of the wonderful frescoes, illustrating Hindu legends, on the walls of Siva's temple at Madura.

trees, notably the banyan-tree, the power of sending out adventitious roots. These, in the case of the banyan and screwpine, do not develop underground, but are aerial and extend for a considerable distance from the main trunk, assuming a very solid and massive appearance.

The most noteworthy of the various screwpines at Peradeniya is the gigantic one introduced thirty years ago from the Andaman Islands and therefore called *Pandanus Andamanensium*—a name whose length appears to match its bulk very well. Standing at the southern end of the Gardens, near the carriage-drive, this monster shows off its aerial roots to great advantage and reduces the human figure to insignificance beside it.

The Pearl Mosque, Delhi.—The Moti Masjid, or "Pearl Mosque," at Delhi, was added by Aurangzeb to Shah Jehan's magnificent palace, the father having apparently been content to leave his palace without a private mosque when he had the Jama Masjid so near at hand. Western critics are divided as to whether the Pearl Mosque is worthy of its setting in Shah Jehan's handiwork. Some are disappointed at its small size—it is only sixty feet square—while others point to its lovely decorations and declare that it fully merits the name which it bears. "In grace, simplicity and perfect proportion," says Mr. G. W. Forrest, one of its warmest admirers, "the Moti Masjid cannot be surpassed."

Red sandstone walls enclose it all round, so that from outside there can only be seen the three white marble domes, the centre one larger than the two side ones, as in the case of the Jama Masjid, etc. Within the walls, however, the beautiful finish of the carved marble becomes apparent, and the interior is worthy of careful study. In a small compass this mosque is a wonderful piece of work. It is said to have cost Aurangzeb one hundred and sixty thousand rupees to build it.

Delhi's "Pearl Mosque" must not be confused with that of the same name at Agra, which was erected, like the Jama Masjid at Delhi, by that princely builder, Shah Jehan. Both Jama Masjid and Moti Masjid are comparatively common names for mosques.

The Siva Temple, Madura.—Madura, the second largest city in Madras Presidency, is celebrated chiefly for its Great Temple, dedicated to Siva, under his form Sundaresvara ("the Excellent Lord"), and to Minakshi ("the Fish-Eyed Goddess"), a local deity identified with Siva's wife Parvati. When the Mohammedans overran India, they captured Madura and damaged much of the temple, but spared the shrines of Siva and Minakshi. Madura threw off again the Mohammedan yoke, when the temple was rebuilt with more than its former splendour round the shrines.

The ground covered by the buildings has an area of eight hundred and fifty feet by seven hundred and fifty feet. In the outer wall are four great *gopuras* (pyramids or pagodas), while five more surround the inner court. These *gopuras*, of which the tallest, though not completely finished, is over one hundred and fifty feet high, are sculptured in almost inconceivable elaboration with representations of Siva and his consort, in human and monstrous shapes, other deities, demons, bulls, etc., and are painted in the most glaring colours, so that undoubtedly they gain by being looked at from a distance rather than close at hand. The same may be said of a good proportion of the sculptures and paintings throughout the temple, for the bizarre, repulsive and obscene are present everywhere, as in nearly all Sivaite places of worship. Nevertheless, there is much that is beautiful in the frescoes illustrating Hindu legends, in the other decorations of ceilings and walls, and in the carvings of the columns, while there is a tremendous wealth of jewels in the temple.

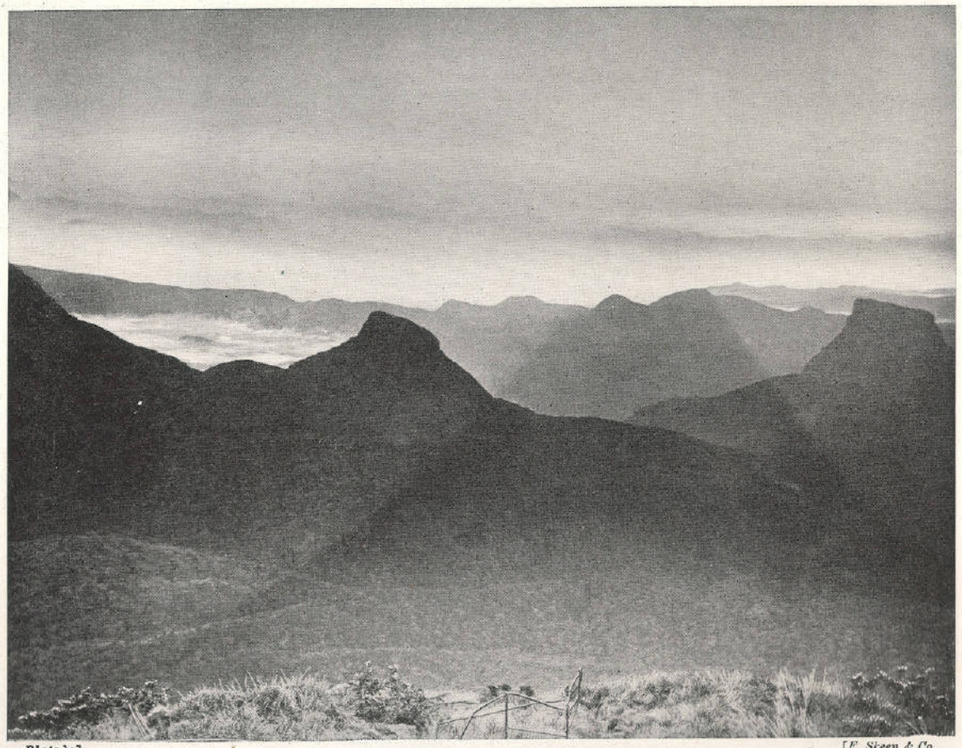


Photo by] *[F. Skeen & Co.*

THE SHADOW OF ADAM'S PEAK.

This shadow, which is produced by the co-operation of the rising sun and the morning mists, has no doubt helped to gain the mountain its reputation for holiness. The shadow has been compared with both the Brocken "Spectre" and the "Glory of the Buddha" on Mount Omi.

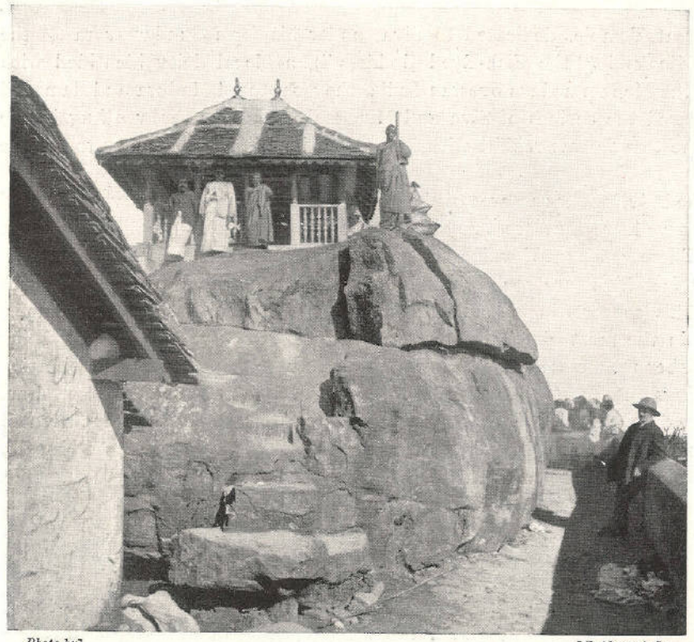


Photo by] [*F. Skeen & Co.*

ADAM'S PEAK, CEYLON.

Adam's Peak, about 7,400 feet high, is the most celebrated, if not the tallest, mountain in Ceylon. It has been visited by pilgrims from time immemorial. On the very summit is a "footprint" attributed by the early Christians and Mohammedans to Adam; by the Buddhists to the founder of their religion. There is a shelter built over the footprint, and below stands a Buddhist monastery-hut, as shown on the left hand of the photograph.

Specially notable sections of the group of buildings are the Hall of a Thousand Pillars, the Golden Lily Tank, and the innermost shrines of Siva and Minakshi. These shrines are jealously shut against Europeans, although, thanks to the influence of the Maharajah of Travancore, M. Pierre Loti was allowed to enter a few years ago and see the marvellous jewellery and other treasures of the goddess. The ordinary visitor sees nothing of these oldest parts of the temple except the gilded copper plates which cover the roofs above them.

In the Hall of a Thousand Pillars the sculptures are particularly rich and fantastic, and the shadows and silence which envelop the hall make it very impressive. By way of contrast, the Golden Lily Tank is a brilliant sight under the open sky, with its cloistered arcade all round, and its views of temple-roofs, *gopuras*, and tall palms beyond. The tank is a broad rectangle, about fifty yards each way, and its waters are of a very green hue, which adds to the beauty of the colour-scheme, but is due, alas! to the innumerable worshippers' ablutions of their feet. Overhead, parrots and other birds are in constant flight, for they build their nests freely about the temple and roost at will on the *gopuras* and trees. Bats, also, in hordes, make the buildings their home, and elephants and sacred cows wander at liberty among the cloisters and about the grounds. The whole picture is most strange, magnificent and grotesque.

Adam's Peak, Ceylon.—Like "Adam's Bridge"—the link between India and Ceylon, which is said to have been destroyed about the end of the fifteenth century, and is claimed by Mohammedans to have been the way by which Adam left Paradise, by Hindus the means of Rama's invasion of Ceylon in search of his stolen wife—"Adam's Peak" is enshrined in the legends of the followers of various religions. The fact that the mountain has on its very summit a depression roughly resembling a footmark led the early Christian and Mohammedan visitors to say that Adam had set foot there. Similarly, the Buddhists claimed the footprint as that of the Buddha, Hindus as that of Siva, and later Christians as that of St. Thomas, the apostle to India. When the peak first became a goal for pilgrims is uncertain. Priests appear to have been established on the summit for very long before history took notice of them. At the present day there is a little open shrine, or shed, over the sacred spot; and just below is a small monastery-hut tenanted by Buddhist monks, which is surrounded by a wall to prevent falls down the very steep sides of the peak. In May every

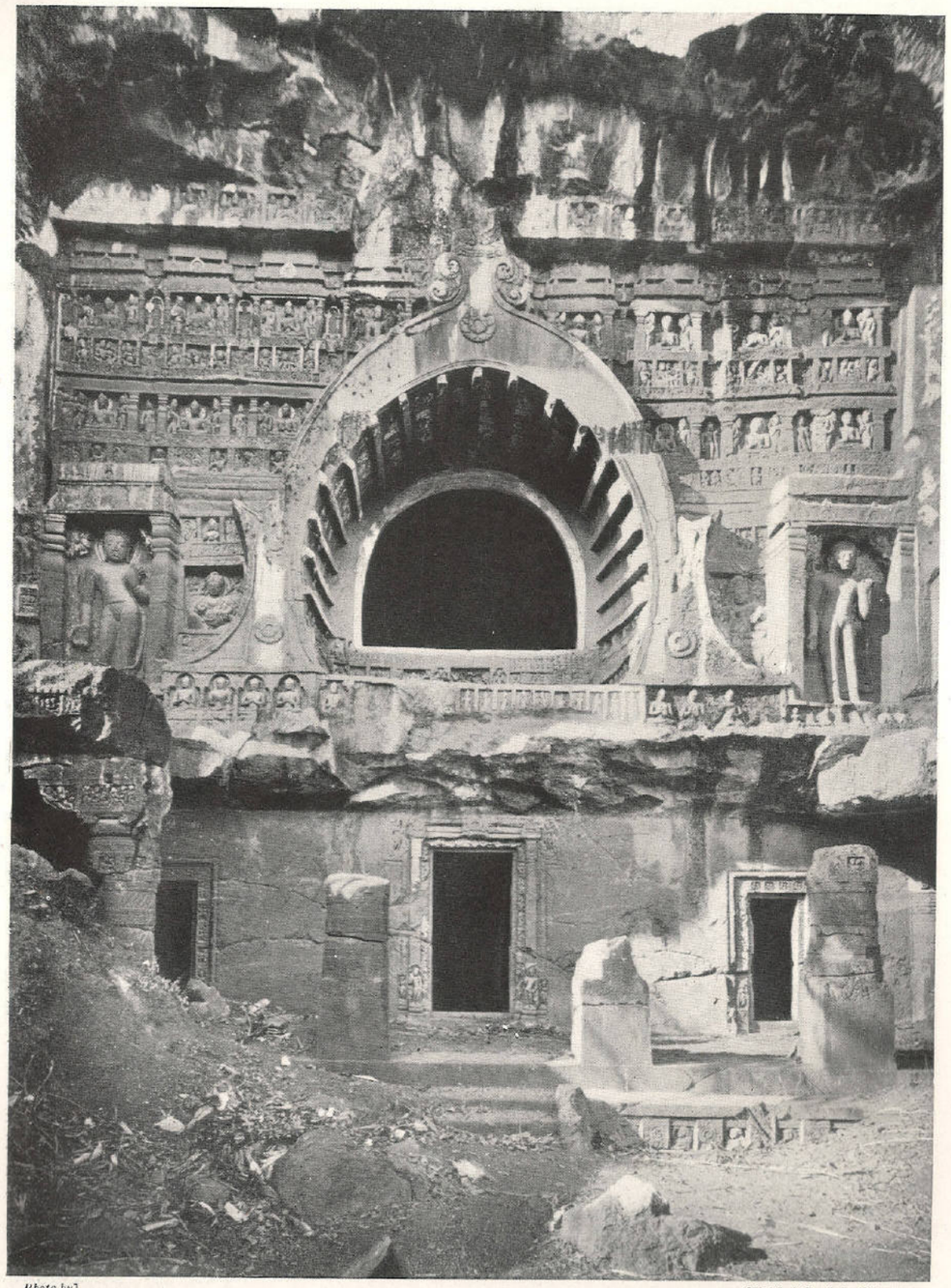


Photo by] [*Frith & Co. Ltd., Reigate.*

ROCK TEMPLE, AJANTA.

The façade of one of the marvellous shrines hewn out of the solid cliff-face. Notice the imitation woodwork in stone about the largest window.

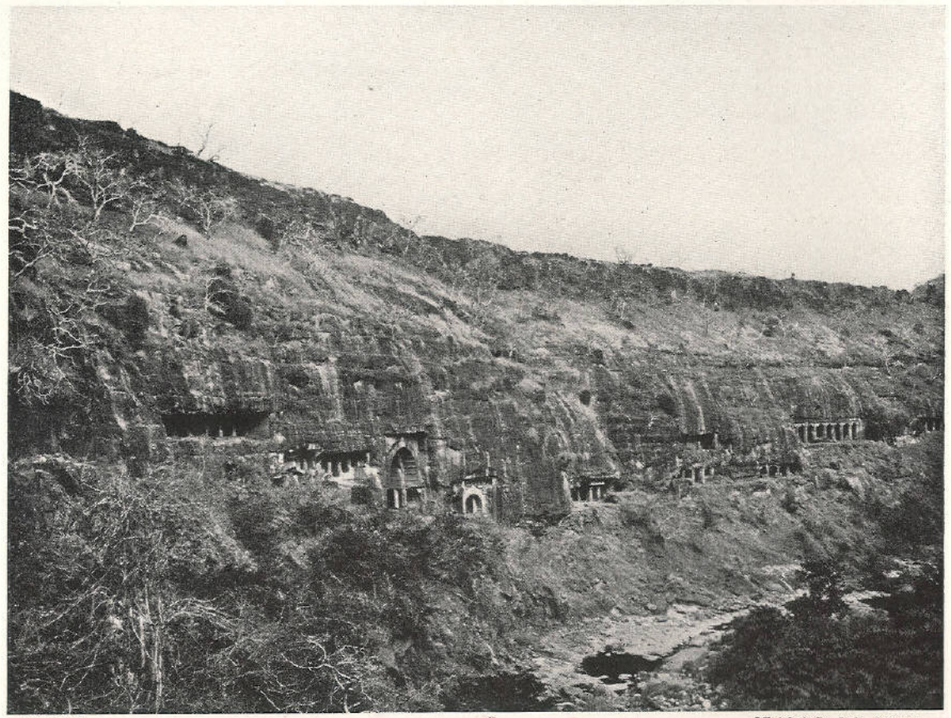


Photo by] [*Frith & Co. Ltd., Reigate.*

THE CAVES OF AJANTA.

A general view of the five temples and twenty-four monasteries excavated in the semi-circular face of a cliff near Ajanta, Hyderabad State. These rock-hewn churches and dwellings represent the work of eight hundred years of Indian Buddhism. Both the stone carvings and the paintings all over the interior of the caves are remarkable.

year pilgrims come in thousands, and, camping on the slopes by night, bring their prayers and offerings to the shrine by day.

The legend of the discovery of the *Sripada*, or sacred footmark, relates that a certain king Walagambahu, about 90 B.C., was out hunting and espied a very beautiful stag, which led him on up the mountain until finally it reached the very summit. Here it suddenly disappeared—for in reality it was not a stag, but a spirit, sent to guide the king to the *Sripada*.

A certain amount of human artifice has heightened the similarity of the mark to a footprint, but there is certainly a natural oblong-shaped hollow, about five feet long and between one and two inches deep, in which the pious visitors see what they come to see. Similar marks are to be found in Siam, the Malay States, Tibet, and at Canton, where the same reverence is paid to them.

One of the most curious things in connection with Adam's Peak is beyond the power of man to alter or improve, and that is the shadow of the mountain. Of it Mr. Edward Carpenter writes: "The shadow of the peak, cast on the mists at sunrise, is a very conspicuous and often-noted phenomenon. Owing to the sun's breadth, the effect is produced of an *umbra* and *penumbra*; the *umbra* looks very dark and pointed—more pointed even than the peak itself. I was surprised to see how distant it looked—a shadow mountain among the far crags. It gradually fell and disappeared as the sun rose."

The shadow of Adam's Peak has been compared with the "Spectre" on the Brocken, and with the "Glory of the Buddha" on Mount Omi, but it is hardly so mysterious in appearance as either

of those phenomena, though, like them, it requires the co-operation of the sun and of the morning mist to produce it.

Ajanta Rock Temples.—The temples and monasteries excavated in the rock of the Inhyadri Hills, a little distance away from the village of Ajanta, Hyderabad State, were discovered by Westerners about a hundred years ago; and the late James Fergusson first described them minutely in 1843. They had lain deserted since the seventh century A.D., when Buddhism was driven out of India. Owing to this fact, however, they are of exceptional interest, for no later additions have concealed the early workmanship; and, happily, time has dealt lightly with the elaborate carvings and with some of the paintings which decorate the excavations.

In all there are five *cetiyas*, or temples, and twenty-four *viharas*, or monasteries, hewn out of an almost perpendicular cliff-face, two hundred and fifty feet high, curving round in a semicircle and overhanging the bed of a stream. A ledge of rock, now very difficult to pass in places, is apparently the only means of access that there has ever been. In some cases the caves when found were filled up with mud, which had washed in. Few of them were completely finished, though almost all had been decorated on roof, walls and columns. Some show obvious Brahman influence, and can clearly be assigned to the end of the Buddhist period. The earliest, on the other hand, are attributed to about 200 B.C., so that altogether they represent Buddhist cave-architecture over a period of eight hundred years. When they were first discovered there was a tendency to attribute to them a far greater antiquity, to place them, indeed, among the oldest monuments in the world. A closer study, however, of India's numerous other rock temples and the decipherment of the literature of Buddhism enabled the true date to be established with some degree of certainty.

The general plan of the *cetiyas* is a high-vaulted chamber, with a circular apse at the inner end, in which stands a relic-mound hewn out of stone. The *viharas* are mostly square halls, with cells opening out of them for the monks on three sides, and a pillared verandah in front, though the smallest are simply verandahs with cells opening directly out of them.

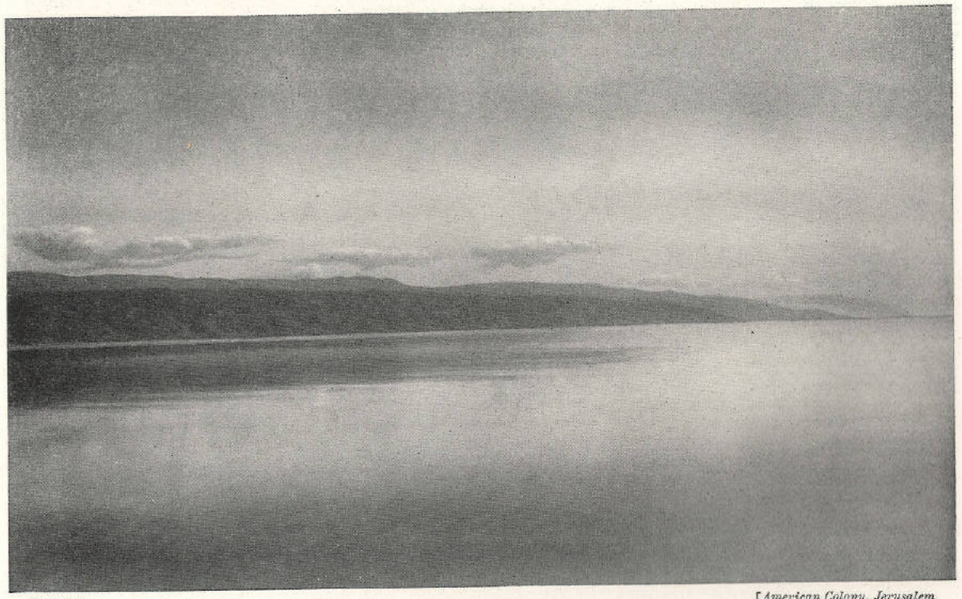


Photo by] [*American Colony, Jerusalem.*

THE DEAD SEA.

This view of the famous lake brings out the curiously oily appearance of its surface and the general lifelessness of the scene with nothing growing or breathing by land or water.



Photo by] [*American Colony, Jerusalem.*

THE DEAD SEA.

A view on the north shore of the Dead Sea, which is shown with uprooted trees and reeds brought down by the swift stream of the River Jordan.

The carving, especially in the case of the *cetiyas*, is both elaborate and interesting, some of it showing how skilfully wooden decorations could be imitated in stone. (This can be seen, for instance, in the façade of the cave known as No. 26, which is one of the latest.) The paintings in the interior are even more noteworthy, and are artistically superior to the carvings. They represent a vast variety of subjects, from figures of the Buddha and his disciples to domestic, hunting and battle scenes. Unfortunately in many of them the originally brilliant colouring has faded very much.

The method of lighting the shrines is worthy of notice. Fergusson writes: "The whole light being introduced through one great opening in the centre of the façade throws a brilliant light on the altar. . . . The spectator himself stands in the shade . . . and the roof and aisles fade into comparative gloom. It is perhaps the most artistic mode of lighting a building of this class that has ever been invented, certainly superior to anything that was done by the Romans, or during the Middle Ages."

The Dead Sea.—Even apart from the exaggerations of legend (which make, for instance, its exhalations so poisonous that birds flying over it fall down dead through suffocation), the Dead Sea is a sufficiently awe-inspiring body of water. Describing it as seen from a neighbouring height, Mrs. Goodrich Freer writes: "You look down at the lowest spot on the earth's surface—the hollow of the Dead Sea, blue as the sky in the morning sunshine, flecked with cloud-like wavelets, beautiful, gay, and smiling, but bitter, treacherous, and the home only of mystery and death."

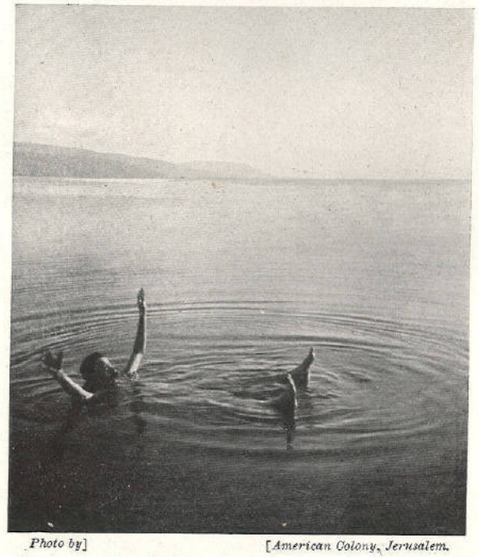


Photo by] [*American Colony, Jerusalem.*

The waters of the Dead Sea are so buoyant that it is impossible to sink in them.

Studied at closer quarters the Sea is of a peculiar oily greenish hue, and its strange qualities become vividly apparent. There is no life in it, with the exception of some few microscopic specimens, and salt-water fish die when put into it; while fresh-water species brought down by the Jordan and other streams running into it soon float dead upon the surface.

Bathers who venture into it find it impossible to sink below the surface, and suffer from irritation of the skin after emerging, owing to the extreme saltness. Analysis has shown that the water contains more than twenty-five per cent. of saline matter. About the centre of the northern section the depth is very great, as much as one thousand three hundred and eight feet having been fathomed. The surface is one thousand two hundred and ninety-seven feet below that of the Mediterranean. And, what seems most mysterious of all, the Dead Sea has no visible outlet; indeed, can scarcely have an outlet owing to its lying so low; and yet it receives daily about six and a half million tons of water, and apparently once received a good deal more, from the Jordan and other rivers which empty themselves into it.

The secret of this constant addition to its waters and yet failure to increase in extent or depth (except after the rains of winter, which are responsible for the stretch of submerged trees shown in one of our photographs) is to be sought in the tremendous daily evaporation caused by the fierce sun beating down upon it and in the absorbent nature of the soil. The southern end, near the salt-hills, is the barest and least inviting to the eye, and it is for this reason that people have looked here for the site of the five Cities of the Plain.

The name of the lake has varied considerably during historical times. In the Old Testament,



Photo by] [*American Colony, Jerusalem.*

This photograph shows half a mile of submerged forest on the east shore of the Dead Sea, proving how this body of water has grown in consequence of the increased rainfall.

for instance, we hear of the "East Sea," "Salt Sea," or "Sea of Akabah." In the classical period it was known as the "Lake of Asphalt," later as the "Dead Sea," which title was adopted by the early Fathers of the Church. Nowadays the Arabs call it Bahr Lut, "Sea of Lot."

Isurumuniya Temple, Ceylon.—The tremendous overgrowth of the jungle covered up much else that was beautiful and historically interesting beside the great shrines, palaces and monasteries of the Anuradhapura neighbourhood, in the North Central Province of Ceylon. About forty years ago, what is known as the Isurumuniya Temple was entirely hidden from view and forgotten amid the jungle. Since then the overgrowth has been cleared away and some of the depredations of time repaired by restorations—not always with the happiest results.

Isurumuniya was a fortunate find. "This curious building, carved out of the natural rock," writes Mr. H. W. Cave, "occupies a romantic position. . . . To the right of the entrance will be

noticed a large *pokuna*, or bath. This has been restored and is quite fit for its original purpose of ceremonial ablution, but the monks now resident have placed it at the disposal of the crocodiles, whom they encourage by providing them with food. The terraces which lead to the shrine are interesting for their remarkable frescoes and sculptures in bas relief. There are more than twenty of these in the walls, and all of them are exceedingly grotesque. . . . Above the corner of the bath are the heads of four elephants, and above them is a sitting figure holding a horse. Similarly there are quaint carvings in many other parts. The doorway is magnificent, and for beautiful carving almost equals anything to be found in Ceylon.

The temple is attributed to Tissa, the King of Ceylon at the end of the fourth century B.C., who was a friend of the great Indian Emperor Asoka.

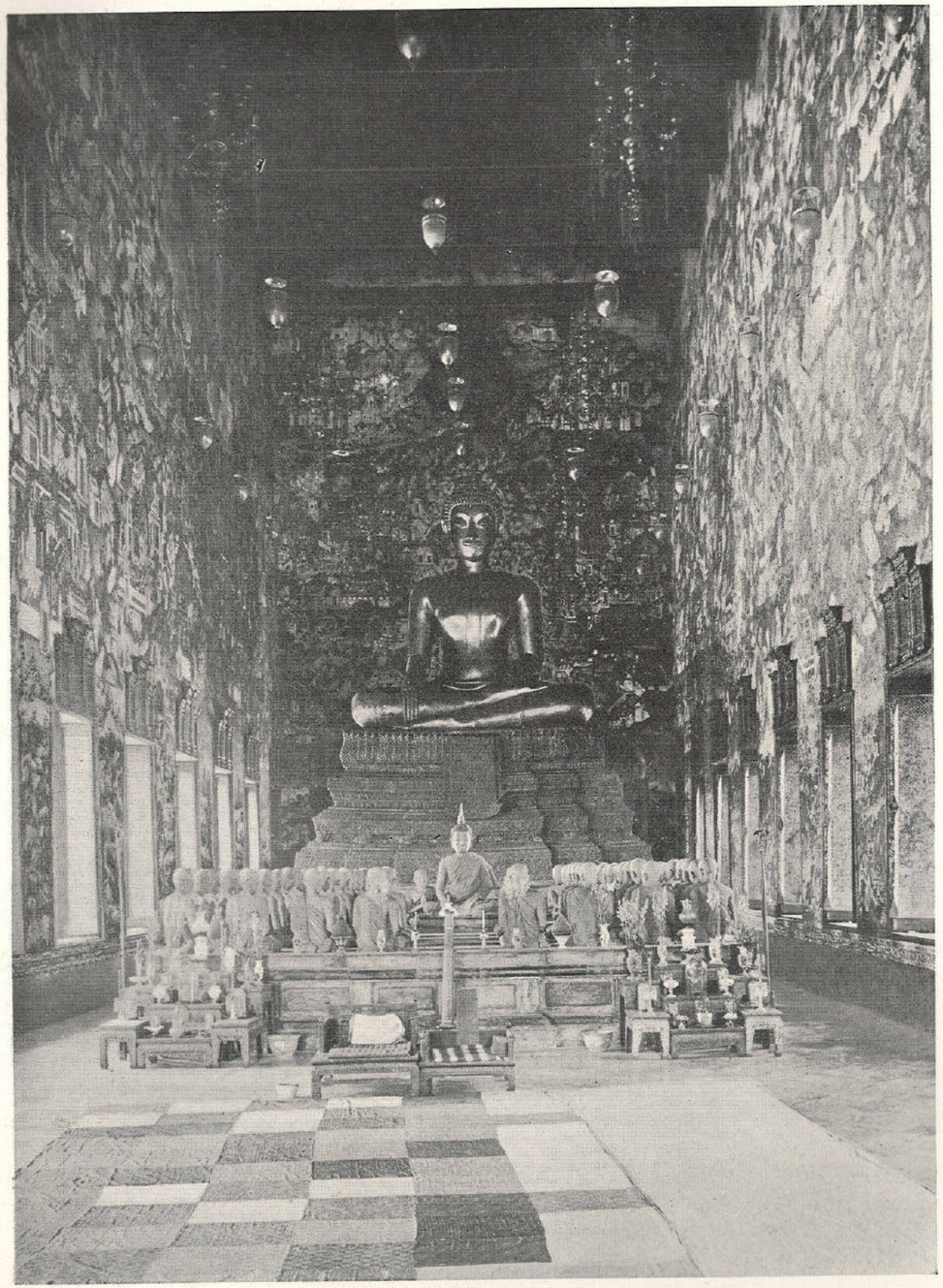


Photo from "The Ruined Cities of Ceylon," [*by Henry W. Cave, M.A., F.R.G.S.*

ISURUMUNIYA TEMPLE AND BATH.

The beautiful Isurumuniya Temple, hewn out of solid rock by King Tissa about the beginning of the third century B.C., was totally covered up by jungle-growth when rediscovered forty years ago. Modern additions, such as the entrance which stands out in the centre of the photograph, have not improved the appearance; but the old parts of the temple are very interesting.

Wat Suthat, Bangkok.—Although not so familiar to the tourist as Wat Phra Keo, Wat Chang, Wat Po, or Wat Pichiyat, still there is much about Wat Suthat to make it also noteworthy among Bangkok's many temples. It has a curious *bawt*, or "holy of holies," with singularly plain and unadorned square pillars uplifting an elaborate fourfold roof, whose ridge-ends terminate in very elongated examples of the favourite Siamese decoration of the snake's head. Then the doorway of the *wihan*, or image-house, is a tremendously tall and marvellously decorated piece of work, with a distinct individuality of its own. The images within are reputed to be old. Their arrangement is certainly striking. Not only is there the usual colossal figure of the Buddha, seated in the attitude of meditation, according to the canons of Buddhist religious art; but also, below this, there is a smaller seated Buddha, with his two principal disciples, Sariput and Mokhalan (as the Siamese call them) in a position of devotion on either side of him, and a crowd of other disciples sitting in orderly rows facing the Master. In the dim light which is invariably maintained in the image-chamber these figures look very impressive. The priests in charge of the *wats* fortunately understand the



WAT SUTHAT, BANGKOK.

The most interesting feature of this temple is the great hall in which is seated a colossal figure of the Buddha in the "attitude of meditation," *i.e.*, with the legs crossed, the right hand clasping the right knee, and the left hand lying palm uppermost across the thighs. Below is a smaller figure of the Buddha, supported by his two chief disciples in the attitude of worship, with two groups of other disciples facing him on the right and the left.



Photo by] [*Pr. Abdulla Mirza.*

FATIMA'S SHRINE AT KUM, THE SACRED CITY OF PERSIA.

Kum is a sacred city on account of the burial there of Fatima, sister of the eighth *Imam*. The photograph represents the larger of the two domes in the shrine over her tomb. This dome is covered with copper sheets, overlaid with gold to the depth of one eighth of an inch. It is the ambition of pious Persians to be buried as close to Fatima's shrine as possible.

value of religious gloom where the sacred images are concerned. Far Eastern shrines exposed to the full light of day and seen close at hand are almost invariably a shock to the eye, whereas the aid of semi-darkness at once makes them pleasing and mysterious.

Fatima's Mosque at Kum.—Kum (Koom), generally known as the "Sacred City" of Persia, lies about a hundred miles south-west of Teheran and, being on the beaten track for travellers between Teheran and Ispahan, would be more or less familiar to visitors from Europe, were it not that the fanaticism of the inhabitants (a large proportion of them mullahs) makes inquisitiveness decidedly dangerous. What makes the city sacred is the fact that here was buried Fatima *el-Masuma* (the Immaculate), sister of Reza, the eighth of the twelve holy *imams*, or prophets, whom the Persians reverence. She had fled from Bagdad, according to the legend, to escape from persecution at the hands of the Khalifs, and, dying at Kum, was buried here by her brother, since when her tomb has become a great resort for pilgrims, like that of the Imam Reza himself at Meshed. Moreover, owing to Fatima's reputation for holiness, it became a fashion for the devout of the Shiah school of Mohammedanism, to which nearly all Persia belongs, to have their bodies buried close to the shrine. In consequence, Kum has become a vast necropolis. Some ten sovereigns of past dynasties have been interred here, between four hundred and five hundred saints, and numberless other people. Bodies are brought from great distances to this day to find sepulchre here, and the city, indeed, flourishes on the dead, big fees being charged for burial space—and the nearer to the immaculate Fatima the bigger the fee. Undertakers, grave-diggers and stone-cutters naturally abound.



Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE LAMA'S TOMB, YELLOW TEMPLE.

This tomb, much of whose architecture suggests India rather than China, is built not over the body of a deceased Tashi Lama, but over his yellow robes, which were kept behind when his august remains were sent back to Tibet.

The appearance of Fatima's shrine at a distance has been compared to that of one of the gilded domes of the Kremlin at Moscow. The Hon. G. N. (now Lord) Curzon, describing his visit to the place, says: "Another low ridge is climbed, another valley opens out, toward the southern end of which extends the belt of mingled brown and green that in the East signifies a large city. Above it the sun flames on the burnished cupolas and the soaring minars of Fatima's mosque. As we approach, the sacred buildings loom larger, and are presently seen to consist of two domes overlaid with gilded plates and five lofty minarets, disposed in two pairs and a single standing in close proximity to the larger dome.

"Emerging from small clumps of trees, or standing in solitary prominence, are to be seen

the conical tiled roofs of scores of *imamzadehs*, erected over the remains of famous saints and prophets, whose bones have been transported hither and laid to rest in the consecrated dust of Kum. . . . Some of them are in good repair and contain beautiful panels or lintel-bands of tiles with Kufic inscriptions from the Koran. Others are in a state of shocking ruin, the blue tiles having peeled off their cupolas, upon whose summits repose enormous storks' nests."

The copper sheets which cover the two domes are plated with gold one-eighth of an inch thick, the work on the larger dome being due to Fath Ali Shah, of the present dynasty. On the top is an ornament of solid gold, said to be one hundred and forty pounds in weight. The minarets near this dome are adorned with a beautiful mosaic of azure, canary and iridescent green tiles. Of the tomb beneath, an early traveller, Sir J. Chardin, about the end of the seventeenth century, wrote



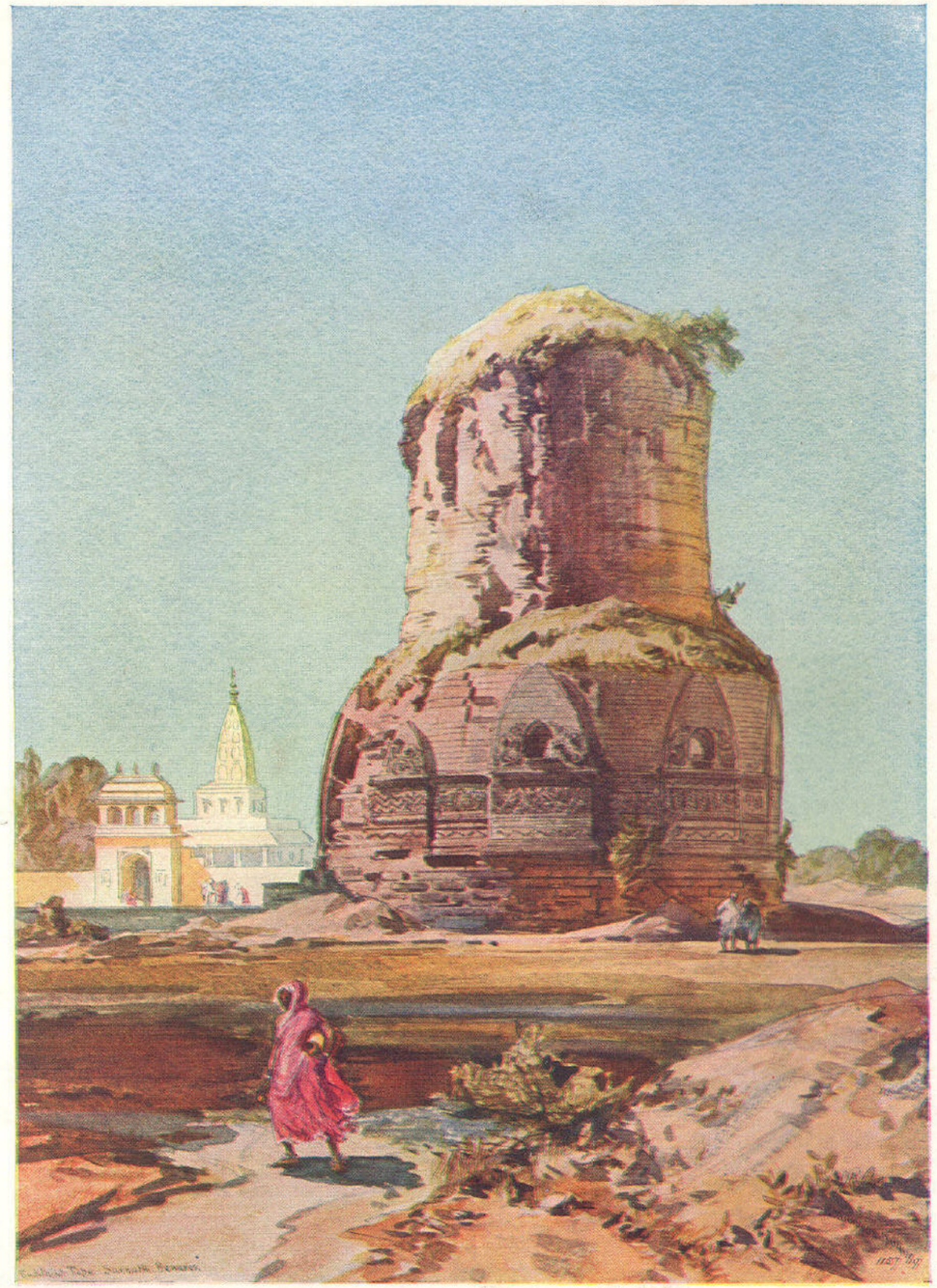
Copyright photo by] [*H. G. Ponting, F.R.G.S.*

THE YELLOW TEMPLE, NEAR PEKING.

This shows the entrance to the well-known temple, which includes among its treasures a tomb built over the yellow robes of a great Tibetan Lama, who died of small-pox at Peking near the end of the eighteenth century.

that it was "overlaid with tiles of China, painted *à la Moresca*, and overspread with cloth of gold that hangs down to the ground on every side." He speaks of "a gate of massy silver, ten foot high, distant half a foot from the tomb, and at each corner crowned as it were with large apples of fine gold." This silver "gate," or grating, is said to be still round the tomb. But it is practically impossible nowadays for a non-Mohammedan to penetrate inside the shrine and see the tomb.

The Yellow Temple, near Peking.—The *Hoang Ssu*, or "Yellow Temple," is one of the sights in the neighbourhood of Peking to which visitors to the Chinese capital never fail to make an excursion. It is not easy, nevertheless, to see much when one has got there, for the monks are neither amiable nor inclined to encourage sight-seeing except upon receipt of exorbitant donations.



THE SARNATH TOPE.

This, one of the oldest monuments in India, was set up in the earliest days of Buddhism to commemorate the spot in the Deer-park outside Benares in which Gautama first instructed his followers in the new Way, or, as the Buddhists preferred to say, first "turned the Wheel of the Law."

The principal object of interest, a white marble tomb, can be viewed without very great trouble; but Westerners seldom get a glimpse of much more.

The Yellow Temple derives its name from the following facts. In 1780 the Tashi Lama, a dignitary scarcely inferior even to the great Dalai Lama himself, came on a visit to Peking from his home at Tashi Lhumpo. He had only arrived a few weeks when he fell ill of small-pox and died. His body was sent back to Tibet in a golden casket, for the mortal remains of an incarnation of Amitabha, "Boundless Light," were too holy to be buried elsewhere. But his yellow robes were kept behind and enclosed in another casket, and over them was



Photo by] [*The American Colony, Jerusalem.*

THE AMPHITHEATRE, PETRA.

After traversing the narrow "Sik," there lies, in an open space where the valley widens, on the left hand, an amphitheatre. It is cut out of the mountain, and was made to accommodate over 3,000 spectators. There are 33 tiers of seats.

erected the tomb which may be seen to-day. Upon a raised terrace, entered through a *pailow*, or triple arch, stands a tall central relic-tower in the midst of four smaller towers, one at each corner. The towers, all of white marble like the arch, are Indian or Tibetan, not Chinese, in shape, and the central one is charmingly carved with scenes from the life of the Tashi Lama, and innumerable Buddhist figures, emblems and inscriptions.

The entrance to the temple is a picturesque piece of architecture, though of a type more ordinary in China than the tomb over the robes. The threefold staircase is worthy of note, with its middle flight showing an example of the "spirit staircase," not cut in steps, but set in an inclined plane and

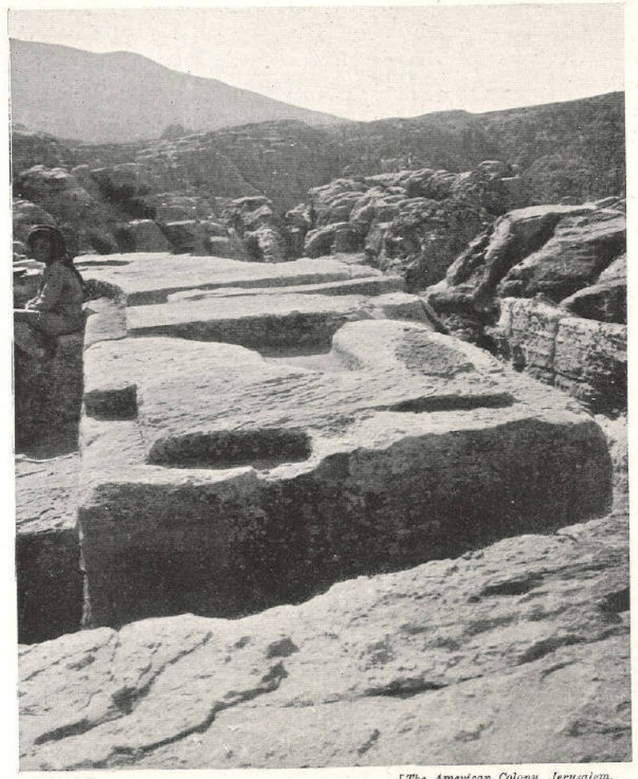


Photo by [*The American Colony, Jerusalem.*

"THE PLACE OF SACRIFICE ABOVE PETRA."

Of the many wonderful remains of Petra, "The Place of Sacrifice" is perhaps the most interesting. This site of religious observance gives a realistic idea of the "High Places" of the primitive inhabitants of the Land of Israel, where the worship offered was such a snare to the Israelites.

ornamented with dragon-carvings—as can be seen on a larger scale at the Temple of Heaven in the Chinese City, and the Confucian Temple in the Manchu City, of Peking.

The monastery contains also a foundry, which turns out bronze images, bells, and religious vessels and ornaments of all kinds, and a number of other buildings into which no encouragement is given to the "foreign devil" to pry.

Petra.—The rock-hewn city of Petra is exceedingly interesting, and also of astonishing beauty owing to the vividly variegated hues of the sandstone cliffs out of which its palaces, temples, houses, tombs, etc., are carved. These cliffs have been compared with Oriental carpets, so rich are their reds, purples, blues, yellows, blacks, and whites, running in bands across their face. The city itself has been called the "Red City," owing to the prevailing tint of its monuments. It lies in a valley about three-quarters of a mile long, from north to south, and varying in width from five hundred yards at the northern end to half that at the southern end. The rocks rise up almost perpendicularly around it, and in ancient times there was only one approach, through a deep and narrow gorge on the east, now known as the *Sik*. In places this gorge only allows two horsemen to ride abreast, and the enclosing rock-walls vary from two hundred feet high at the start to about eighty feet at the finish.

The original residents of Petra were the Edomites, or Idumæan Arabs, but they were succeeded by the Nabathæans, who built up a strong state, with Petra as its capital. They allowed themselves, however, to become vassals of Rome, and at last, in the reign of Trajan the province of Arabia Petræa was formed.

The remains, with the exception of some of the tombs, seem all to belong to the Roman epoch, and to the second, third and fourth centuries of that. The style is debased Græco-Roman, with a blend of native art, due to the Nabathæans themselves; while some see Egyptian influences also. A certain amount of damage seems to have been done to them by earthquake at various times, cracks and dislocations being visible here and there; but they are still wonderful.

Besides the Treasury of Pharaoh and the *Kasr Firaun*, or "Castle of Pharaoh," which appears in the centre of one of the photographs, the most important ruin is the amphitheatre,



Photo by] [*The American Colony, Jerusalem.*

PETRA, THE "RED CITY."

The rock-cut city of Petra lies secluded in the heart of the mountains of Seir. Shaped into palaces, temples, houses, tombs, etc., its rocks rise up almost perpendicularly around it, and, with the variegated hues of the sandstone, form an impressive and magnificent sight.

cut entirely out of rock and capable of seating over three thousand spectators on its thirty-three tiers.

Petra is particularly rich in tombs. Indeed, it might be called a vast necropolis, so full of tombs are its enclosing walls on every side. They are to be seen at such a height up the cliff-face that it is clear that those who hewed them must have used ladders. Now they are quite beyond reach, though not so far that the carved façades of many of them cannot be appreciated.

On the heights far above and a little to the south of the amphitheatre is a "Place of Sacrifice," one of the ancient "High Places" to be found in Syria and the neighbouring countries, of which frequent mention is made in the Old Testament. In the example at Petra are two altars, a large one for the sacrifice of victims and a smaller round one, a pool for ablutions, and a courtyard, all of them cut in the solid mountain-top.

Nowadays Petra is known to the Arabs as Wady Musa, or "Valley of Moses," from the stream which runs across the valley from east to west. According to the legend, it was here that Moses struck the rock with his staff, whereupon twelve springs gushed out.

Wat Po, Bangkok.—In the heart of the picturesque, dirty and odorous capital of Siam, close to the great enclosure of the royal palace, there is built Wat Po, the largest of the innumerable *wats*, or temple-monasteries, in the only remaining independent Buddhist kingdom in south-eastern Asia. Bangkok has been called "the city of temples," but few of them are better worth a visit than the one before us.



Photo by [*Robert Lenz, Bangkok.*

WAT PO, BANGKOK.

This is the largest temple-monastery in Siam, and is celebrated for a figure of the Dying Buddha, 175 feet long, built of brick, but covered with gold-leaf so thickly that early European visitors imagined it to be of solid gold. The photograph represents some of the inner buildings of Wat Po, a high wall enclosing the whole and making it impossible to obtain a general view. Some of the characteristic features of Siamese architecture can be seen in this picture.

The principal sight is the "Sleeping Buddha," as it is commonly called, though as a matter of fact it represents the founder of Buddhism in the hour of death, reclining on his right side, with his head propped by his right hand. The figure is one hundred and seventy-five feet long and is built of brick, which has been covered in turn with cement, lacquer, and thick gold-leaf, while the soles of the feet (each foot is five yards long) are inlaid with mother-of-pearl in the conventional designs always associated with the soles of the Buddha.

The photographs which appear here show various features of the Wat. The first, for instance, gives a good idea of the ornateness of the architecture, especially in the main hall (in the centre of the picture), and in the large *prachedi*, or votive spire (to the right). Although the derivation is not at first sight obvious, the top parts of these *prachedis* represent the old umbrellas-of-honour with which pious Indians used to crown their relic-mounds. Each ring in the spire is, as it were, a petrified umbrella, the number of such rings having increased as this style of architecture developed.



Photo by [*Alan H. Burgoyne, Esq., M.P., F.R.G.S.*

THE GUARDIAN OF THE GATE, WAT PO.

The figure shows obvious Chinese influence.

In this same picture the guardian spirits at the gateway are also noticeable. Another, and grimmer-looking, guardian is shown in one of the smaller photographs. The Chinese influence in the figure in the smaller picture is obvious.

In the full-page photograph is shown a cloister with a row of Buddha figures, recognizable by the strangely-shaped glory (in Siamese, *sirot*) on the top of the head. "Amongst the marks which the popular superstition insisted upon as characteristic of a Great Being, and which were, therefore, pre-eminently marks of the Buddha, was a curiously pointed cranium covered with refulgent hair. From this the Siamese derived their idea of the glory, which does not encircle the head, but rises flame-like above it."

In the grounds of Wat Po are some ponds containing crocodiles, which the priests feed; numerous granite rocks carved into monstrous shapes; and a multitude of trees, both growing naturally and artificially dwarfed and deformed—which latter, again, show Chinese influence.

There is a general air of decay about Wat Po at the present day, but it continues to attract pilgrims, if only to see the gigantic image of the dying Buddha.

The Wailing Place of the Jews at Jerusalem.—Few sights are more familiar to the tourist in Jerusalem than the "Wailing Place of the Jews," south-west of the *Haram*, or "Noble Sanctuary." It seems to affect various visitors in various ways. For instance, here is what Mr. Rider Haggard says about it:

"Facing the wall about a score of Jews, men and women of all ages, were engaged in 'wailing.' The women really wept, with intervals for repose, but the men, as strange a collection of human beings as I ever saw, did not give way to their feelings to that extent. They rubbed their faces against the huge blocks, which occasionally they kissed, or read from the Scriptures, or muttered prayers. . . . All about the principal actors, and mixed up with them, was a motley crowd—beggars, halt, maimed, and disease-stricken; boys, who drew down their eyelids within six inches of your face to reveal the shrivelled balls beneath; men with tins the size of a half-gallon pot, which they shook before you, howling and vociferating for *baksheesh*."



Photo by] [*Alan H. Burgoyne, Esq., M.P., F.R.G.S.*

PRACHEDIS AT WAT PO, BANGKOK.

The *prachedi* is a development of the relic-mound of India, and the curious rings or discs in the spires are a conventionalized development of the umbrella-of-honour which surmounted such mounds. Each ring represents an umbrella. Generally in Siam these spires are purely votive, and do not actually cover relics.

Observers find great pathos in this sight of men, women and children, from all parts of the world where Jews make their home, bewailing the past glories of Jerusalem and the desecration of the Great Temple.

The wall is part of the ancient fortification of the temple, over one hundred and fifty feet long and fifty-six feet high, and its lower courses are composed of vast blocks of stone, one being as long as sixteen feet. The labour of building such walls must have been immense; but, as we know from other structures which have been described in the present work, the Palestinian architects were skilled in the transport and employment of gigantic blocks, which certainly have justified their use by the splendid condition in which they remain to this day.

Temple of the Holy Tooth, Kandy.—Of the Cingalese temples still standing and not in ruins, the *Dalada Maligawa*, or Shrine of the Holy Tooth, at Kandy, is decidedly the most famous. It is assigned to the sixteenth century, when Kandy itself was founded. Below it lies a long tank, in which are kept many tortoises to be fed by visitors; above and behind it, well-wooded heights. Trees surround it, and a battlemented stone wall, within which a lawn is grazed over by some humped cattle. A massive low doorway gives entrance to the temple, whose roof is upborne by rows of short square pillars. Frescoes depicting incidents of Buddhist history decorate the walls. The innermost shrine—or, rather,



Photo by] [*Robert Lenz, Bangkok.*

WAT PO, BANGKOK.

The Cloister of Buddha figures, showing the curious shape of the glory with which the Siamese adorn the head of representations of the Buddha.



Photo by] [*L. Meinertzhagen.*

THE WAILING PLACE OF THE JEWS, JERUSALEM.

The wall is part of the ancient fortification of the temple, and it is here that Jews from all parts of the world come to bewail the past glories of Jerusalem and the desecration of the Great Temple.

series of seven shrines—is gilt and jewelled with exceeding richness. The relic is kept locked up within the seventh and smallest shrine, and is very rarely exhibited except to genuine Buddhist visitors—and they have to pay for the privilege.

The history of the Tooth is a curious one. It was brought to Ceylon in 311 A.D., by a fugitive Indian princess, who for safety carried it hidden in the coils of her hair. On its arrival it was housed in a temple built expressly for it at Anuradhapura, in the precincts of the great *Thuparama Dagaba*. The ruins of this first *Dalada Maligawa* are still in existence at Anuradhapura. During the wars with the Tamil invaders it was often necessary to remove the Tooth to Polonnaruwa for security; and, finally, when Anuradhapura fell definitely into Tamil hands, the Cingalese capital was moved to Polonnaruwa, and a new and beautiful *Dalada Maligawa* was built there, which is the object of much admiration to-day. Later Indian raiders succeeded in capturing the relic and carrying it away from Ceylon, but it was ransomed by one of the kings and brought back. Finally the Portuguese got hold of it and took it to Goa, where it was burnt to ashes by the Roman Catholic Archbishop. But, as one story runs, it miraculously reappeared and ever since has been enshrined at Kandy.

Whatever it was that was burnt at Goa, the actual object shown as the Tooth at Kandy is not human. It is stated to look like ivory, and a plaster cast of it exhibited to the present writer at Colombo by the monk Jinavaravamsa, cousin of the late King of Siam, showed it to be quite

two inches in length. It is contended by some upholders of the relic's genuineness that what is now seen is merely an ivory case, within which the real Tooth is kept.

Ruanweli Pagoda, Anuradhapura, Ceylon.—The Ruanweli *dagaba* (or "Pagoda of Golden Dust"), is one of the most impressive objects amid the ruins of Anuradhapura. When rediscovered, Ruanweli had the appearance of a conical hill, surrounded by a wall and topped by a small spire. Trees and bushes having taken root on the sloping sides, the illusion was the more complete. Examination, however, proved that the seeming hill was a brick building nearly one thousand feet in circumference and, not counting in the platforms subsequently excavated, about two hundred and seventy feet high. Great alterations in the aspect of the pagoda have been taking place since the mound was first discovered. The platforms have been dug out from the soil which buried them; and the offerings of pilgrims are enabling extensive restorations to be carried out.

The general plan of the building was as follows: In the centre of two platforms, one superimposed on the other, there was built a solid brick bell-shaped mass, two hundred and seventy feet high with the spire, and two hundred and seventy feet also in diameter at its base. Three ambulatories, each seven feet wide, encircled the bell in order that worshippers might walk round it thrice, keeping it on their right hand all the time, according to the prescribed ritual. Chapels stood at the four cardinal points of the pagoda, while on the upper of the two platforms there appear to have been a number of miniature *dagabas*, the gifts of the pious, one of which remains almost perfect to this



Photo from "The Book of Ceylon,"] [*by Henry W. Cave, M.A., F.R.G.S.*

THE TEMPLE OF THE HOLY TOOTH, KANDY.

This, the most famous of Cingalese temples still standing, was built in the sixteenth century. Locked up within the seventh and smallest shrine is an ivory relic which is asserted to be an actual tooth of Buddha.

day. There were also other erections on the platform, including a hall in which were sheltered four statues which the excavators discovered. Three of these were Buddha figures; the fourth and tallest, ten feet high, is supposed to represent King Dutthagamini himself.

The decorations of the platforms (one sculptured with a frieze of lions, the other with a frieze of elephants), and of the various remains surrounding the bell—statues, friezes, altars, etc.—are admirable. It appears that the general body of the pagoda and the two platforms were covered with a hard white enamel called *chunam*, so that the effect in bright sunshine must have been very dazzling.

According to the ancient Cingalese chronicle, when the great work was nearing completion, Dutthagamini fell mortally sick. He gave instructions that he was to be carried to a marble couch (which is shown to this day), lying on which he could let his dying eyes rest upon the pagoda and his other masterpiece, the Great Brazen Palace. Before he breathed his last he adjured his younger brother, Tissa, to finish his work for him. This Tissa did, while subsequent kings added to its decorations very considerably.

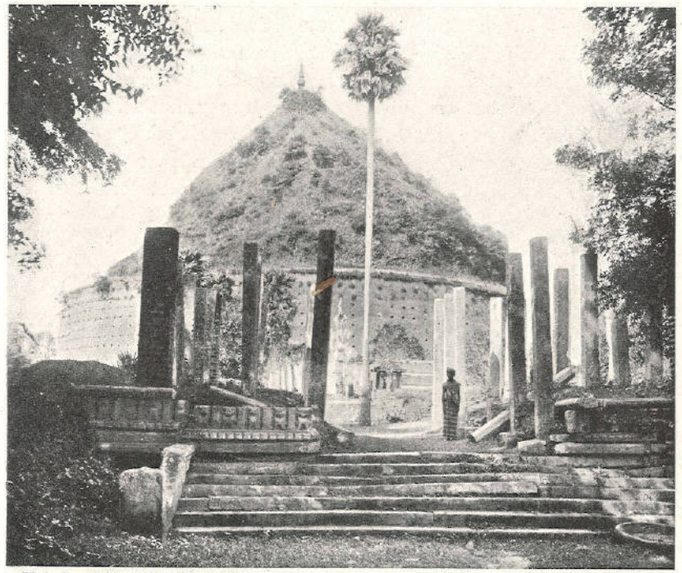


Photo from "The Book of Ceylon," *[by Henry W. Cave, M.A., F.R.G.S.*

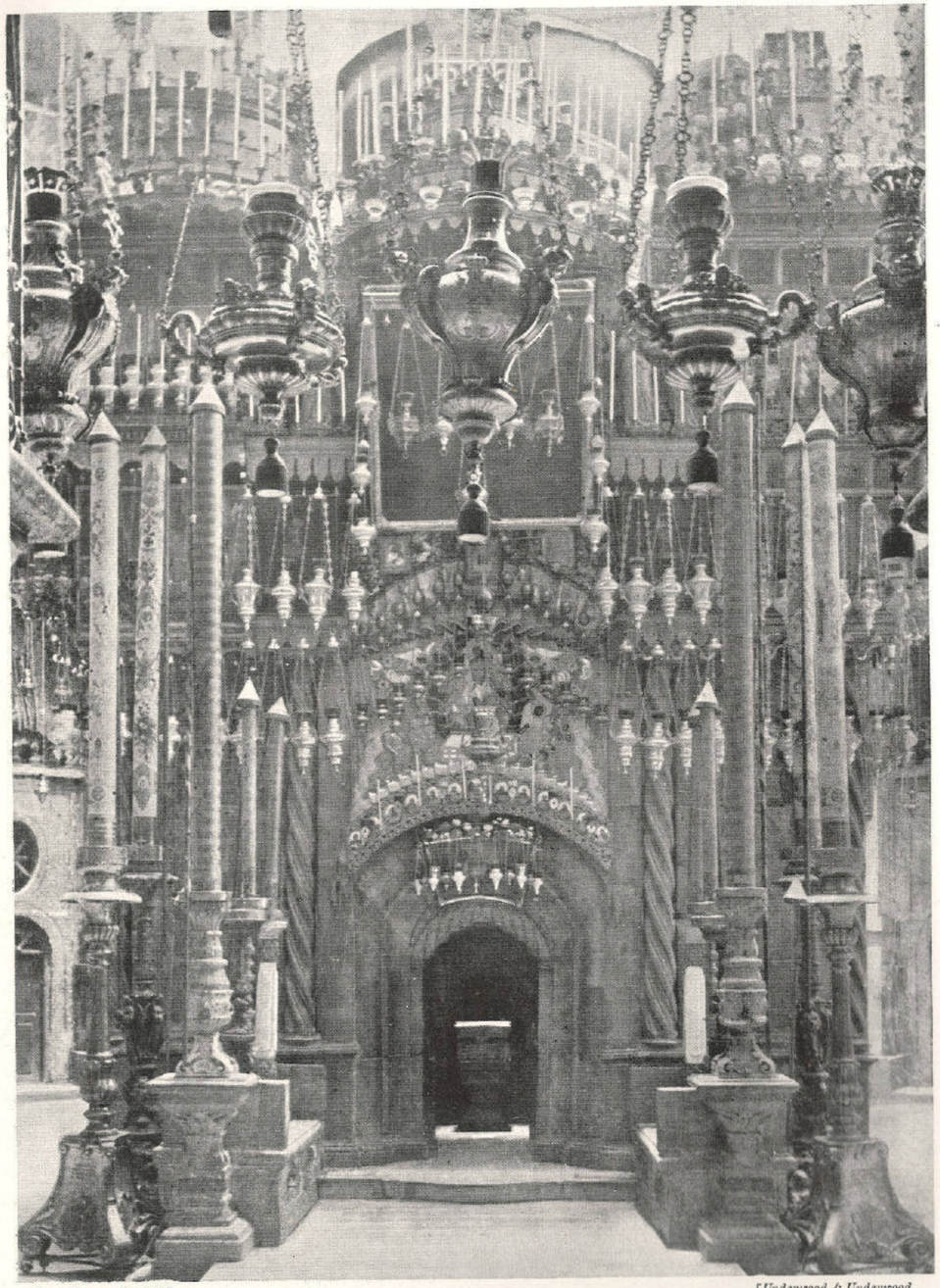
RUANWELI PAGODA, ANURADHAPURA, CEYLON.

Looking at a distance like a conical hill surrounded by a wall and surmounted by a tiny spire, Ruanweli pagoda is in reality a solid mass of brickwork, 270 feet high and nearly 1,000 feet in circumference. It was set up in the second century B.C. by the greatest of the Buddhist kings of Ceylon, who on his deathbed let his eyes rest on it and his other great building, the Brazen Palace.

The Holy Sepulchre at Jerusalem.—It has frequently been pointed out by modern writers, including some of the most undoubted piety, that the evidence in favour of the authenticity of the site of the Holy Sepulchre is weak. Helena, mother of the Emperor Constantine, is said to have been induced by a dream to visit Jerusalem. There a second vision led her to proceed to a temple of Venus, erected by Hadrian, and destroying the temple, to dig down to the foundations, when there were discovered both the sepulchre of Jesus Christ, and also the crosses upon which He and the two thieves were crucified three hundred years before. This is Eusebius's story.

The most sacred part of the Church of the Holy Sepulchre is what is known as the "Rotunda," a circular building, sixty-seven feet in diameter, in the midst of which stand the Sepulchre itself and in front of it the Chapel of the Angel, through which alone it can be entered. Within the chapel, which is illuminated by fifteen lamps belonging to the various sects, is a little marble altar supposed to mark the spot where on the morning of the Resurrection the angel stood by the tomb and told the amazed women: "He is not here: He is risen, as He said."

The Sepulchre is inside a building twenty-six feet by eighteen, westward of the chapel, and is a quadrangular vault, six feet by seven, with a high domed roof supported on marble columns.



From Stereo copyright] *[Underwood & Underwood.*

THE CHURCH OF THE HOLY SEPULCHRE.

The photograph shows the facade of the Chapel of the Angel hung with almost innumerable lamps. Within the chapel, which is illuminated by fifteen lamps belonging to the various sects, is a little marble altar supposed to mark the spot where on the morning of the Resurrection the angel stood by the tomb and told the amazed women that Christ had risen.

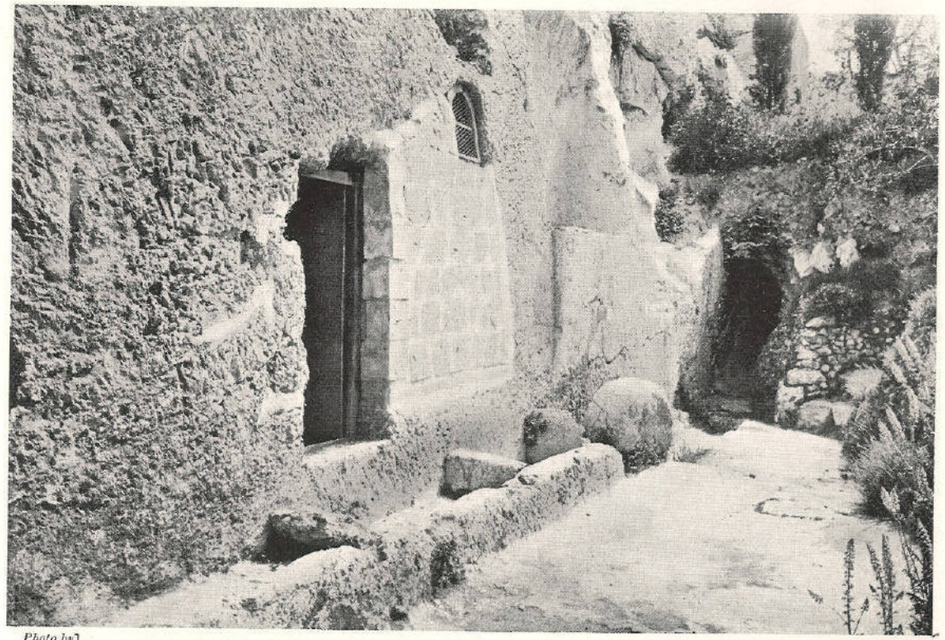


Photo by] [J. W. McLellan.

GORDON'S CALVARY.

Outside the present walls of Jerusalem, north of "Herod's Gate," is a mound which is thought by many, including General Gordon, to be the actual scene of the Crucifixion and burial of Christ. The rock-hewn tomb (the entrance to which is shown in the illustration) to the west of the mound supports this theory.

The vault is lined throughout with greyish marble, the upper part of which is quite black with the smoke of incense and of the forty-three lamps of gold and silver. At the north side is a marble slab, much worn away by the kisses of the pilgrims, under which is said to lie the actual tomb, although, as the marble slab has been in its position since mediæval times, it is impossible to tell what is beneath it. The vault is decorated with a relief representing the Crucifixion, over the slab; another, in white marble, showing Jesus rising from the tomb; and a great quantity of gifts resented at various times.

The outside of the Sepulchre building is covered with white and yellow stone, and there is a large metal crown on its summit.

Apart from the relic from which it takes its name, the Church of the Holy Sepulchre contains a great number of other features. There is Golgotha, with a spot which is pointed out as being where the three crosses were set up. There are also the Prison of Christ, the Pillar of the Scourging, the Chapel of the Division of the Vestments, the Chapel of the Apparition to Mary, the Chapel of the Invention of the Cross, the Chapel of Helena, etc., etc., and such curious places consecrated by legend as the Tomb of Melchizedek, the Chapel of Adam (who was supposed to have been buried where the Cross was later erected), the Centre of the Earth (because it is in the middle of the church, which is in the middle of Jerusalem, which, again, is in the middle of the world !), and so on.

"Gordon's Calvary" and a Possible Site of the Holy Sepulchre.—Outside the present walls of Jerusalem, a little to the north of "Herod's Gate," is a mound which has notable claims to be considered the scene of both the Crucifixion and the burial of Jesus Christ. The site of the Church of the Holy Sepulchre, experts say, can never have been without the gates of the fortifications of Jerusalem, whereas the true Calvary and tomb, according to the Gospel narrative, were without

the gates. The mound in question is a very conspicuous place, rising to a height of about fifty feet, perpendicular on the side facing Jerusalem, sloping on the other sides, and in general shape curiously resembling a skull.

Moreover, the tomb lying to the west of the mound is strangely appropriate. "It would not be too much to say," writes Mr. Rider Haggard, "that here the Scriptural description seems entirely fulfilled. The tomb is rock-hewn. It appears never to have been finished, for some of the surfaces have not been smoothed. It was closed with a stone. When this stone was rolled away, the disciples, Peter and John, by stooping down, could have looked into the sepulchre and seen the linen clothes lie, perhaps upon the floor of the little ante-chamber. This tomb, too, was a family tomb, such as Joseph of Arimathæa might well have made, with room in it for three bodies, one at the end, as it were, and recessed, and two at right angles. Very well might these have served as seats, such as those on which Mary must have seen 'two angels in white sitting, the one at the head and the other at the feet, where the body of Jesus had lain.'"

On the east wall of the tomb, at right angles to the only finished receptacle for a body, is a faint fresco of a cross with sacred monograms about it, obviously very old, and seemingly indicating that what was originally meant to be used as a place for a second body had been converted into an altar. Outside, but not far away from this tomb, there are to be found early Christian graves, on one of which is the inscription: "Buried near his Lord."

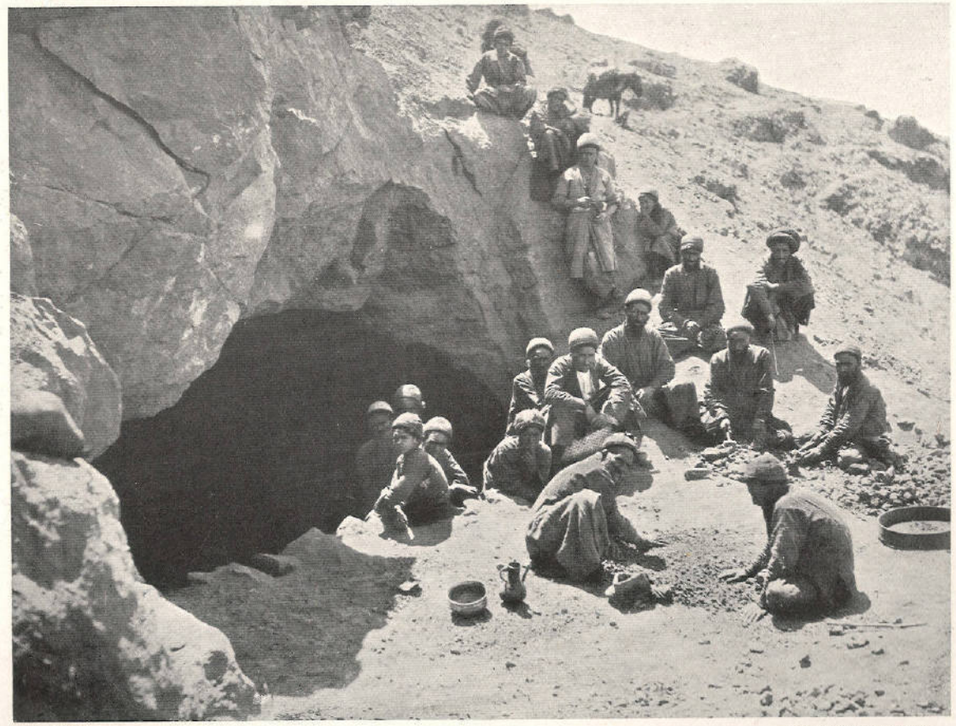


Photo by] [Prince Abdulla Mirza.

THE WORLD'S TURQUOISE STORE

Entrance to one of the mines where 999 out of every 1,000 turquoises which come into the market are found. The mines are in a hill district about forty miles square, usually called after the city of Nishapur, although as a matter of fact about thirty miles away. As much as £23,000 worth of turquoises have been turned out in recent years from these mines.

The name of "Gordon's Calvary" has been given to the place owing to the firm conviction of General Gordon that this was the true site of the Holy Sepulchre and of Calvary, and here, accordingly, he came to pray when on a visit to Jerusalem. Commonly it is known as "Jeremiah's Grotto," after a cave in the steep face of the mound, connected by legend with the prophet Jeremiah.

Nishapur Turquoise Mines.—Although the turquoise is not reckoned a rarity among precious stones, it is, nevertheless, a fact that almost all the world's supply of turquoises is derived not only from one country, Persia, but also from one district about forty miles square in that country.

The city of Nishapur is not far from Meshed, and lies on the road to Teheran. The actual locality of the mines is some thirty miles away, and is known as Madan (that is, simply, "mines"), but the former fame of Nishapur has led to the extension of its name to cover this district. The turquoises are found in a range of hills, where there are a great number of mines, both old and new. Many of the old ones are not completely worked out yet. Indeed, some of the finest of the stones nowadays are still to be found by careful search among their galleries and shafts. In the new mines, the promiscuous and careless use of gunpowder for blasting results in the ruin of many of the stones got out. The mining is a State monopoly, but the Government farms it out to the highest bidder, who, in his turn, sublets the rights. The Persian dealers, in order to dispose of their irregular-shaped and flawed stones, cut them into seals and amulets. They gild Arabic letters over the flaws, and sell them to pilgrims visiting Meshed.

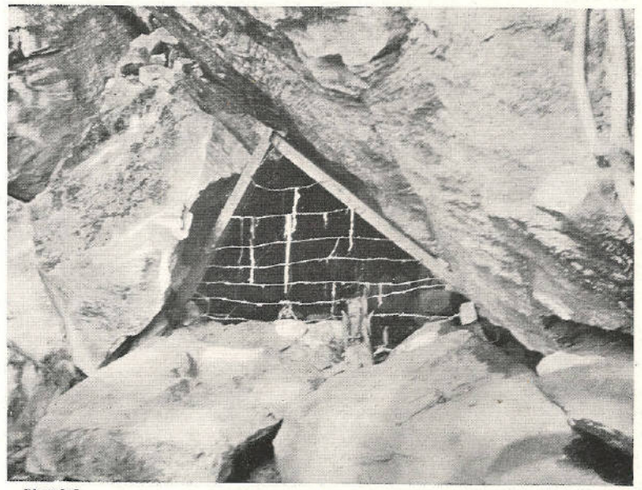


Photo by] [*The Fleet Agency.*

SACRED CAVE, OBSERVATORY HILL, DARJILING.

This hillside cave is popularly supposed to lead to Lhasa, although the distance by road from Darjiling is 333 miles. Legend also makes it hollowed out by Indra's thunderbolt, from the Tibetan name of which, *dorje*, the name of Darjiling is derived.

The Nishapur mines have yielded as much as about twenty-three thousand pounds' worth of turquoises in recent years, and work is found at Madan for some fifteen hundred people, mining and hunting through the old débris-heaps and the stuff washed down the hillsides.

Sacred Cave on Observatory Hill, Darjiling.—Observatory Hill, one of the principal heights in the town, and a place to which visitors always repair to enjoy the magnificent panoramic view of some of the highest mountains in the world, has a great reputation for sanctity, owing to the presence of a cave with two curious legends attached to it. It is known as "the cave of the thunderbolt," and from the Tibetan word *dorje* Darjiling takes its name. *Dorje* is the same as the Indian *vajra*, the thunderbolt wielded by the god Indra, who was admitted into the very mixed pantheon of latter-day Buddhism. The cave is supposed to have been formed by Indra's thunderbolt striking the hill.

The Mosques on the Temple Area, Jerusalem.—On the long platform which crowns Mount Moriah, where once stood the Temple built by Solomon, is now the Mosque of Omar, or Dome of the Rock, about which so many visitors have written in enthusiastic admiration of its beauty.

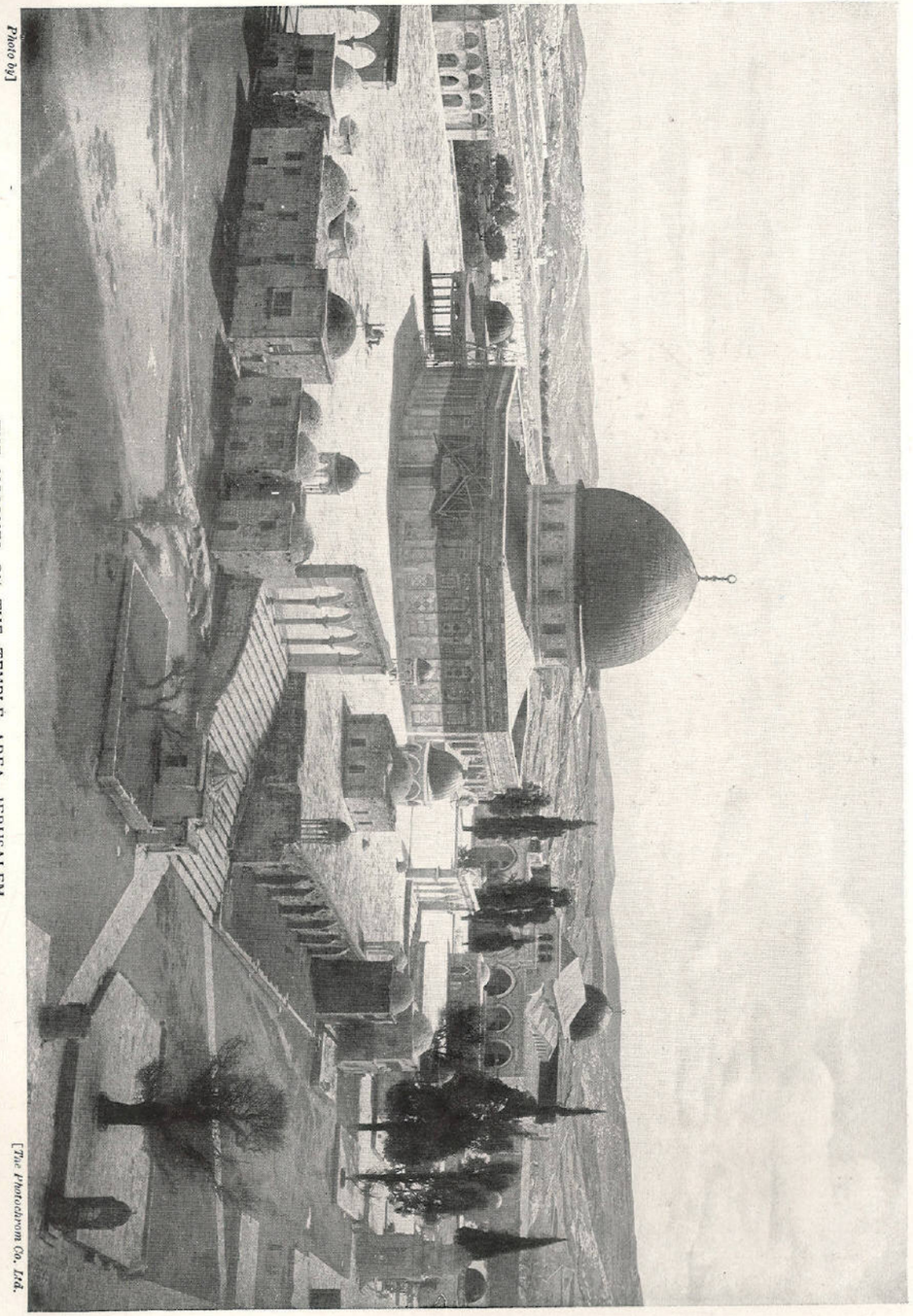


Photo by] [*The Photochrom Co., Ltd.*

THE MOSQUES ON THE TEMPLE AREA, JERUSALEM.

Two of the finest mosques in the world now occupy the chief positions on the site of the former great Temple of the Jews. The Mosque of Omar (in the centre of the photograph) stands approximately on the place where the Temple itself was. The Mosque of El-Aksa (in the background, with a dome very similar to Omar's Mosque) is even more beautiful, including in it the remains of a church of which the builder, Justinian, exclaimed: "I have surpassed thee, O Solomon!"

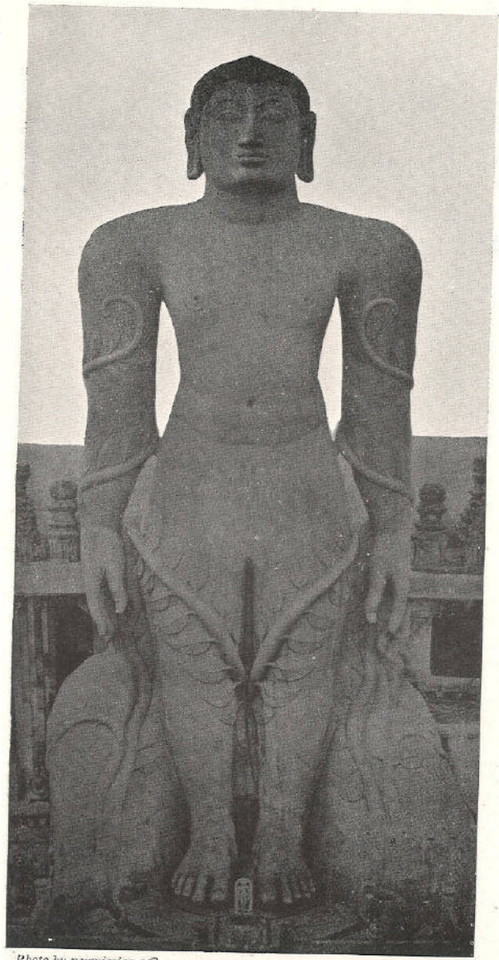


Photo by permission of] [*L. Rice, Esq.*

The Gomatesvara at Sravana Belagola.

But even more beautiful is another building close at hand, the Mosque of El-Aksa, at the southern end of the Haram-es-Sherif, or Noble Sanctuary, as the whole Temple area is now called. The Emperor Justinian erected on this site a church dedicated to the Virgin Mary. "I have surpassed thee, O Solomon!" he exclaimed when he had completed it. When Omar a century later captured Jerusalem, so impressed was he said to be at the loveliness of this church that he offered up his prayers on its steps, refusing to enter lest an excuse should be made by his co-religionists for confiscating it and converting it into a mosque. He even gave a guarantee that it should remain in Christian hands, it was asserted. Nevertheless, the Caliph Abd-el-Malik made a Mohammedan place of worship of it in 684 A.D. Its subsequent history is full of vicissitudes. First an earthquake reduced it to ruins. Then it was rebuilt by the Moslems toward the end of the eighth century. Next the Crusaders, after their capture of Jerusalem, made it a church again, and Baldwin the Second, founding the new order of the Knights Templar in 1118 A.D., gave them as their habitation this "Temple of Solomon," as it was erroneously called. The Mohammedans once again triumphed, and Saladin and his nephew restored the mosque with sumptuous additions. Another restoration followed in the fourteenth century, but it has not again changed hands. Owing to its history, the architecture of this mosque shows a mixture of styles scarcely to be matched elsewhere in the world.

Colossal Jain Statue at Venur.—In the South Kanara district of Madras Presidency there are considerable remains from the time when a large part of the district was under rulers professing the Jain religion. The most interesting objects, perhaps, are certain huge monolithic statues, each enclosed within a walled place called a *betta*. One of these is found at the small village of Venur. It is thirty-seven feet in height, and, therefore, smaller than the one at Sravana Belagola.

The Venur statue represents Gomata Raya, or Gunta Raj, a hero of Jain legends now practically forgotten. It is also called sometimes Bahubalin. The figure and features are of the typical Jain character, easily to be distinguished from the work of Buddhist sculptors. The most remarkable point about it is that it is carved out of a single block of stone. It is impossible to tell whether this block was found on the spot and hewn into shape where it lay, or whether it was brought from elsewhere already carved and erected at Venur. The illustration of the "Gunta Raj" appeared on page 28, and was by mistake called the Gomatesvara.

CHAPTER VII.

By PERCEVAL LANDON.

The Falls of the Narbada.—The story of the exaltation of the Ganges and the consequent degradation of the Narbada from its place as holiest of Indian rivers is one of the strangest legends of Hinduism. In old days the latter was so far the superior in sanctity that a mere look at the Narbada washed away sin, while actual ablutions in the Ganges were necessary to achieve the same object. However, the Narbada incurred the anger of the Gods, and its punishment has lasted till to-day. There is, however, a strong feeling in India, especially among those by whom the Narbada is more get-at-able than the Ganges, to claim that the period of degradation has just lapsed, and that from henceforth the Narbada must take its place once more as the holiest of Indian rivers. It seems clear, according to the legend, the degradation of the Narbada was to last for the first five thousand years of the Kali Yug, *i.e.*, the era in which we are now living, and that according to most calculations that period expired in 1899.

The river rises beside the sacred temple of Amarnath in the Pendra Ghats. Thence the river makes its way to Jabalpur, near which city the famous falls and the Gorge of the Marble Rocks distinguish



Photo by] [*Frith & Co. Ltd., Reigate.*

THE FALLS OF THE NARBADA.

The Narbada is, next to the Ganges, the most sacred stream in India. The Hindus upon its banks claim that within the last few years the period of its inferiority to the Ganges has elapsed, and that now the Narbada takes the premier place.

its course. The "smoke cascade" is that which is here represented. The water falls about one hundred feet into the pool which at the western end escapes through the Marble Rocks. These white cliffs are one of the famous sights of India, and are notorious for harbouring thousands of swarms of savage bees. Several lives have been lost by accident or the foolhardiness of visitors. A memorial records the death by drowning of an Englishman who was trying to escape from the indignant insects.

The Ruins of Persepolis.—Lord Curzon has not hesitated to say of these famous ruins that "no more sumptuous framework of regal magnificence was ever wrought by man." They lie upon a long artificially constructed platform five hundred yards in length from north to south, and about three hundred yards wide, in the valley of Merdasht, thirty miles from Shiraz on the road to Isfahan. This platform is of different levels, and the natural ascent of the ground has been utilized as far as possible. Access to it is obtained by the famous staircase, of which an illustration is appended.

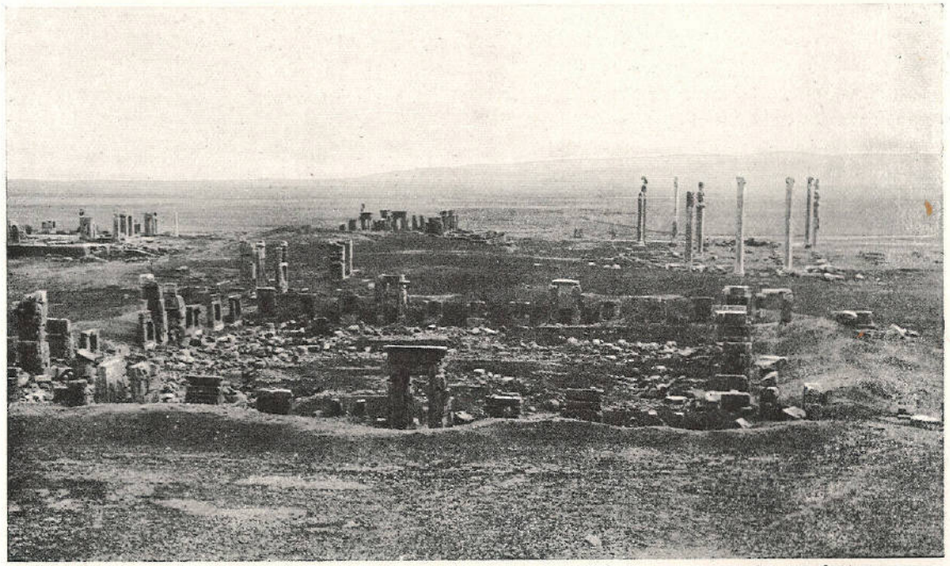


Photo by] [*Alfred Hetmeck.*

VIEW OF THE RUINS OF PERSEPOLIS.

This is a general view of Persepolis taken from the east. Immediately in front is the famous Hall of the Hundred Columns, burnt down by Alexander the Great in a drunken frolic. Beyond this on the right may be seen the few still remaining columns of the Audience Hall of Xerxes.

This is of such an easy gradient that it is possible for the visitor to ascend it on horseback. Immediately at the top of the staircase the visitor is confronted with the Porch of Xerxes. These huge bull-flanked portals are of a style somewhat earlier than that which is generally associated with the Achæmenian kings. The bulls are nearly eighteen feet in height and nineteen in length, the corridor between them being about twelve feet in width. Xerxes has placed an inscription upon the piers of the gateway just above the bulls: "By the grace of Ormuzd I have made this portal." He also refers in it to the other buildings on the platform, definitely stating them to be the work of himself and his father Darius. In spite of some misapprehension, it is clear that these buildings were intended for royal and not priestly ceremonies. There is, indeed, no temple of any kind among them, though religious scenes form a large part of the ornamentation.

Leaving these gates—which are grievously defaced by the names that tasteless travellers have carved upon them—the Audience Hall of Xerxes is approached, of which the few remaining pillars



Photo by] [*Pr. Abdulla Mirza.*

THE PORCH OF XERXES, PERSEPOLIS.

These huge man-headed bulls guard the entrance to the palatial buildings of Persepolis. Ruinous as they are, they still offer the best suggestion of the magnificence of those who called themselves King of Kings and Lord of the Universe.

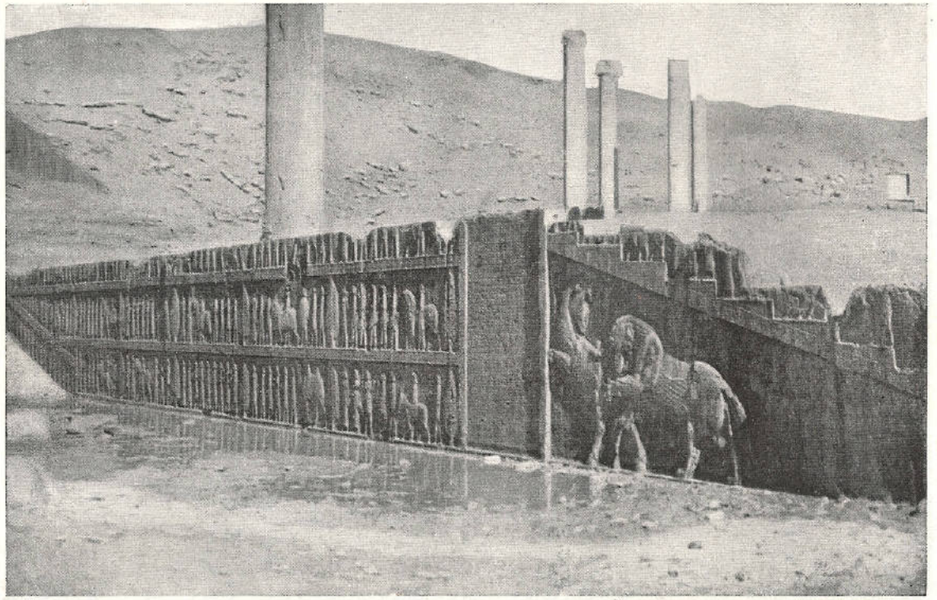


Photo by] [Alfred Heinicke.

STYLOBATE OF THE AUDIENCE HALL OF XERXES

This huge edifice was built upon an elaborately carved platform, of which a good view is here given.

have given to the building the local name of Chehel Minar, or The Forty Columns. The building consisted of a hall supported by six rows of six columns each, with porticoes of the same width as the main building thrown out to the north, east and west. There were thus seventy-two columns when the hall was perfect. Of these but thirteen remain. Two at least have fallen within the last hundred years, and it is only too much to be feared that those now standing will shortly be reduced in number. The columns of the porticoes are sixty-seven feet high to the top of the bull-head capitals. Those of the central hall are somewhat less in height. This great building covered an area of about sixty thousand feet.

Beyond the Hall of Xerxes lies the Palace of Darius. Of this the stone doorways, thresholds and corners alone remain, the sun-baked mud of which the walls were made having long yielded to the assaults of the weather. Above this lies the Palace of Xerxes, which was a more pretentious building. Last of all the buildings on this platform, which is known to the natives as the "Throne of Jamshid," is the famous Hall of a Hundred Columns, which is larger than the central Hall of Xerxes, and is estimated by Lord Curzon to be second only to Karnak in the ancient world. These columns, of which not a single one now remains erect, were about thirty-seven feet high. The whole was surrounded by a wall, of which the stone doorways and windows are in the majority of cases still *in situ*.

This building contains evidence of the truth of the story told by Diodorus and others of Alexander the Great, that he wantonly burnt down the Palace of Darius as a drunken frolic; for the ashes of the cedar roof—detected by the unerring analysis of the modern microscope—were discovered still lying in a thick bed upon the pavement during the excavations of 1878. There is perhaps no better known incident in Alexander's life, and it is curious after two thousand two hundred years to find ourselves, as Lord Curzon phrases it, contemplating the speaking wreck of what was either, if the Greek historians are to be believed, the drunken freak of the conqueror, or, more

probably, the act of a merciless but deliberate premeditation, in revenge for the burning of the Temple of Athens by Xerxes.

The Cathedral, Lhasa.—The exterior of the Potala and the interior of the Cathedral are the two most interesting things in Central Asia—possibly in the whole of Asia. The Cathedral, or Jo-kang, is the real Lha-sa, or Place of God, and into this most holy of holies none of the previous white visitors to Lhasa had ever dared to venture before the arrival of Younghusband's expedition in 1904. There could hardly have been a chance in a thousand for any solitary intruder discovered within its darkened and windowless quadrangles. For the Jo-kang has no outside walls at all. All round the Cathedral the dirty and insignificant Council Chambers and offices of the Tibetan Government cling like parasites. From a distance the five great gilded roofs may from time to time be seen blazing in the sun, but the only view possible on a nearer approach is that of the great western doors, the only public entrance into the holy place. Inside this Cathedral the oldest and incomparably most holy chapel is that at the extreme east end, wherein the great golden idol of Lhasa sits. The first sight of what is beyond question the most famous idol in the world is uncannily impressive. In the darkness it is at first difficult to follow the lines of the shrine which holds the god. One only realizes a high, apparently pillared, sanctuary in which the gloom is almost absolute, and therein, thrown into strange relief against the obscurity, the soft gleam of the



Photo by] [Alfred Heinicke.

THE GREAT STAIRCASE, PERSEPOLIS

This, perhaps the most famous staircase in the world, leads upwards from the plain of Merdasht to the platform upon which are built the royal buildings of Xerxes and Darius at Persepolis.

golden idol which sits enthroned in the centre. Before him are rows and rows of great butter-lamps of solid gold, each shaped in curious resemblance to the pre-Reformation chalices of the English Church. Lighted by the tender radiance of these twenty or thirty beads of light, the great glowing mass of the Buddha softly looms out, ghostlike and shadowless, in the murky recess.

It is not the magnificence of the statue that is first perceived, and certainly it is not that which makes the deepest and most lasting impression. For this is no ordinary presentation of the Master. The features are smooth and almost childish ; beautiful they are not, but there is no need of beauty here. The legendary history of this idol is worth re-telling. It is believed that the likeness was made from Gautama himself, in the happier days of his innocence and seclusion in Kapali-vastu. It was made by Visvakarma—no man, but the constructive force of the universe—and is of gold, alloyed with the four other elemental metals, silver, copper, zinc and iron, symbolical of this world, and it



Photo by] *[Perceval Landon, Esq.*

THE JO-KANG, OR CATHEDRAL, LHASA.

This is strictly speaking the real Lhasa. The word "Lhasa" means the "Place of God," and below the golden roofs of the Cathedral rests the great golden image of Buddha, the most famous idol in the world.

is adorned with diamonds, rubies, lapis-lazuli, emeralds, and the unidentified indranila, which modern dictionaries prosaically explain as sapphire. This priceless image was given by the King of Magadha to the Chinese Emperor for his timely assistance when the Yavanas were overrunning the plains of India. From Peking it was brought as her dowry by Princess Konjo in the seventh century. The crown was undoubtedly given by Tsong-kapa himself in the early part of the fifteenth century, and the innumerable golden ornaments which heap the khil-kor before the image are the presents of pious Buddhists from the earliest days to the present time. Among them are twenty-two large butter-lamps, eight of a somewhat smaller size, twelve bowls, two "Precious Wheels of the Law," and a multitude of smaller articles, all of the same metal.

These are arranged on the three shelves of the khil-kor, and the taller articles conceal the whole of the image from his shoulders downwards. To this fact may perhaps be due the common, but mistaken, description of the Jo as a standing figure. Across and across his breast are innumerable



Copyright photo by] *[H. G. Ponting, F.R.G.S.*

NATURAL ARCH AT MATSUSHIMA.

In the Bay of a Thousand Islands, Japan.



Photo by] [Perceval Landon, Esq.

THE ARAKAN TEMPLE, NEAR MANDALAY.

This is a view of the gilt spire of the Arakan temple from the Sacred Tank.

necklaces of gold, set with turquoises, pearls and coral. The throne on which he sits has overhead a canopy supported by two exquisitely designed dragons of silver, each about ten feet in height. Behind him is a panel of conventional wooden foliage, and the "Kyung," or Garuda Bird, overhead can just be seen in the darkness. Closer examination shows that almost every part of the canopy and seat is gilded, gold, or jewelled. The crown is perhaps the most interesting jewel. It is a deep coronet of gold, set round and round with turquoises, and heightened by five conventional leaves, each enclosing a golden image of Buddha, and encrusted with precious stones. In the centre, below the middle leaf, is a flawless turquoise six inches long and three inches wide, the largest in the world. Behind the throne are dimly seen in the darkness huge figures standing back against the wall of the shrine all round. Rough-hewn, barbarous, and unadorned they are, but nothing else could have so well supplied the background for this treasure of treasures as the Egyptian solemnity of these dark Atlantides, standing shoulder to shoulder on altar stones, where no lamps are ever lighted and no flowers are ever strewn.

Matsushima.—Matsushima looks out upon a bay studded with islands crowned with those typical pine-trees which seem to grow in Japan as they grow nowhere else. Hundreds of these islets dot the broad shallow waters of the bay from Shiogama on the west to Kinkwazan forty miles away to the east. Not the least beautiful fact about this bay is that the friable nature of the volcanic rock of which the islands and the countless promontories are made is continually wearing away. Islands disappear in the course of a few generations and are replaced by the erosion of the sea along the

coast. The great natural arch, of which a picture is here given, represents one of these new islets in process of formation. The sea has worn away the thin curtain of rock between the sturdy pillar of the cliff. At present the lofty archway overhead is intact, but that, in turn, will fall, and a few centuries hence another isolated island point will be added to the bay.

The Arakan Temple, Mandalay.—There are generally said to be only three buildings in Burma the restoration of which enables the pious to acquire merit. As is well known, the whole countryside of the Silken Kingdom is dotted with the disintegrating ruins of small pagodas put up by religious-minded men in past generations. For these, however, their descendants have no care whatever. They can only do themselves spiritual good by offering for themselves new architectural oblations to the comfortable religion of their race. But to this rule there are three exceptions. Merit, much merit, is acquired by the restoration of the Shway Dagon in Rangoon, the Arakan Pagoda near Mandalay, and the temple at Pegu. To this small and select company there has been added by universal consent within the last few years the colossal reclining image of Buddha at Pegu, of which a description has been given earlier in this volume.

The temple at Arakan lies within a short drive of Mandalay. In form the temple is square. An arched corridor runs all round the central block, in which there is a deep and lofty cell containing the image which makes the temple famous throughout Southern Buddhism. This is a large gilt image, about ten feet in height, which was brought from Akyab about one hundred and thirty years ago. It shares with the golden idol in Lhasa and the amorphous log which does duty for the image of Jagannath in Puri the reputation of having been modelled by Visvakarma, the divine fashioner of the universe. But it is certainly of great age, though we may not be willing to assent to the tradition that declares it to have been constructed during the lifetime of Buddha himself. Nor can the well-known legend be accepted, alas! which tells how when all mechanical means of welding the pieces together had been tried in vain, the Master himself appeared and threw his arms round the statue, of which the several pieces at once came together so exquisitely that no human eye has since been able to detect the sutures.

The fact upon which this legend is based is that the offerings of the faithful have so completely

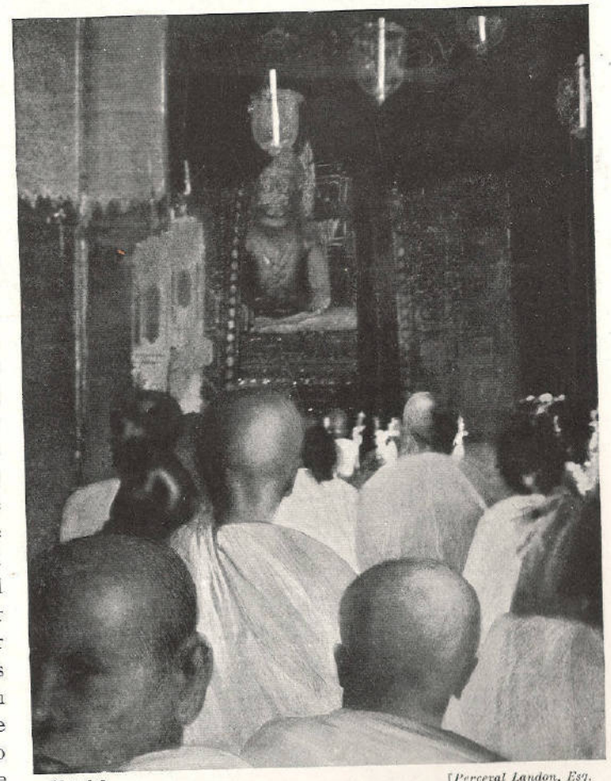


Photo by] [Perceval Landon, Esq.

THE ARAKAN PAGODA, NEAR MANDALAY.

This photograph gives a partial view of the famous Arakan Buddha within the Arakan temple near Mandalay. It is the holiest image in Southern Buddhism, and ranks second to the golden idol in Lhasa, which, tradition says, was made by the same artist.

overlaid with gold-leaf every portion of the statue that it is impossible to trace the lines of juncture.

Outside in the darkening corridors is a crowd of gaily-clad Burmans. Their silk jackets and skirts reflect every hue of the rainbow, and the dainty coils and oiled black hair of the merry little women is relieved by a single scarlet hibiscus flower stuck within its folds. The shops are closing down and the last prayers of the day are being muttered.

The Tomb of Eve, Jeddah.—Jeddah is a little-known city. It lies beside, but far off the main traffic route between east and west, and the traveller will have to put up with some inconvenience in getting to it. Moreover, it is probably the most fanatical town in Asia. It is only thirty-eight miles from Mecca, of which it is the port. So jealously do the Moslems watch for any attempt on the part of a Christian to repeat the rash enterprise of Burton and Palgrave, that

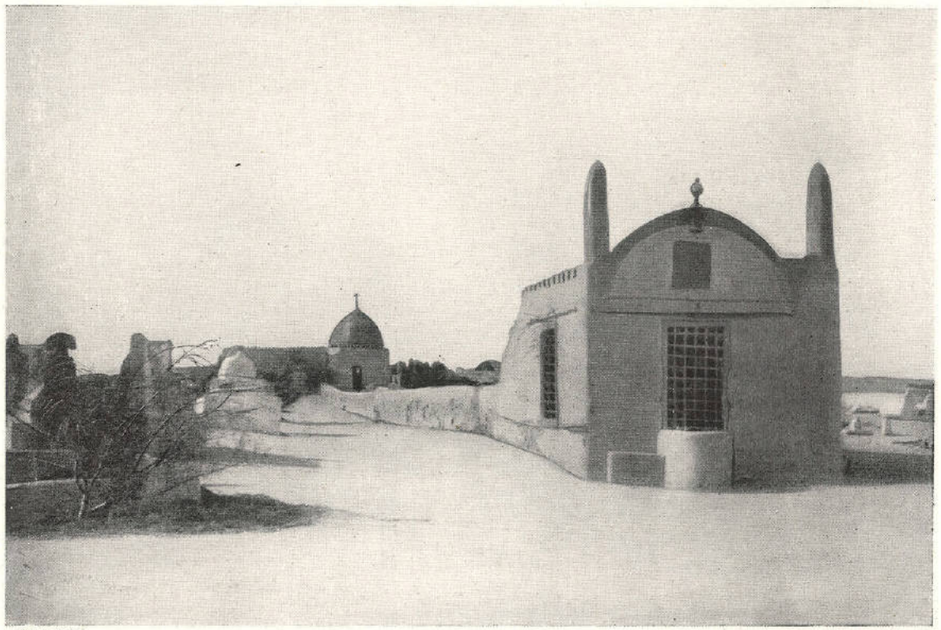


Photo by] [*Perceval Landon, Esq.*

TOMB OF EVE, JEDDAH.

The traditional resting-place of the mother of all living, lies about a mile north of the Arabian city of Jeddah. The photograph shows one half of this strangely-shaped tomb, which is nearly 500 feet in length and ten feet in width.

during the pilgrim season the one or two Christian residents in the town are practically confined to the small foreign quarter near the northern gate. At no time in the year does the European move outside the walls of Jeddah without taking his life in his hands. Many readers will remember the murderous assault made a few years ago upon four foreign consuls while they were innocently smoking their cigarettes a few yards outside the Medina gate.

A mile to the north of the town lies one of the strangest monuments in the world. Here, according to a tradition which is older than Mohammed, the mother of all flesh is buried. Adam is believed by some to rest at his own peak in Ceylon, but this is debated by Oriental scholars. There had been a difference of opinion between our first parents, and Eve spent the last years of her life and was buried at Jeddah, not far from the great temple in Mecca, which Moslem tradition ascribes to the hands of Adam himself. A common legend attributes to Eve the height of one

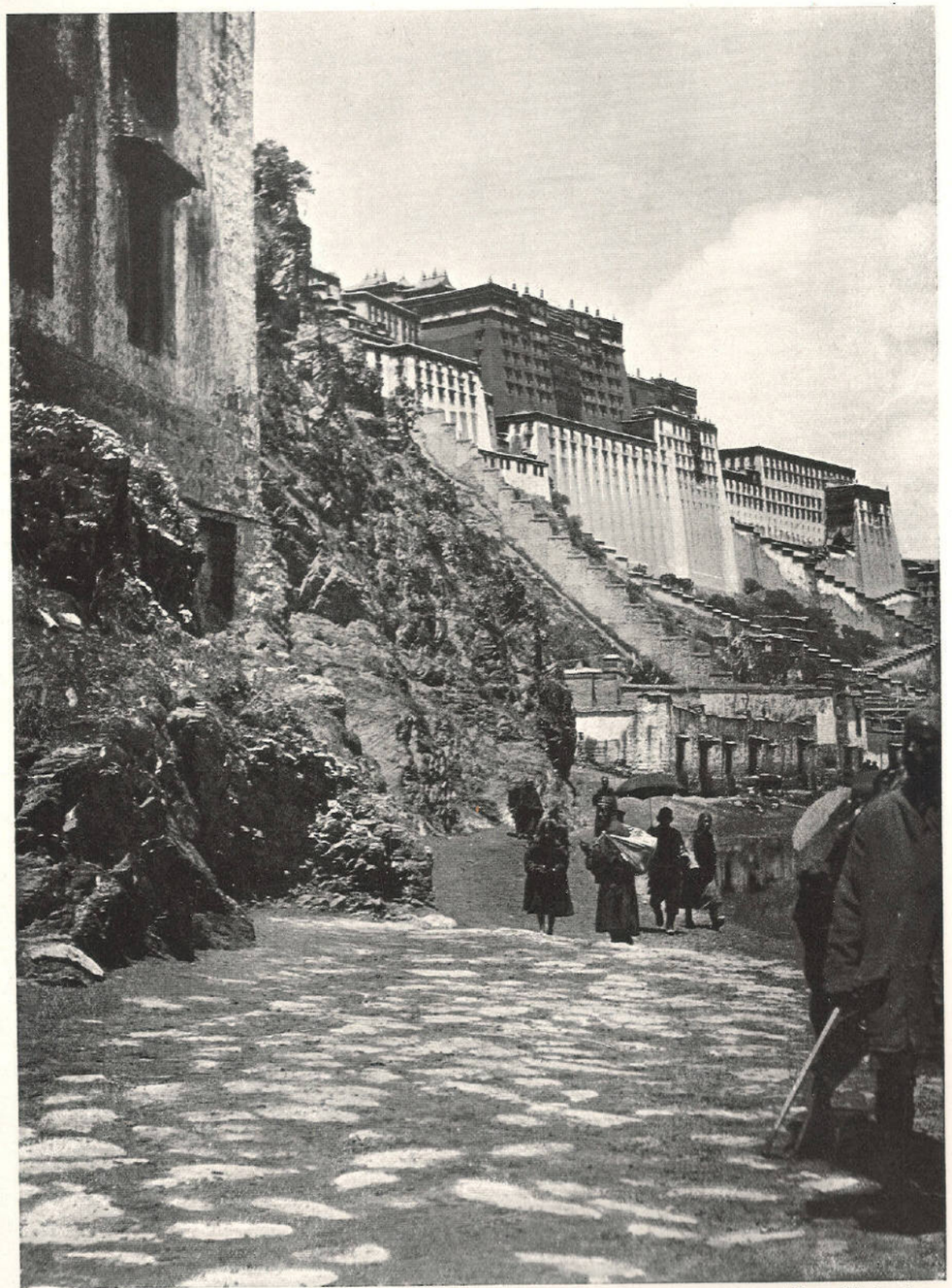


Photo by] [*Perceval Landon, Esq.*

THE POTALA, LHASA.

This view of the Potala was taken from inside the Pargo Kaling, or western gate. It shows the manner in which the huge edifice dominates the city below.

hundred and eighteen feet, but this does not correspond with the dimensions of her tomb, which is nearly four hundred feet long. She must have been of a somewhat strange shape, as her grave is only ten or eleven feet wide! At her head and feet are little whitened shrines, and in the middle of the grave is a small building containing a curious witness to the devotion of the Moslems. On the whitewashed walls of this little temple are hundreds of thousands of pencilled names, as far up as the hand can reach. The attendant contemptuously allowed the writer, although a Christian,

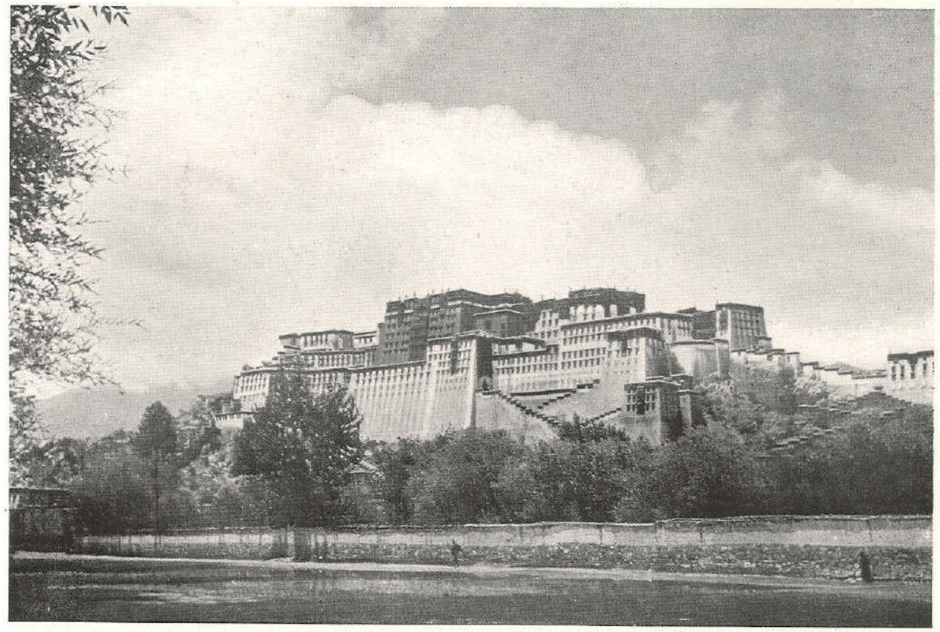


Photo by] *[Perceval Landon, Esq.*

THE POTALA, LHASA.

This picture presents a good view of the famous palace of the Grand Lama at Lhasa. It is about 900 feet in length and its gilded roofs are more than 400 feet from the plain.

to go inside—after taking his boots off, of course—on the score that all men are the children of Eve, whether true Moslems or outcast infidels. I fancy, however, that the prospect of bakshish was a stronger argument.

The Potala, Lhasa.—Lhasa has stood for centuries as the goal of all the greater travelling of the world. Once or twice white men, for the most part members of religious orders, have reached it in the course of far travel across the central plateau of Asia. One or two priests actually took up their abode there in the early part of the eighteenth century. But these were expelled, and since then the gates of Tibet have been closed with ever-increasing sternness against the white man. When, therefore, on August 3rd, 1904, Younghusband's expedition reached Lhasa, no living white man had set eyes upon the forbidden city. So far as the policy both of India and Tibet can prevent it, no other living white man would seem to have the least chance of repeating the experience.

The following description has been given of the view which greets the eye of the traveller as he climbs the precipitous little neck of land beside the western gate of Lhasa and looks down upon the panorama of palace, of park and town: "There was nothing—less, perhaps, in such maps and descriptions of Lhasa as we had than anywhere else—to promise us this city of

gigantic palace and golden roof, these wild stretches of woodland, these acres of close-cropped grazing land and marshy grass, ringed and delimited by high trees beside lazy streamlets of brown transparent water over which the branches almost met.

"In front of us, between the palace on our left and the town a mile away, there is this arcadian luxuriance interposing a mile-wide belt of green. Round the outlying fringes of the town itself and creeping up between the houses of the village at the foot of the Potala there are trees—trees sufficiently numerous in themselves to give Lhasa a reputation as a garden city. . . .

"Between and over the glades and woodlands the city of Lhasa itself peeps, an adobe stretch of narrow streets and flat-topped houses crowned here and there with a blaze of golden roofs or gilded cupolas; but there is no time to look at this; a man can have no eye for anything but the huge upstanding mass of the Potala palace to his left; it drags the eye of the mind like a loadstone, for, indeed, sheer bulk and magnificent audacity could do no more in architecture than they have done in this huge palace-temple of the Grand Lama. Simplicity has wrought a marvel in stone, nine hundred feet in length and towering seventy feet higher than the golden cross of St. Paul's Cathedral. The Potala would dominate London—Lhasa it simply eclipses. By European standards it is impossible to judge this building; there is nothing here to which comparison can be made. Perhaps in the austerity of its huge curtains of blank, unveiled, unornamented wall, and in the flat, unabashed slants of its tremendous south-eastern face there is a suggestion of the massive grandeur of Egyptian work; but the contrast of colour and surroundings, to which no small part of the magnificence of the sight is due, Egypt cannot boast.

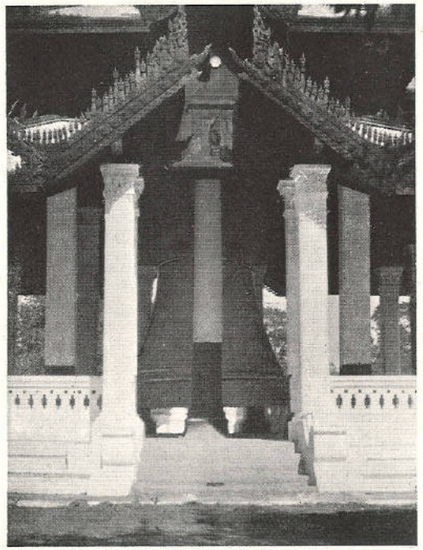


Photo by] *[Perceval Landon, Esq.*

THE GREAT BELL, MINGUN.

The present canopy which supports and protects the great bell is here well shown.

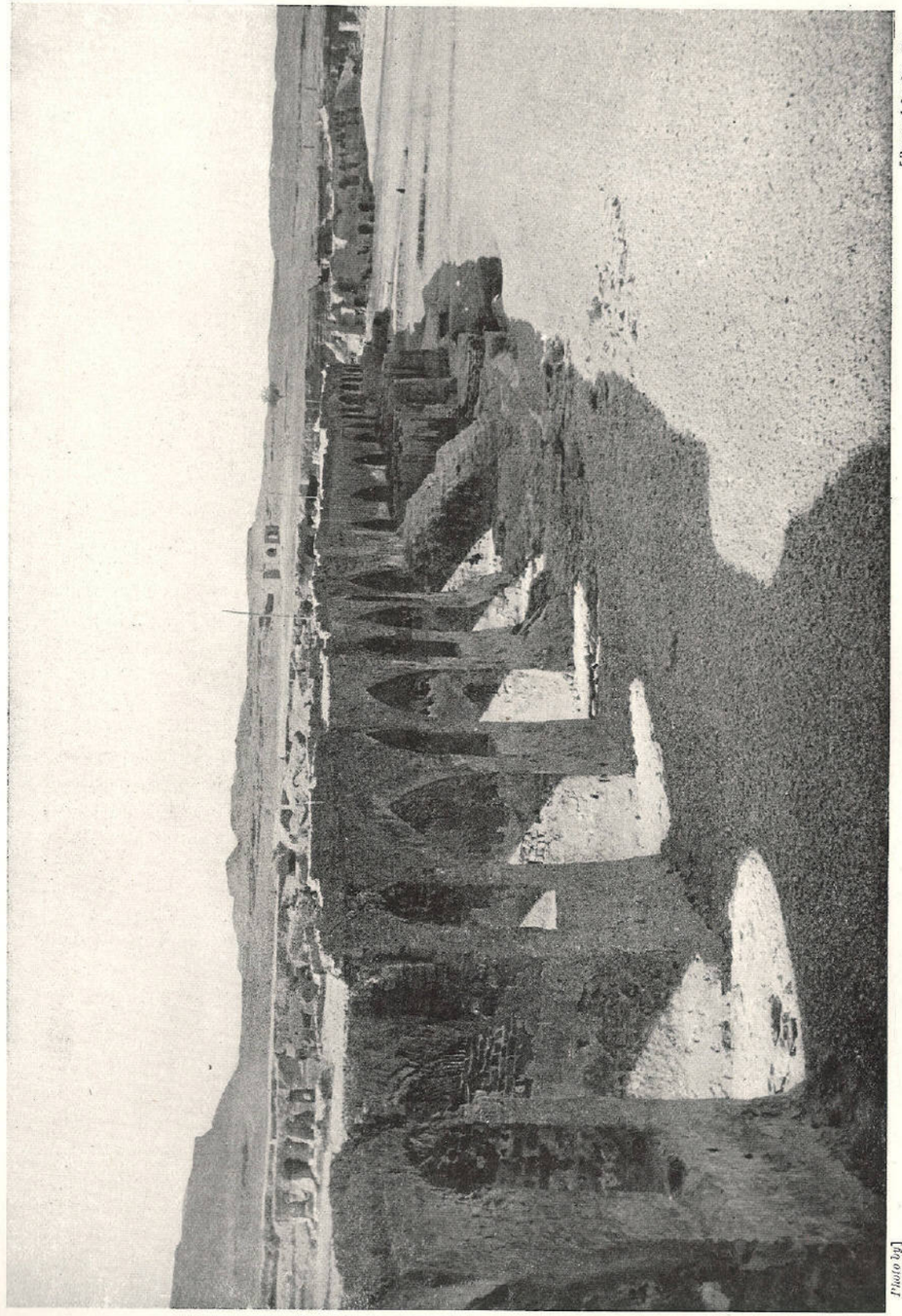


Photo by] *[Perceval Landon, Esq.*

THE GREAT BELL AT MINGUN.

Nine or ten miles north of Mandalay, on the opposite side of the river, is the largest hung bell in the world. Lord Curzon had it reset-up within an elaborately carved belfry.

"The vivid white stretches of the buttressing curtains of stone, each a wilderness of close-ranked windows and the home of the hundreds of crimson-clad dwarfs who sun themselves at the distant stair-heads, strike a clean and harmonious note in the sea of green which washes up to their base. Once a year the walls of the



[*Perceval Landon, Esq.*

VALERIAN'S BRIDGE, SHUSHTER.

This bridge was built by the Roman Emperor Valerian while a captive in the hands of Shapur. It is a proof of the engineering capacity of the most luckless of all Rome's emperors.

Photo by]

Potala are washed with white, and no one can gainsay the effect; but there is yet the full chord of colour to be sounded. The central building of the palace, the Phodang Marpo, the private home of the incarnate divinity himself, stands out four-square upon and between the wide supporting bulks of masonry a rich red-crimson, and, most perfect touch of all, over it against the sky the glittering golden roofs—a note of glory added with the infinite taste and the sparing hand of the old illuminator—recompose the colour scheme from end to end, a sequence of green in three shades, of white, of maroon, of gold and of pale blue. The brown yak-hair curtain, eighty feet in height and twenty-five across, hangs like a tress of hair down the very centre of the central sanctuary, hiding the central recess. Such is the Potala."



Photo by] [*Perceval Landon, Esq.*

ONE OF THE GATES OF THE TEMPLE OF JAGANNATH AT PURI.

This forbidden temple is the centre of the worship of Vishnu in India. The central sikra may be seen behind the forts to the left.

The Great Bell, Mingun.—Many claims are put forward by different places which profess to possess the largest bell in the world. Of course, the largest bell-shaped piece of metal in existence is that in the Kremlin, at Moscow, the "Tsar Kolokol." It weighs about one hundred and ninety-three tons. But this huge example of the founder's art has a piece broken out of one side of such a size that the bell at one time was used as a chapel, with the fracture as a doorway. No attempt has ever been made to hang or ring it. Next to this doubtful claimant is the famous bell of Mingun (Mingoon), about nine miles above Mandalay, on the western bank of the Irrawadi. This bell is about eighteen feet in diameter and thirty-one feet in height—this latter figure, of course, including the massive erection of metal which takes the place of the shackle. Its weight is about eighty tons. This bell remained for generations half buried in the ground and silent, but was examined by order of Lord Curzon, found to be intact, and has recently been hung in the handsome belfry of which a picture is given here. Of course, it cannot be rung in the ordinary way, and it does not possess a clapper. A heavy piece of wood is used as a ram when it is wished to sound the bell, though a mere rap of the knuckle is sufficient to bring out the strangely thrilling low note of this monster.

The Emperor Valerian's Bridge, Shushter.—There exists at Shushter, in western Persia, not only the remains of some of the most important engineering work constructed in ancient times, but a curious and pathetic memorial to the one Roman emperor who died in captivity among his foes. The Emperor Valerian found himself elevated to the purple in the year 253, at a time when the empire was sorely pressed by enemies on all hands. Leaving his son Gallienus



Photo by] [*Perceval Landon, Esq.*

ANOTHER GATE OF THE TEMPLE OF JAGANNATH.

This is the main entrance. In front of it is an exquisitely carved pillar brought from the Black Temple of Kanarak.

to deal with the western foes, Valerian hurried to the east to re-establish the Roman dominion, which was being threatened by the inroads of the Sassanian monarchs of Persia. He met with some success at first, but as the result of long operations in Mesopotamia, the course of which has never been really known, Valerian was captured in the year 260. Shapur I., who achieved this crowning triumph over the might of Rome, made, it is said, a curious use of his captive. The story goes that he imprisoned the unfortunate emperor at Shushter, and there employed him as engineer-in-chief for the great irrigation works, of which traces are to be seen for hundreds of miles along the Karun River, and in the construction of the bridge, of which a photograph is given here. This bridge is known to this day as the Emperor's Bridge. The Persian poet Firdusi is the authority for the truth of this legend, though, as Lord Curzon remarks, it is not to be expected that a captive sovereign would, as a rule, be of much service if converted into a civil engineer. This bridge is now broken, and the fast current has scoured a channel of such depth in the artificially-paved bed of the river that it is not likely that any repairs will now be undertaken.

The Temple of Jagannath, Puri.—Of all the temples of the East, Jagannath is the best known by repute to Europeans. The name of none of the holiest shrines—Benares, Rameswaran, Tanjore, Madura, Buddhgaya, or the noble temples of Farther Asia—is so familiar to the European ear as that of the Temple of Jagannath. For this there is a curious reason. The interior of the temple is unknown to the white man. No European has ever set foot within its sacred precincts. The Viceroy of India himself has been refused admittance, and a Grand Lama of Tibet has found it impossible to penetrate inside the temple, which has been built in honour of the very deity of whom he is regarded by many Hindu theologians as a living re-incarnation. The tinkle of bells,



THE RUINS OF MÁRTÁND, KASHMIR.

On an elevated plateau, overlooking the valley, some five miles east of Islamabad, there are standing the remains of the temple of Mártánd, built by King Lalitaditya in about the middle of the 8th Century, A.D. Shaken down apparently by an earthquake the ruins lie scattered, an impressive and magnificent sight.

the long-drawn scream of a brass trumpet, the continual sodden thumping of a drum, the hoarse unison of voices—these are all that is ever heard outside of the services that night and day go on within its forbidding walls. Much, indeed, we know about the legendary origin of the temple. We know that there was once upon a time a King of Orissa called Indra-mena, who, after much painful digging, re-discovered the Temple of Vishnu, buried nine miles deep in the sand of the shore at Puri. Having found it, he covered it up again. This he must have done with regret, as the temple was made of solid gold. By command of Vishnu, however, he built the present temple, and in order that it should not tempt the cupidity of mankind, it was allowed to be built of stone instead of gold. When it was finished Vishnu himself, in the form of a log, was washed ashore, and Visvakarma came to carve the log into an image of the god. This he consented to do, but with the reticence of an artist, he stipulated that no one should see it before it was finished. But Indra-mena was as inquisitive as Fatima, and peeped in through a chink. Visvakarma thereupon repacked his tool-bag and went away in a huff, and that is the reason why the image was never finished. Certainly, it remains an armless, legless, unshaped block to this day.

But this is not the reason why the world knows the name of Jagannath so well. Once a year this extraordinary rudely-hacked log is carried in procession to the Garden House upon the famous Car of Jagannath. This is thirty-five feet square and runs upon sixteen wheels. Over four thousand

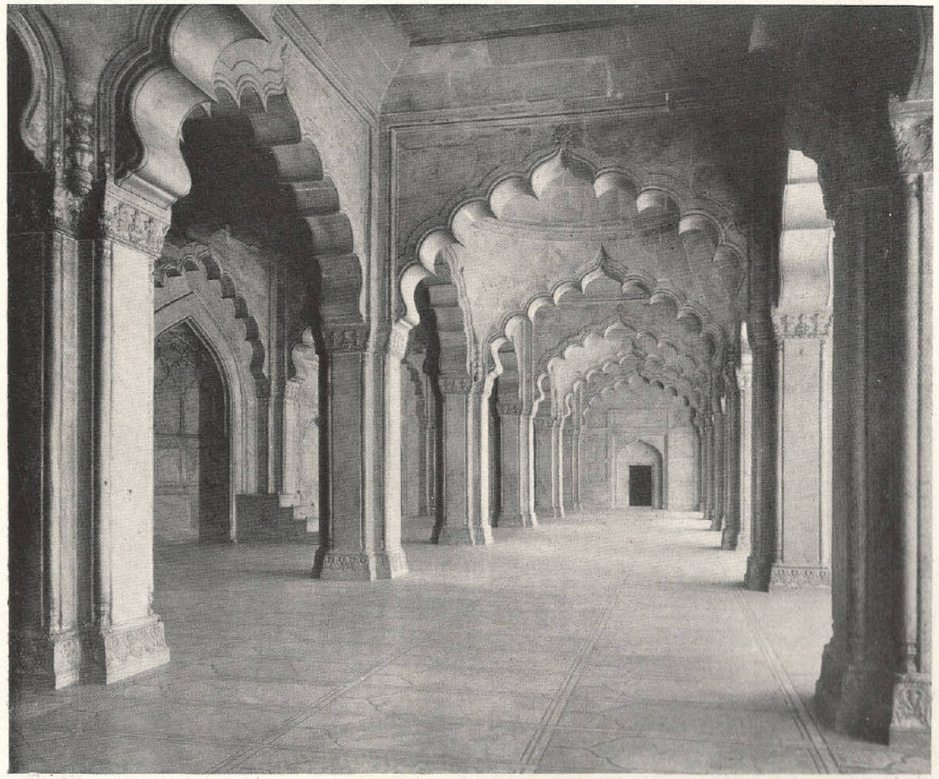


Photo by] *[Johnston & Hoffmann.*

THE PEARL MOSQUE AT AGRA.

Entirely constructed of glittering white marble, the dignity and simplicity of this building and the outer court render it one of the most beautiful buildings in India.

men pull at the ropes, and similar cars follow after with equally crude representations of the brother and sister of Jagannath. The road along which the car passes is a wide thoroughfare, which on this annual ceremony is completely full with pilgrims from all parts of India. This car seems to have taken the imagination of Europe by storm. It has done so because it is commonly believed that men in hundreds immolated themselves under the huge wheels of the slowly moving car. Accidents will always happen on such occasions, and there will always be a certain number of fanatics whose brain is turned by the popular enthusiasm at such times. But it need hardly be said that every possible precaution is now taken to prevent any such well-meant suicide. The car goes backwards and forwards nowadays to the somewhat daringly ornamented Garden House without the forfeit

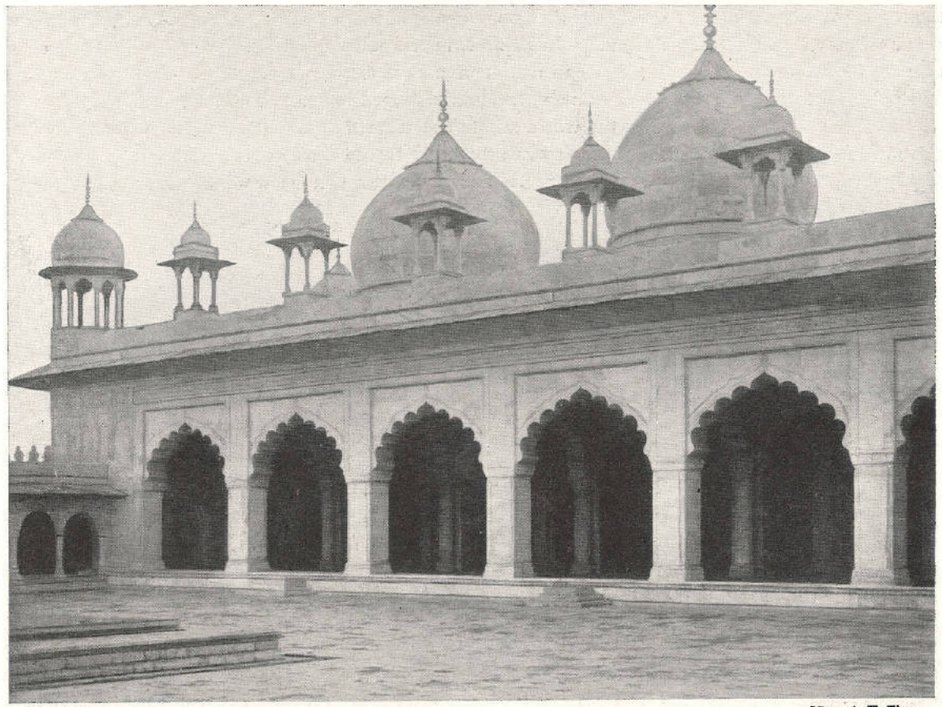


Photo by] *[Rev. A. H. Finn.*

The facade of the Pearl Mosque at Agra, viewed from the courtyard.

of a life, and the popular enthusiasm connected with these festivals has not suffered in the least on that account.

The Pearl Mosque, Agra.—Once inside the red portals of the palace fort of Agra, the visitor mounts slowly towards the royal apartments. Just before reaching the open space to which the Hall of Public Audience gives its name, right in the heart of the fort, stands the Moti Musjid, or Pearl Mosque, which was built by the great Mogul Emperor Shah Jehan in the middle of the seventeenth century. It is not of vast size; indeed, so far as dimensions are concerned, it cannot compare for a moment with the vast Jama Musjid at Delhi. Yet in plan the two buildings are not unlike, except for the absence of the towering minarets which form such a landmark for miles round the capital of Hindustan. The external measurements of the Agra mosque are two hundred and thirty-four feet by one hundred and eighty-seven feet, and underneath it the nature of the



Photo by] *[Johnston & Hoffmann.*

BUDDHGAYA.

This temple, which is more in the style of southern than of northern Indian architecture, was erected on the site of an earlier temple put up by the Emperor Asoka on the spot where Buddha "received enlightenment" under the Bo-tree. Immediately under the tower to the right of the picture may be seen the descendant of the original tree.

ground compelled the construction of a lofty stylobate, or plinth. It is not until the visitor has mounted the steps and entered the great gateway on the east that the full beauty of the mosque bursts upon his eye. But having once seen the Pearl Mosque at Agra, he is little likely to be over-impressed by any other courtyard in Asia. The place deserves its name. No one can ever forget the blaze of pearly white light that almost blinds him as he moves from under the dark shadows of the red gateway into this marble casket of swimming and dazzling white light. Mr. Fergusson, whose knowledge of Eastern architecture has never been surpassed, rightly describes it as one of the purest and most elegant buildings of its class to be found anywhere.

As soon as the eye becomes used to the dazzling reflections of the Oriental sun from the snowy pavement that surrounds the sacred tank, he sees that the beauty of the building does not in any way depend, as so often happens in India, upon the ornamentation of its surfaces. There is, indeed, only one attempt at decoration, and that is a graceful black marble inscription inlaid into the frieze of the mosque. For the rest, the exquisite severity of this silver temple is one of its greatest attractions. Even in winter, however, it is almost impossible to look steadily upon the flashing argent of its marble walls and flooring except through smoked glasses, and the visitor will turn with relief to the pillared shade of the mosque itself at the western end of the courtyard. Here the shadow half conceals and half reveals a triple arcade of pillars, within which a pleasant blue darkness deepens until the farther wall of the mosque is but faintly to be distinguished.

Fergusson observes that woodcuts cannot do the picture justice, and the same is unfortunately

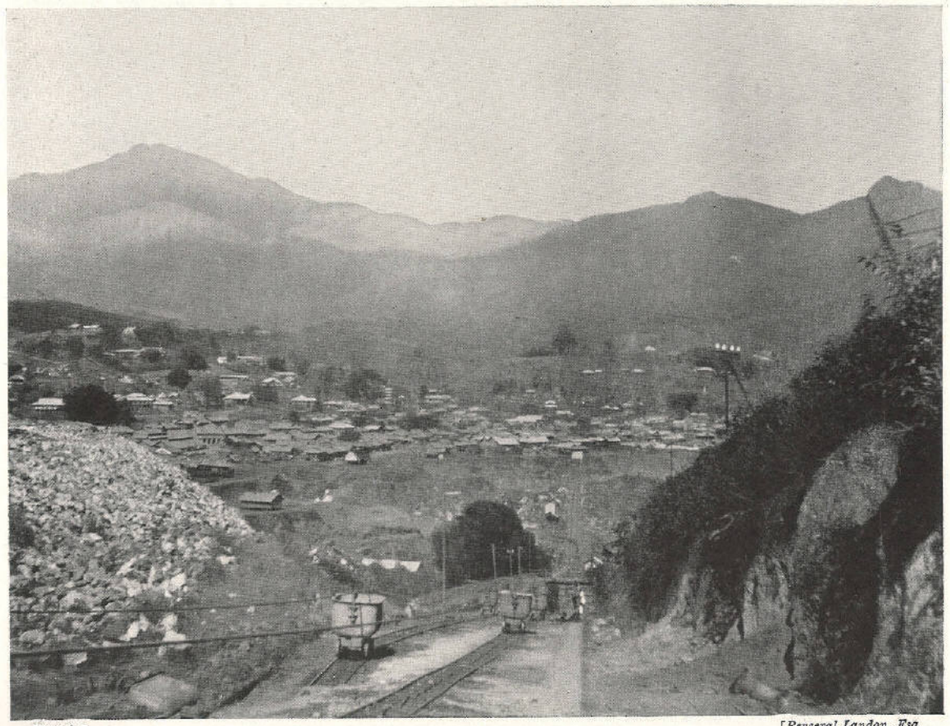


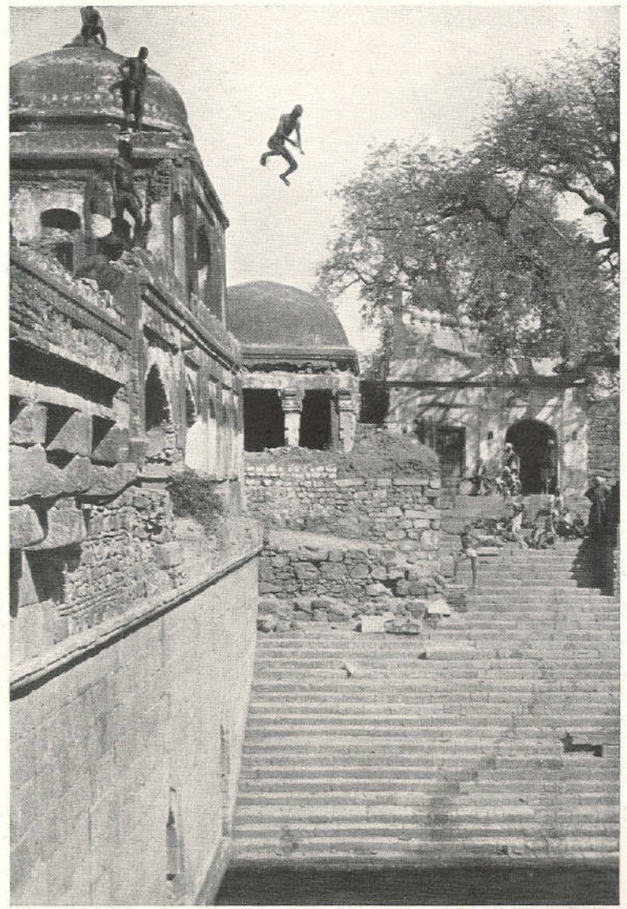
Photo by] *[Perceval Landon, Esq.*

THE RUBY MINES, BURMA.

All the best rubies of the world have come from a single valley in Upper Burma, not far from the Chinese frontier. The district is known as Mogok, and a general view of the ruby diggings is here given.

true of even the best of photographs. Such extremes of light and shade defeat the most skilfully constructed lens; but an idea, at any rate, may be obtained of this unequalled gem of Mogul architecture. Not the least remarkable part about the Moti Musjid is the strange contrast which it offers, both to the red strength and symmetry of the larger part of Akbar's fort, and to the jewel-encrusted Jasmine Tower of the royal apartments from which Shah Jehan, as his own son's prisoner, watched with dying eyes the gossamer splendours of the Taj Mahal where his darling awaited him and where he was himself to lie.

Buddhgaya.—The temple at Buddhgaya marks what is the holiest place on earth to the largest number of human beings. Here it was that Prince Gautama, after learning much, and suffering more, received enlightenment. Here he became the Buddha, after a last night of struggle and temptation with the powers of evil. It was here, under the spreading branches of the Sacred Fig (*Ficus Religiosa*), parts of the root of which are to be seen in the Museum in Calcutta to this day, that the Master won to truth; and a descendant of the original tree still springs from under the western wall of the great temple.



Stereograph by] *[H. C. White Co., London.*

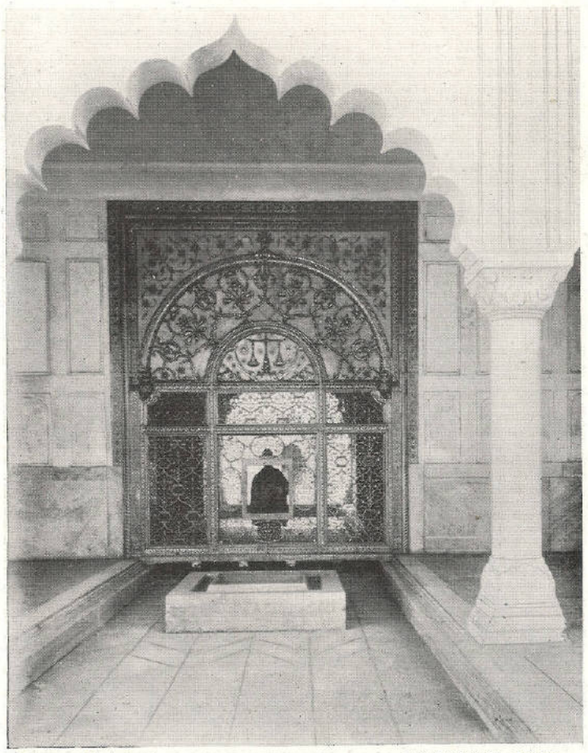
THE SACRED TANK, NEAR DELHI.

Not far from the famous tomb of Humayun, south of Delhi, is a Sacred Pool into which men and boys will, for a small consideration, leap from a great height, to the amusement of visitors.

It may be clearly seen in the photograph. Inside the temple there is a large cell, in which a statue of Buddha is seated in the position known as "calling the earth to witness." The temple has fallen into the hands of the Hindus, who, with some presence of mind, have identified Gautama with their own god Vishnu, and have painted the tridentine "tilak" of the deity upon the serene brow of the Master. Buddhism is now practically extinct in India proper, but a powerful movement has lately been inaugurated among Buddhist states, such as Siam, Japan, China, Sikkim and Tibet, to re-obtain for Buddhists the rights of free worship at Buddhgaya, the heart and centre of their faith. The Indian Government looks favourably upon the proposal, but is inclined to hesitate before taking active steps which might stir up religious strife.

The Ruby Mines, Burma.—From the earliest days rubies have been the jewel of jewels. Not even the filmy nacre of the pearl, the glittering purity of the diamond, or the cold perfection of the

sapphire, has ever rivalled the crimson fire of the imperial ruby. Yet it is a curious fact that all the great rubies—from that mythical gem as large "as a man's palm" which Mandeville and "Q" have alike exploited, down to the single stone that MM. Boucheron exhibited at the French Exhibition two and a half years ago, and were willing to dispose of for fourteen thousand pounds—all have come from one small valley in a remote district of Burma. Mogok is the name of the settlement, which may be reached by a traveller from Thabeytkyin, a little village a day's journey above Mandalay, on the banks of the Irawadi. The road lies eastwards for sixty miles through almost virgin jungle, rising at last into the scantier vegetation of the outpost foot-hills that culminate eventually in the mountainous frontier ranges between Burma and China.



Stereograph by] *[H. C. White Co., London.*

The perforated alabaster screen separating the Diwan-i-khas from the Emperor's private apartments.

The little town of Mogok lies between the ruby workings and the inevitable polo ground which is always to be found wherever ten Englishmen get together in the Far East. The ruby diggings are slowly eating their way through the town. Already the houses along half the High Street have been consumed, and in a year or two the polo ground itself will begin to fall into the jaws of the ever-advancing mines. All day and all night the work goes on. The "byon," or ruby-bearing earth, stretches almost everywhere along the Mogok Valley, and wherever this rich old-gold-coloured clay is found, rubies are found also. Yet a stranger might hunt among the cuttings for weeks and see never a glint of crimson. This is a standing jest at the office, where the offer is often made to the visitor that he may keep any ruby he sees, an offer of which no one has ever yet been able to take advantage. Yet there the rubies are and after the iron trolleys have been hauled up to the washing sheds, and their sticky burden rotated and filtered and washed and stirred and cleaned and distributed, there is no mistaking the rich glow of the rubies that lie here and there among the heaps of dark shingle upon the slate tables of the sorting shed.

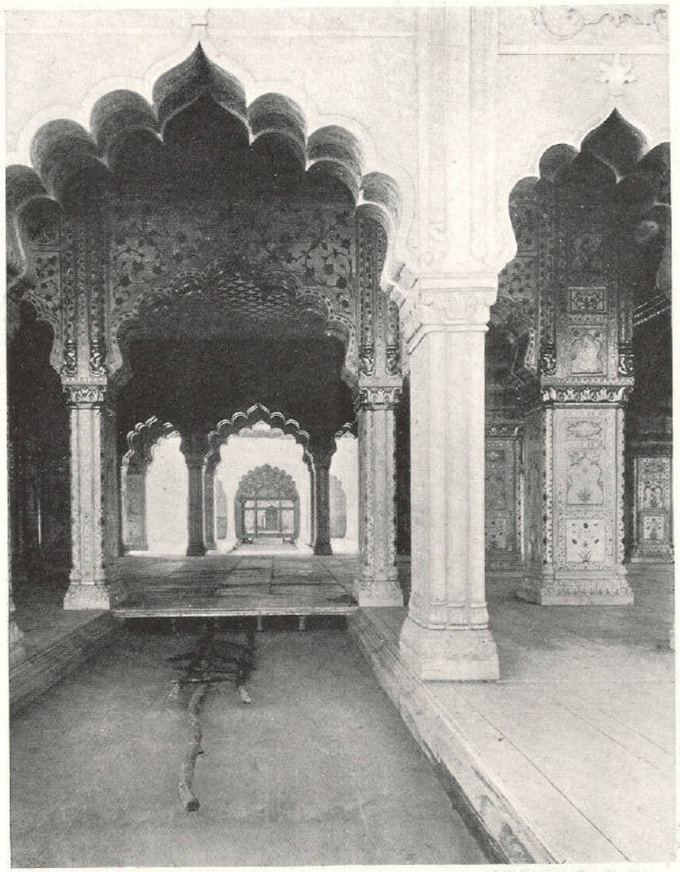
Diving into the Tank of Nizam-ud-Din.—This is one of those curious places of popular resort, so frequent in the East, around which a crop of legends has centred. The Tank of Nizam-ud-Din lies at a little distance across the road from the famous tomb of Humayun, and has been visited by many travellers. Here at one time dwelt the Saint Dargahs, who lived during the reign of the Emperor Tughlak in the thirteenth century. The story of the relations between the two is by no means as creditable as that between the Emperor Akbar and the Saint Shaikh Salim at Fatehpur Sikri. At Delhi, king and priest came to open war. Tughlak required the assistance of the workmen



Photo by] *[H. C. White Co., London.*

THE DIWAN-I-KHAS, DELHI.

This Hall of Audience, which was built by Shah Jehan, is certainly the most beautiful room on earth. It is constructed of white translucent alabaster, inlaid with precious and semi-precious stones. A famous Persian inscription upon the walls claims that if there be a heaven anywhere on earth it is there.



Stereograph by] [*H. C. White Co., London.*

This is a view through the Diwan-i-khas in the palace at Delhi. The famous inscription, though of course not legible here, is written along the dark cornice above the middle arches.

who happened to be excavating this tank for his new fortress-town at Tughlakabad. Saint Dargahs bowed before the imperial will, but asked that he might have the services of his men at least during the night. The emperor countered by denying the holy man the use of oil, which was apparently necessary for the building. At this point the celestial deities intervened. Every night the water of the tank was miraculously turned into oil, and the saint's purpose was served. Tughlak thereupon promulgated a useless curse upon the waters. Backed by his divine allies, Dargahs then cursed Tughlakabad. To a modern visitor it would seem that the saint's curse was more efficacious than the emperor's. For Tughlakabad is to-day only a haunt for owls and bats, while the saint's tank still supplies water for man and beast.

One curious custom has been initiated. From the eastern side of the tank boys and men, who are promised a recompense by the tourist, will make a long, but not particularly dangerous, dive into the waters of the tank.

The Diwan-i-khas, Delhi Palace.—When the cunning hand of the jeweller—whether he were the renegade Austin de Bordeaux or not—inlaid the famous Persian text upon the cornice of the Diwan-i-khas in the palace at Delhi, the artist boasted, indeed; but if ever a man was justified in his boast, it was he. The lines run: "If Heaven there be on the face of earth, it is here, it is here, it is here." And, indeed, there is nothing like it under the sky.

This Court of Private Audience is an open hall, supported on a double row of many-cusped arches daintily gilded here and there, and of heavy square columns of marble, panelled and inlaid, here white, here ivory, there old gold in tint. One could swear that this forest of marble is translucent. The gilding upon it here and there stands forward and rejects the light that sinks softly a finger's breadth into the onyx-like stone upon which it is laid. And the inlaid flowers, whereof every leaf is jade and malachite, every petal is agate and lapis lazuli, so stand out upon

this pearly bed that you might vow you could put your fingers behind the stalk and snap it. You will not at first understand the beauty and splendid restraint of the Diwan-i-khas. But if you try four afternoons to sketch it, you may begin to realize that a dishonest and fugitive jeweller from France may yet prove to have been the first decorator of all known periods—decorator, not artist, nor perhaps architect; the point is in dispute. Quiet, restrained, his riot of colour spreads over these jewelled walls, unfailing in taste and perfect even in the veining of a poppy-leaf or the stamen of one of those Crown Imperial lilies or blue-purple irises which his craftsmen can never have looked upon, though at the bidding of this immoral genius they faithfully translated into stone the humbled pride of the one and the cool transparency of the other. Outside there is hot sunshine, the blaze of a scarlet hibiscus across the lawn, and the soft and stealing scent of jasmine and orange-blossom.

Upon a marble base, which still exists in the Hall, once stood the famous Peacock Throne. This throne, which, like all Oriental thrones, was more like a bed than a seat, was made of gold. But the gold was scarcely visible for the rubies, diamonds and sapphires upon it, set closely together from end to end of the long, low seat. A peacock, "in his pride," stood behind at either end, and the displayed tails formed the greater part of the back. In the centre of the back of the throne was a life-sized parrot, cut out of a single emerald. These statements about what was unquestionably the most magnificent jewel ever made on earth would be incredible had not a French professional jeweller, Tavernier by name, seen it before it was stolen by Nadir Shah in the eighteenth century. His estimate, as an expert, of the value of the gorgeous thing is startling. He wrote that in his opinion it was worth about £12,037,500 sterling—expressed in the currency of to-day. We have the casket of this jewel in the Diwan-i-khas, and it is worthy of that royal seat, even if the latter's beauty was equal to its cost.

Miyajima.—This exquisite village—for it is hardly more—upon the Inland Sea of Japan, is well worthy of its dignity as one of the Three Beautiful Places of the Japanese Empire. It can easily be reached by rail, and the beauty of the locality has unfortunately attracted the notice of the hotel-keeper and the commercial exploiter of the world's natural beauties. But the Japanese Government have unintentionally helped to preserve the spot, as it has a certain strategic importance, and the Japanese abruptly discourage the over-inquisitiveness of visitors. It is in shape a hill, about two thousand feet in height, which descends all



Stereograph by] [*H. C. White Co., London.*

ON THE SHORES OF MIYAJIMA ON THE INLAND SEA.

This is one of the famous beauty spots to which the Japanese point with pride. The famous Torii is seen a hundred yards away in the sea.

round to the sea in deep-cut chines, if the homely English word may be used of these verdured and magnificent ravines. All along the coast a series of beautiful pictures is presented, each more charming than the last. Here an aged temple hides its lacquered columns beneath a green cloud of darkening foliage; there, the dainty little shops of the artists and the ruder, but still beautiful, huts of the fishermen stretch entrancingly just across the road from the white shell-strewn beach. Out in this almost tideless sea stands a giant torii, and from up the hill comes now and then the low, reverberating tone of a deep bell, too soft to terrify the little Japanese deer that pick their way daintily along the roads, certain of their welcome from even the rudest of Western travellers. In short, there is perhaps no more beautiful



Photo by] [*Frith & Co. Ltd., Reigate.*

MÂRTÂND.

Mârtând is the finest and most typical of the existing examples of Kashmir's architecture. Its peculiar interest is that it reproduces in plan the great temple of the Jews more than any other known building. It is, however, impossible to trace any connection between the two temples.

walk on earth than that which follows the ascending snake-like spiral by which the track reaches the summit of this fairy island.

Mârtând.—Five miles east of Islamabad, the old capital of the Kashmir Valley, the ruins of Mârtând still present to the archæologist a riddle that seems as insoluble as when they were first discovered. In itself it is but a small building sixty feet in length, with a façade of the same size. Its ruins stand in a courtyard two hundred and twenty feet by one hundred and forty-two feet, which, in the opinion of General Cunningham, was at one time filled with water brought by a conduit from the river Lambadari.

There is a general consensus of opinion that the courtyard was built in the second quarter of the eighth century, the temple itself being perhaps of the same date. It is the greatest ruin in Kashmir, and the prevalence of architectural forms and ornaments of a European nature is not the least remarkable fact of this strange and isolated memorial of the past. Special interest attaches to the

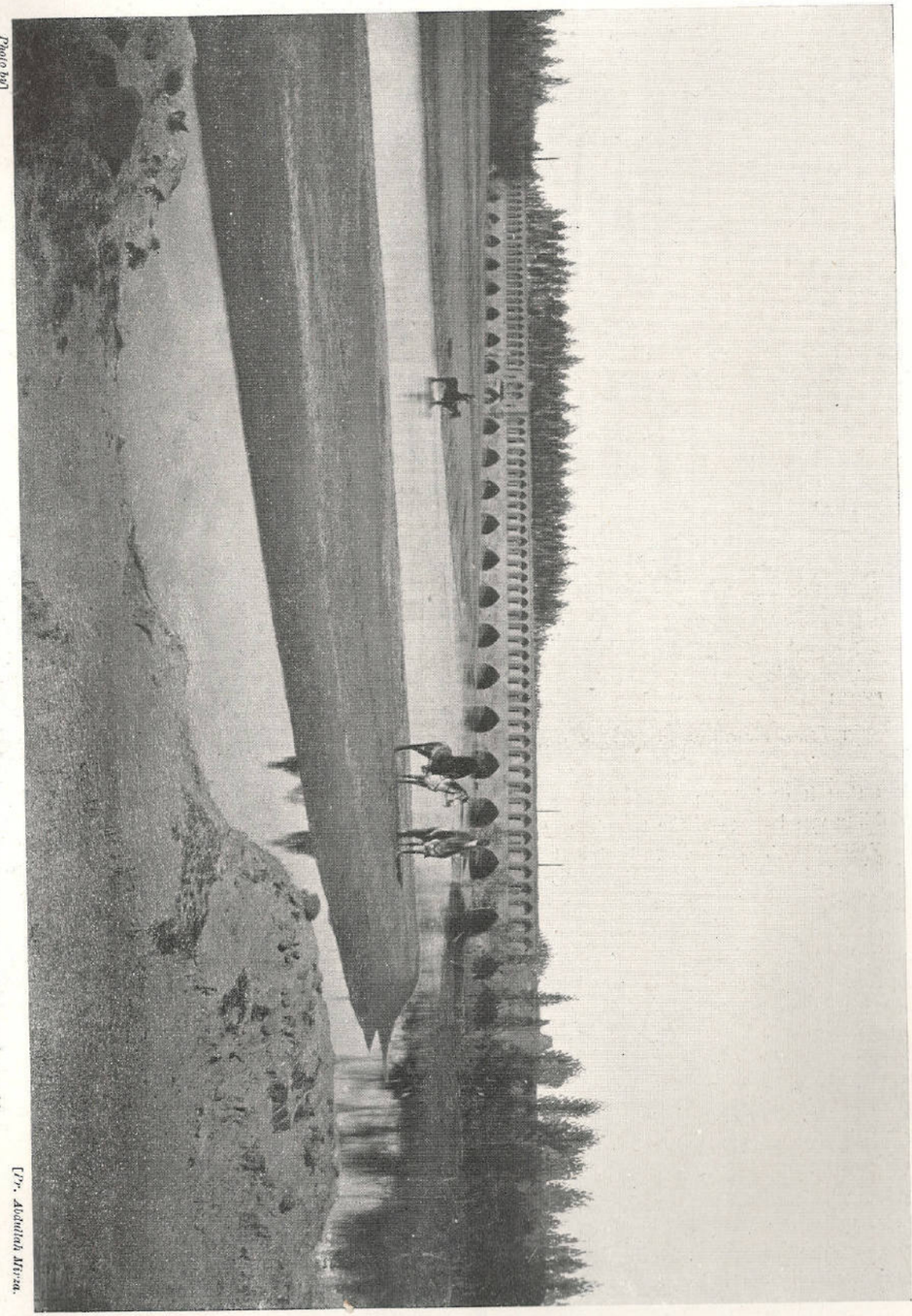


Photo by] [*Dr. Abdullah Mirza.*

The Great Bridge across the Zendeh Rud at Isfahan, which is regarded by some as the most beautiful bridge in the world.

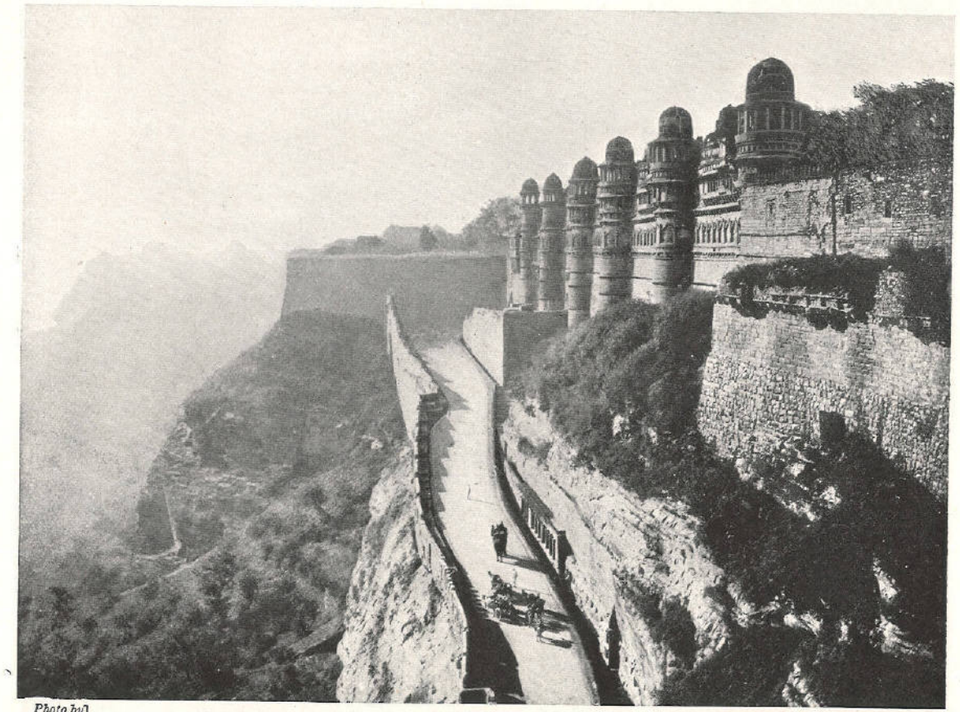


Photo by] [N. P. Edwards.

GWALIOR.

The fortress of Gwalior rises abruptly from the level plain some distance to the south of Agra. Though now abandoned, it possesses many gates and exquisitely tiled palaces.

fact that it probably presents a more exact reproduction—in plan, for in dimensions the Jewish building was larger—of the temple at Jerusalem. There is food for thought in this for those, and they are many, who believe that in the fierce, hook-nosed, patriarchally bearded Pathans of the North-West frontier the true descendants of the Lost Tribes are to be found.

The Great Bridge of Isfahan.—Isfahan, as all the world knows, was the ancient capital of Persia, and there still remain many memorials of this pre-eminence. Perhaps the famous bridge, built by Ali Verdi Khan, is more impressive than even the Chehel Situn or the magnificent Royal Square. During the larger part of the year only a few arches are required to carry off the water of the Zendeh Rud, but in flood-time the whole of the long row is required if Isfahan is not to be submerged. It leads from Isfahan to Julfa, a suburb founded by Shah Abbas in 1604. The name of this town is derived from that which is notorious as a city on the Caucasian frontier between Russia and Persia. The splendid bridge built by the Shah's Field Marshal is a noble *trait d'union* between the two towns. It is three hundred and eighty-eight yards in length and thirty feet in width, and it is built in three stories. The photograph gives a good idea of its general effect.

Gwalior, the capital, residence and headquarters of Scindia, the strongest and most capable of Indian chiefs, is divided by the Chambal from the better-known districts of Agra. Like Chitor, it is a deserted rock fortress in the midst of a plain, with precipitous sides and a well-guarded approach on the eastern flank. In old days it must have been almost impregnable, and some old guns are still mounted in the casemates. Beside the main entrance at the top of the rock is the

Painted Palace, the most interesting building still standing on the rock. It is simply designed, and decorated with exquisite tile-work of blue and green. Inside there are finely chiselled capital-brackets and latticed windows in the women's court, now long given over to the owls and bats. There are a couple of interesting temples at the southern end of the fortress, and the large nude Jain figures still stand that once excited the Emperor Baber's modest anger.

The Black Temple, Kanarak.—Readers of the "Arabian Nights" will remember that the intrepid Sindbad, in the course of his voyaging, had the misfortune on one occasion to be shipwrecked from a very unusual cause. As the ship in which he was travelling approached a certain part of the coast of India, the iron bolts with which the beams of the vessel were joined together were so powerfully attracted by a magnet in a building on the shore that they left their positions and the unhappy ship fell to pieces on the sea. Now the Black Temple was the cause of this disaster, and to this day you may see lying upon the ground the iron girders, twenty-three feet long, which originated the story.

Years and years ago this temple—which represents the highest achievement of purely Hindu sculpture—was consecrated in honour of the Sun, which here cured a son of Krishna of the disease of leprosy. The main building is modelled in the shape of one of those processional "raths," or ceremonial vehicles, of which the Car of Jagannath is by far the best-known example. Not the least remarkable feature of the building is presented by the wheels which represent the multitudinous castors of the great truck.

The most casual observation will reveal the outstanding characteristic of the Black Temple. Every inch of surface has been carved with exquisite and loving care. There is not a pillar or a plinth or a panel that has not its own special decoration.

The great altar is the most conspicuous object in the closed chamber, or Holy of Holies, of the Black Temple. The chamber in which it is found was full of débris, and has only recently been cleared.

The Gol Gumbaz, Bijapur.—The tomb of Mahmoud at Bijapur is one of the mysteries of the world. Internally, it is merely a square room, one hundred and thirty-five feet in each direction, but it has

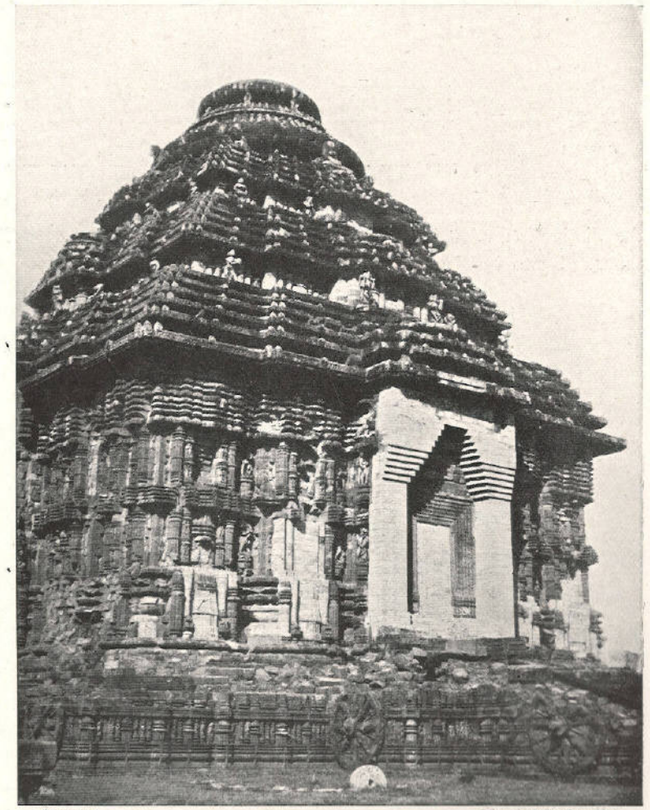


Photo by] [Perceval Landon, Esq.

THE BLACK TEMPLE, KANARAK.

This, though now deserted, is probably the most exquisite example of purely Hindu art. The walls, roofs and platforms are minutely carved, and the temple in general very greatly resembles the forbidden temple of Jagannath at Puri.

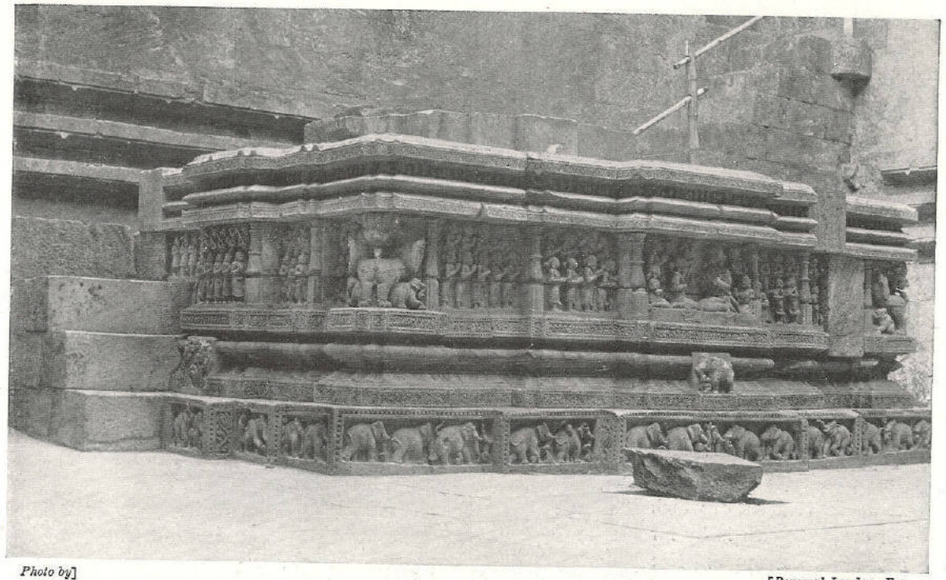


Photo by] [*Perceval Landon, Esq.*

THE GREAT CENTRAL ALTAR WITHIN THE BLACK TEMPLE.

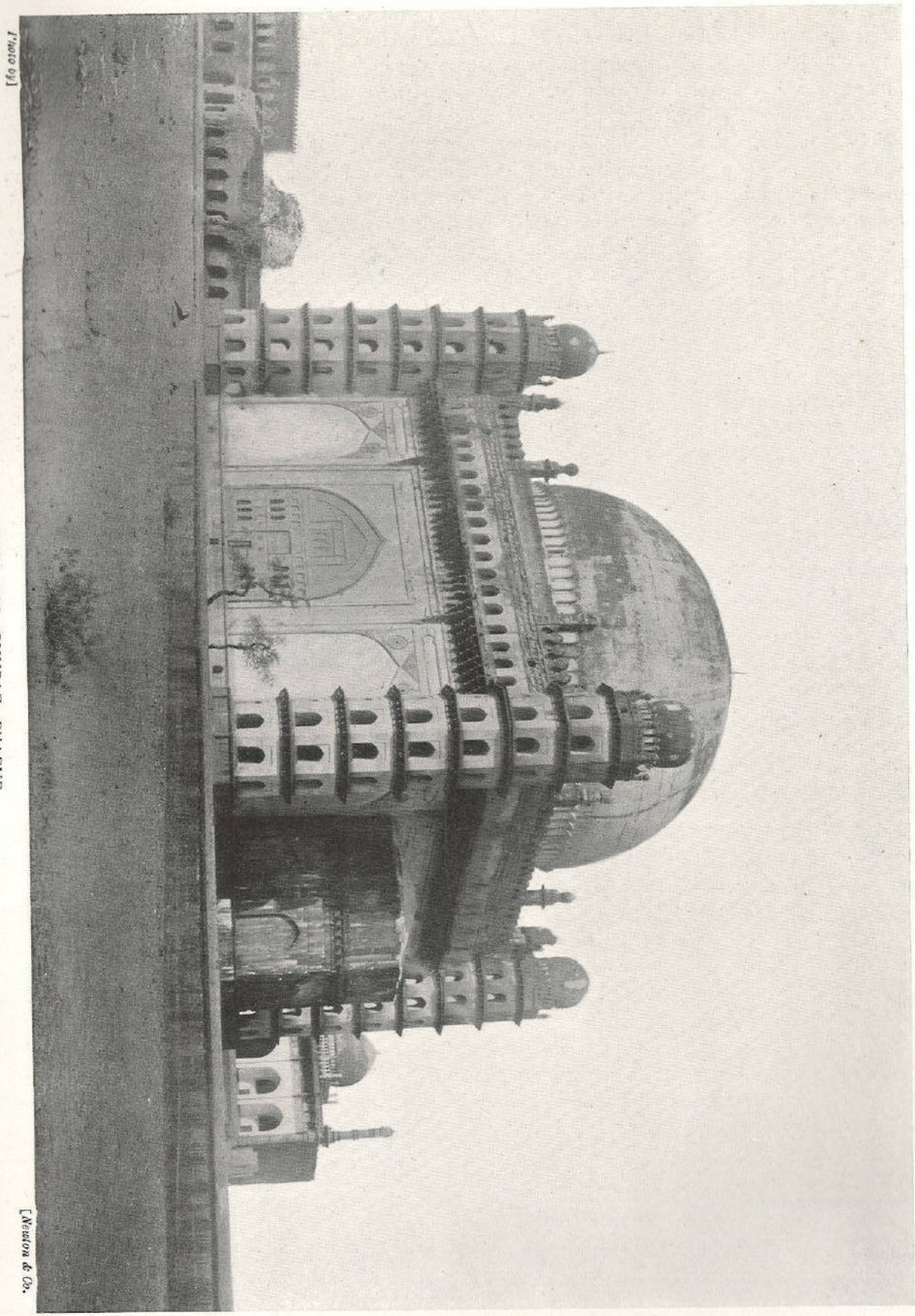
Especial attention should be paid to the elephant frieze.

the distinction of being the largest domed space in the world. Compared with its eighteen thousand two hundred and twenty-five square feet, the Pantheon at Rome can only boast fifteen thousand eight hundred and thirty-three square feet. Fergusson's description of this architectural marvel must be quoted: "At the height of fifty-seven feet from the floor-line the hall begins to contract, by a series of pendentives as ingenious as they are beautiful, to a circular opening ninety-seven feet in diameter. On the platform of these pendentives the dome is erected, one hundred and twenty-four feet in diameter, thus leaving a gallery more than twelve feet wide all round the interior. Internally, the dome is one hundred and seventy-five feet high; externally, one hundred and ninety-eight feet, its general thickness being about ten feet.

"The most ingenious and novel part of the construction of this dome is the mode in which its lateral or outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut off the angles, but that their arches intersect one another, and form a very considerable mass of masonry perfectly stable in itself, and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome. If the whole edifice thus balanced has any tendency to move, it is to fall inwards, which from its circular form is impossible; while the action of the weight of the pendentives, being in the opposite direction to that of the dome, acts like a tie, and keeps the whole in equilibrium, without interfering at all with the outline of the dome."

The Tomb of Timur, Samarkand.—Samarkand, the most famous of Tartar capitals, is composed, on the one hand, of gardens and orchards, and on the other, of the ruined remains of Timur—and of all these remains the tomb of the great butcher is pre-eminent. You may travel through and through Samarkand in all directions; you may buy silks from the placid and contemptuous merchants in the bazaar; you may sketch among the trees that have grown up round the Mosque of the Lady Princess; but at the end of every day it is to the Emir's tomb that you will inevitably return. Here, in the quiet shadow, you will recall to yourself the most brilliant

Photo by]



THE GOL GUMBAZ, BIJAPUR.

A full account is given in these pages of this problem of architectural construction. This Tomb of Mahmoud is the largest domed space in the world.

Valentine & Co.

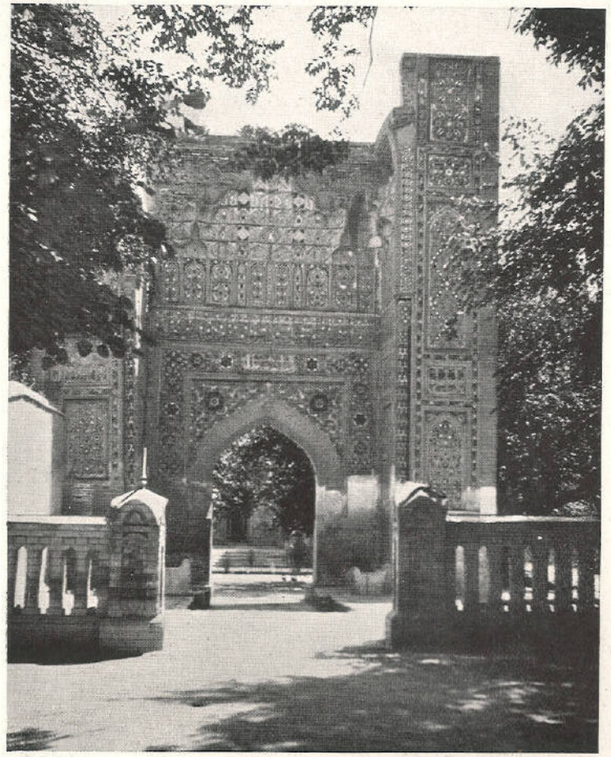


Photo by] *[Perceval Landon, Esq.*

THE TOMB OF TIMUR, SAMARKAND.

Two men stand out in the world's history as savage and unrelenting butchers of men. Of one of them, Jenghiz Khan, the sepulchre is lost. Timur the Tartar, or as his contemporaries called him, Timur the Lame, is buried here in Samarkand.

career that any monster of mingled cruelty and shrewdness has ever lived. Outside, the brilliantly tiled gateway, of which a picture is here given, prepares the visitor for no ordinary sepulchre within.

With what looks like an anticipation of Western symbolism, his plain block of marble stands out black under the dome among the surrounding white cenotaphs of his wives and relations. The vault rises above the little platform littered with plain-cut stones. To the eye of some it may seem but a dingy place. The translucent belt of jasper that runs around the walls at shoulder-height, crying forth the nine-and-ninety names and the ineffable glory of God, is darkened with centuries-old grime. You may hardly distinguish it at first from the time-darkened limestone of which the walls of the tomb are built. Yet there is both in the jasper and the limestone as beautiful a play of tints as ever was taken on by the walls of a human shrine. Colour there is in profusion. Mauves, purples lurk in the recesses of the stalactite masonry that here and there clings to the corners of the tomb like a gigantic wasp's-nest of amber and dull stone. Here in the light the belt of jasper is translucent umber —there, in the shadows, smalt grey, and over the plain undecorated surface of the main walls there are flashes of nameless colours that change, from minute to minute, as the sun's mote-laden gnomon of light wheels slowly over the quiet tombs. The windows are heavily traceried, and the sun's intrusion is but a pastime of the late afternoon. At mid-day the light creeps in through the unglazed gratings, so tempered by the rich verdure of the forest trees outside that you may see three mysterious and changing tints of green under-flushing the sombre colouring of the vault overhead. There is silence absolute within the chamber. Silence such as this does but remind one the more of the stormy life of him who sleeps below.

CHAPTER VIII.

By J. THOMSON, F.R.G.S.,

Officier de l'Ordre du Cambodge.

The Antiquities of Cambodia.—The Kingdom of Cambodia lies between Siam on the west, and Cochin China and the Gulf of Siam on the south and east.

The early history of the country is wrapped in obscurity, and it is chiefly to the Chinese annals that we are indebted for authentic notices of the ancient splendour of Cambodia and its tributary States. It is said that Funan (the name by which part of the realm was known) existed as a kingdom in the twelfth century B.C.

After the lapse of over a thousand years, during the reign of the Chinese Emperor Heao-Wuti, about 123 B.C., the king is said to have sent ambassadors bearing tribute to the Chinese Court. But the most important event recorded in early history is the advent of Buddhism from Ceylon soon after the time when the followers of Gautama were driven out of India and took refuge in the island, from which they sent propagandists to ultra-India, who are said to have founded in Cambodia a great outpost of Buddhism, and who reared the first stone cities and temples of that country. The striking similarity that exists between the ancient Buddhist buildings of Ceylon and those of Cambodia goes far to confirm the report of the early connection between the two. There are no temples in India that have features in common with those of Cambodia. The square pillars are characteristic of the latter, and of the antiquities of Ceylon alone.

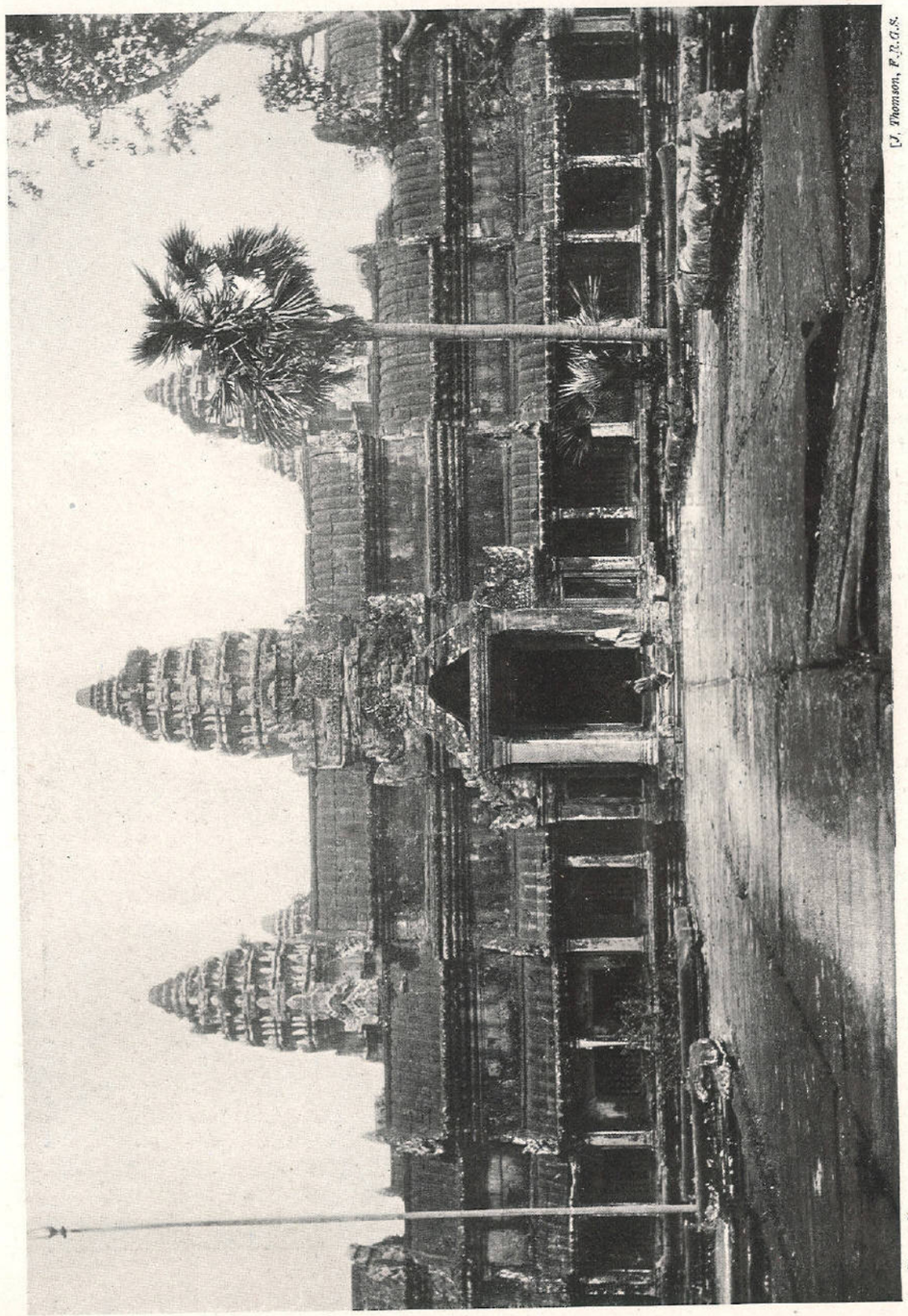
Nakhon Wat, in its massive grandeur, suggests a vision of Oriental splendour materialized in stone, destined to stand as a monument of human endeavour for all time. The Pali characters used in the Buddhist sacred books, we are told by a Chinese historian of the Tsin dynasty, 265–419, were employed in the books and writings of



Photo by] *[J. Thomson, F.R.G.S.*

ANGKOR OR NAKHON WAT.

Entering the western gateway of the outer gallery, one obtains a view of the raised stone cruciform causeway leading to the main temple, which is seen in the distance.

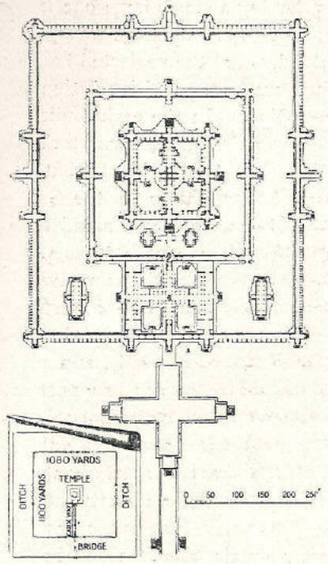


[J. Thomson, F.R.G.S.

THE PRINCIPAL ENTRANCE OF THE TEMPLE.

The building rises in three terraces, one above the other, and out of the highest of these the great central tower springs up; four lower, or inferior, towers rise around it.

Photo by]



By] [J. Thomson, F.R.G.S.

A plan of Nakhon Wat.

Funan, and that the people were skilled in fashioning vessels of gold and silver, and in the art of sculpture.

About three centuries later, Lim-yip, another State, apparently included in Cambodia, is noticed in the history of the Suy dynasty, and its position may be identified, as it is stated that the shadow cast by the sun in June when at the zenith was ten degrees south of the gnomon. At that time the Chinese invaded the country, and after a disastrous war, carried off eighteen golden statues from one of the royal palaces, and many captives. From the Tang dynasty onward to 1017 A.D. there are notices confirming the view that Cambodia played a leading part all through the centuries in ultra-India; and we gather, further, that a period of decadence ensued, brought about by constant strife and the blighting influence of war. Unfortunately the exact date of the building of Nakhon Wat is unknown, as the written annals of the Cambodians did not exist prior to 1346 A.D., about the time when the temple was building. Our brief review must be confined to the ruins of the city "Inthapatapuri," or "Nakhon Thom" ("The Great City"), and Nakhon Wat, the greatest and last work of the race. We had the privilege of exploring the ruins, and the temple, which is in good preservation, in 1866, taking the first series of photographs, and producing the first plan of the "Wat." We spent some time in Nakhon Thom, which was buried in a forest of venerable trees. One temple alone, "Prea-Sat-ling-poun," covered a vast area, and was crowned by thirty-seven stone towers, each tower sculptured to represent the four-faced Buddha, or Brahma, and thus one hundred and forty-six colossal sphinx-like faces gazed benignly towards the cardinal points. Some were contorted and torn by trees and parasitic plants that had rooted and grown through the crevices in the huge blocks of stone of which they were built, while those intact were full of that expression of purity and repose which Buddhists so love to portray, and all wearing diadems of most chaste design above their unruffled brows. Hard by were the ruins of a royal palace, described by the Chinese envoy of the thirteenth century as "a place of great magnificence, partly built of wood, exquisitely carved; with statues and ornaments of pure gold, and approached by a massive stone causeway, whose entablature was sculptured to represent a hunting scene with elephants in the forest."

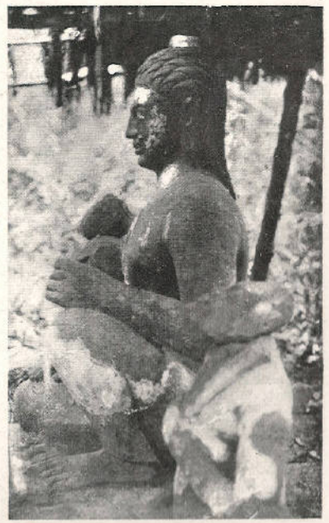


Photo by] [J. Thomson, F.R.G.S.

The stone statue of the leper king found among the débris.

We had to employ a gang of natives for some days in cutting the tower of "Prea-Sat-ling-poun" from the growth of ages. The city walls have a circuit of about nine miles, and rise to a height of thirty feet, and are pierced by five gateways. In photographing the gateway represented we had a sort of "battle of the apes"; a tribe of monkeys persisted in shaking the foliage, coming and going and displaying almost human curiosity in studying our proceedings, causing a loss of much time and valuable material

Reared above the gateway stood a series of subordinate towers, having a single large one in the centre, whose apex again displayed the four benign faces of the ancient god; the image was partly hidden beneath plants which twined their clustering fibres in a garland round the neglected head.

In this ancient city one can trace the evolution in native architecture from primitive design and elementary skill in building to the mature products of a later period. In the early buildings the blocks of stone used in construction are smaller, and the examples of the sculptor's art are crude when compared with the decoration of Nakhon Wat. It was evident that the arch, which is said to have been known to the ancient Egyptians, and certainly to the Greeks and Romans, was unknown to the early Cambodians. Their method of constructing a substitute is clearly shown at the base of the tower of Prea-Sat-ling-poun, whose huge blocks of stone are superposed, and project one beyond another from each side, and meet in the centre, so as to support the enormous weight of masonry above. This method also applies to Nakhon Wat, the Great Temple, about two miles distant from the city.



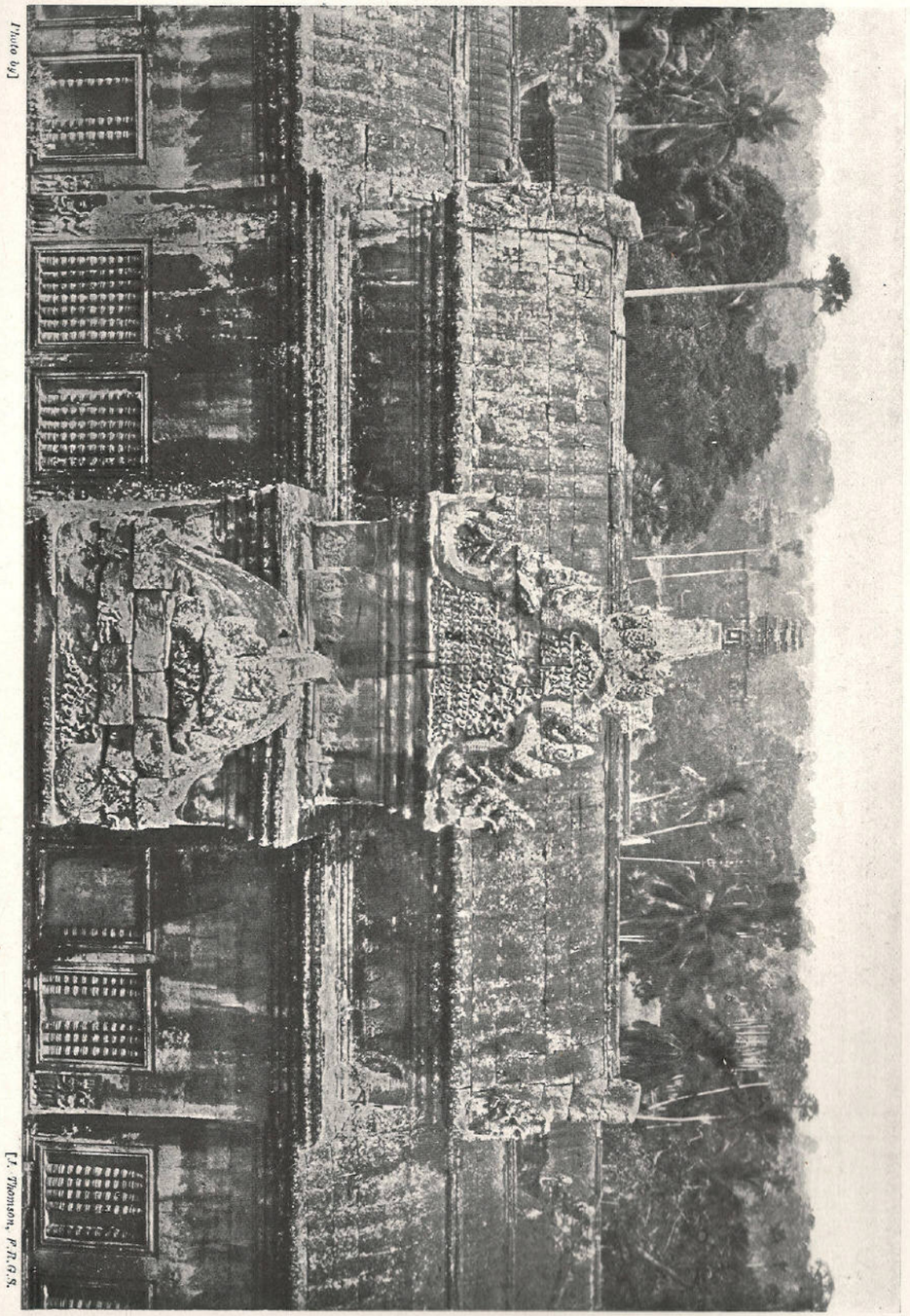
Photo by [*J. Thomson, F.R.G.S.*

A part of one of the four tanks.

This wonderful building is perfectly symmetrical in design (as may be gathered from the ground plan), like the majority of Buddhist structures, and may have been meant to symbolize the sacred Mount Meru, or centre of the Buddhist universe. This is all the more apparent when we consider that Meru is surrounded by seven circles of rocks; that there are seven circles in the central tower; that the Sacred Mount is supported by three platforms (corresponding to the three terraces of this temple), one of earth, one of wind, and one of water, and that it rises out of the ocean. This part of the symbolism is indicated by the temple being surrounded with a wide moat; and, indeed, during the rains, when the place is flooded, the whole stupendous structure would rise (like Meru from the ocean) out of an unbroken sheet of water. In some of the ancient temples of Java we find the same symbolic architecture; the Shrine of "Kalisari," for example, is an oblong square divided into three floors, and there are many more of the same design. On the ancient Buddhist Temple of Boro-Bodoer there are seven terraces (and no central tower) which would correspond with the seven circles of Meru. But the three terraces of Nakhon Wat may have another significance; they may have been designed originally for the sacred rites and processions still practised in ceremonials at the *tonsur* festivals of Siam; for example, at the coronation of a king the priests march thrice on three successive days round the sacred "Khao-

Photo by] A VIEW FROM THE GREAT CENTRAL TOWER OF NAKHON WAT. [*J. Thomson, F.R.G.S.*

In the centre is pictured the stone causeway with the western gateway of the outer gallery in the distance. These outer galleries and walls enclose a square space measuring nearly three-quarters of a mile each way.



Khrai-lat," the Siamese Buddhist Mount Meru. It is difficult to say what may have been the origin in many heathen religions of the sacred number three. We have them in the Holy Trinity of our own Church, a doctrine which does not claim a high antiquity; in the supreme principles of creation; in Orphic mytho'ogy, Council, Light and Life; in On, Isis and Neith of the Egyptians; in the Magian Trinity, Mithras, Oromazdes and Ahriman; the Indian triad, Brahma, Vishnu and Shiva; while in China we have the classic doctrine of the powers of Nature, Heaven, Earth and Man, and the Buddhist Past, Present and Future. We also find in the Temple of Heaven, near Peking, where State worship is performed, an altar of three terraces, on which at certain times of the year three sacrifices are offered. These are the Ta-sze, or great sacrifice; the Choong-sze, or medium sacrifice, and the Seaon-sze, or lesser sacrifice.

To return to Nakhon Wat. The ancient Chinese traveller, in his narrative of a tradition, says something relating to the worship of the snake in early times; but he, at the same time, tells us that Buddhism was the religion which then prevailed in Cambodia. The view that this great building was created for snake worship suggested by Fergusson can hardly be maintained. After visiting China, and seeing the Hindoo deities that guard the gates of Buddhist temples there, and the mythological objects which adorn these shrines, we have been led to believe that Nakhon Wat is a Buddhist edifice, decorated about the roofs and balconies with effigies of the seven-headed snake, who is honoured for ever, because he guarded Gautama when he slept. Nagas (snakes)



Photo by] [*J. Thomson, F.R.G.S.*

SECTION OF THE INNER WESTERN GALLERY.

One of the open colonnades which form a very conspicuous part in the temple, on account of the bas-reliefs on their walls.



Photo by] [*J. Thomson, F.R.G.S.*

AN EXAMPLE OF THE BAS-RELIEF.

These bas-reliefs cover the inner galleries in the Wat. The upper part of this particular example shows a state procession; beneath it is a scene of a Buddhist inferno.

appeared at his birth to wash him; numbers of nagas conversed with him here and there, protected him, and were converted by him; and after the cremation of his body, an eighth portion of the relics was allowed to the custody of the nagas.

Nakhon Wat, like the majority of the buildings in Inthapatapuri, and other cities of Cambodia, is raised upon a stone platform, and is carried upward from its base in three quadrangular tiers, with a great central tower above all, having an elevation of one hundred and eighty feet. The outer boundary wall and galleries enclose a square space measuring nearly three-fourths of a mile each way, enclosing a moat two hundred and thirty feet wide. Entering the western gateway of the outer gallery shown in the central distance on page 245, we found square monolithic pillars, almost Roman Doric in design, with a gallery and cloisters richly decorated with sculptured ornament; the first glimpse was then obtained of the imposing pile of masonry which forms the main temple. This approach leads to a raised, wide stone cruciform causeway, having ornamental flights of steps descending to the moat. These were probably intended for the first ablutions of the worshippers at the shrine. This causeway had been guarded along its entire length by a stone balustrade representing the body of the seven-headed snakes rearing their crests at the points of descent to the moat. Ascending a terrace by a flight of steps again sculptured with lavish ornament, and guarded on each side by colossal stone lions, we stood before the principal entrance of the temple, whose façade on this side is over six hundred feet in length, and is walled in in the centre for a distance of some two hundred feet. This walled space is divided into compartments, and each compartment lighted with windows. In every window there are seven floral stone bars, uniform in pattern

and in size throughout. The floral design on these bars represents the sacred lotus, and the flowers are as carefully repeated as if they had been cast in a single mould. These compartments occur in the centre of the other three galleries in the sides of the square, each facing a cardinal point. The remaining two-thirds of the space consist of open colonnades, the inner walls of which, with their bas-reliefs, form one of the chief attractions of Nakhon Wat.

The building, as already noticed, rises in three terraces, one above the other, and it is out of the highest of the three that the great central tower springs up; four lower, or inferior, towers rise around it. The bas-reliefs are contained in eight compartments, measuring each from two hundred and fifty to three hundred feet in length, with a height of six and a half feet. In each space of six and a half feet, the average number of men and animals depicted is sixty. They are executed with such care and skill, and in such good drawing, as to show that the art of the sculptors had reached a high degree of perfection among the "Khamen-ti-burân," or Ancient Cambodians. The chief subjects represented are battle scenes, state processions, and a complete series illustrating the "Ramayana" and "Mahâbhârata," the ancient Indian epic poems, which are said to have been received from India about the fifth century.



Photo by] *[J. Thomson, F.R.G.S.*

The Seven-headed Snake which, at one time, surrounded the temple of Nakhon Wat.

Perhaps the most wonderful subject of all the bas-reliefs is what the Siamese call the "Battle of Ramakean." This is one of the leading incidents in the "Ramayana," of which Coleman says: "The Grecians had their Homer to render imperishable the fame acquired by their glorious combats in the Trajan War, the Latins had Virgil to sing the prowess of Æneas, and the Hindoos have their Valmuc to immortalize the deeds of Rama and his army of monkeys. The 'Ramayana' (one of the finest poems extant) describes the incidents of Rama's life and the exploits of the contending foes."

In the sculptures of Nakhon Wat many of the incidents of the life of Rama are depicted, such as the ultimate triumph over the god Ravana, and the recovery of his wife Sita. The chief illustration of the poem, however, is the battle scene which ensues after the ape-god Hanuman had performed several of his feats which formed the daily incidents of his life, such as the construction of what is now known as Adam's Bridge at Ceylon. This he accomplished by a judicious selection of ten mountains, each measuring sixty-four miles in circumference; and being short of arms, but never of expedients, when conveying them to Ceylon, he poised one on the tip of his tail, another on his head, and thus formed the famous bridge over which his army of apes passed to Lanka. In another compartment the subjects appear to be the avatar of Vishnu, where the god is represented

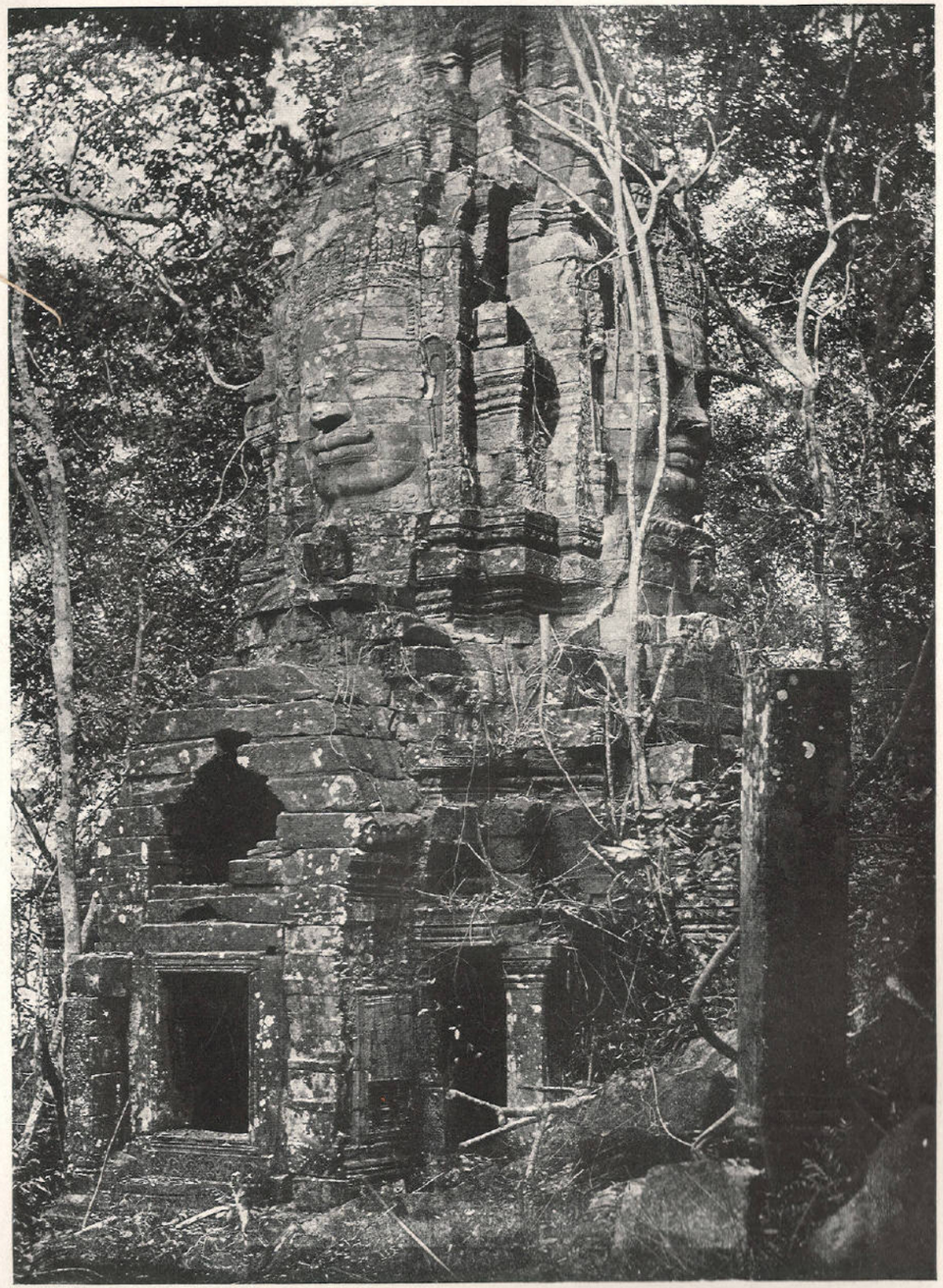


Photo by] *[J. Thomson, F.R.G.S.*

THE TEMPLE "PREA-SAT-LING-POUN," IN NAKHON THOM.

This temple covers a vast area and is crowned by thirty-seven stone towers, each tower sculptured to represent the four-faced Buddha, and so 146 colossal sphinx-like faces gaze benignly towards the cardinal points.



Photo by] [*J. Thomson, F.R.G.S.*

ONE OF THE GATEWAYS OF NAKHON THOM.

The City Walls of Nakhon Thom, or Inthapatapuri, have a circuit of about nine miles, and rise to a height of thirty feet, and are pierced by five gateways.

as a tortoise supporting the Earth, which is submerged in the Waters. The four-armed Brahma is seated above. A seven-headed snake is shown above the water, coiled round the Earth, and extending over the entire length of the bas-relief. The gods on the right and the dinytas on the left are seen contending for the serpent. Hanuman is pulling at the tail, while, above, a flight of angels are bearing a cable to bind the snake after the conflict is over. The example of bas-relief on this page will convey an idea of the ornate nature of the battle scenes, and will also enable the reader to judge for himself, not only regarding the art which they display, but also of the constructive mechanical skill which the Cambodians possessed, and which enabled them to build their war chariots at once strong enough for the rough usage of war, and light enough to secure that degree of speed upon which the issue of a conflict might depend. Take, for example, the wheel of the chariot. It must have been strong, and nothing lighter or more elegant could be constructed at the present day among ourselves. Part of it must have been made of metal, proving that the builders were experts in the use of metals. We must note that this splendid monument was put together with immense blocks of freestone and ironstone without a trace of mortar; and so deftly as to leave but a hair-line to trace the junction of the blocks. A part of one of four tanks (shown at B on the plan and illustrated on page 244) has all the appearance of a rock-cut temple, and is adorned with the sculptured ornament characteristic of the exquisite work of this great building race. Nakhon Wat was the greatest and last work of the ancient Cambodians, probably erected about the middle of the fourteenth century and left incomplete.

There is a tradition of a later king, whose stone statue we found among sculptured débris, who is said to have built a Buddhist temple in the hope that he might be cleansed of his leprosy.

The illustration on page 248 represents one of the ancient guardians of the temple, the seven-headed snakes found around the building for the protection of the sacred image of Buddha enshrined in the lofty central tower. Apart from fragmentary historical accounts and inscriptions, the deserted cities, palaces and temples of stone tell their tale of the rise and fall of a great empire, which reached its zenith when building the still unfinished shrine Nakhon Wat.



Photo by] [*J. Thomson, F.R.G.S.*

Bas-relief of battle scene in the gallery.

AUSTRALASIA AND THE PACIFIC.

CHAPTER IX.

By F. LAMBERT, F.R.G.S.

The Jenolan Caves, New South Wales.—Unlike the land of Columbus, Australia can claim but little in the nature of the stupendous. It has no Niagara Falls, and its rivers and mountains are small as compared with the great waterways of the Amazon and the Mississippi, and the heights of the Andes and the Rockies.

In the limestone caves at Jenolan, New South Wales, however, Australia possesses a natural phenomenon which, although smaller than the Mammoth Cave of Kentucky, in America, need fear no comparison with this, either in general grandeur of effect or in beauty of formation.

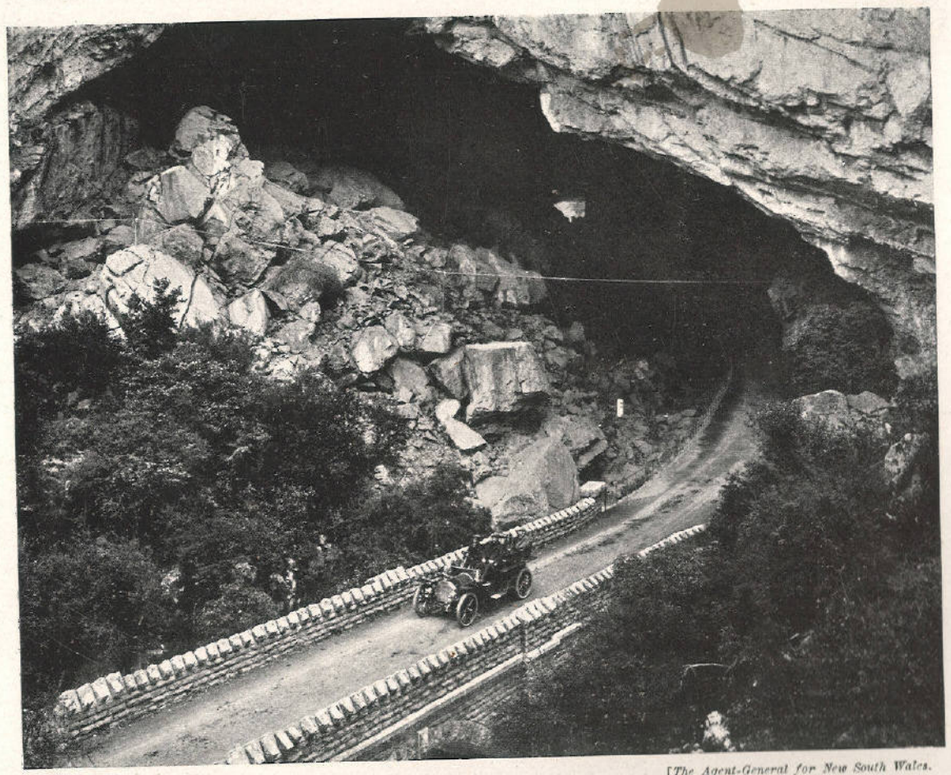


Photo by permission of] [*The Agent-General for New South Wales.*

THE GRAND ARCHWAY, JENOLAN CAVES, N.S.W.

The three daylight caves, of which the Grand Archway is an example, differ very materially from the entirely subterranean caves; they are open to the air at both ends, and exposure to all kinds of weather has given them most of their lovely colouring and sombre shades. The tunnel of the Grand Archway is 450 feet long and about 70 feet high, with a width varying from 35 to 180 feet.

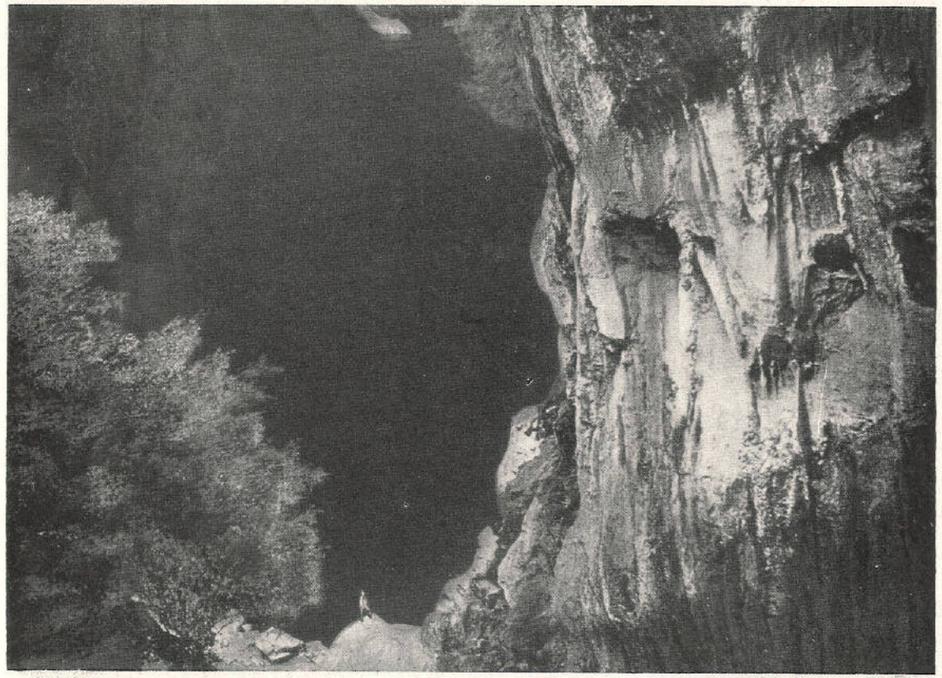


Photo by] [The Photochrom Co. Ltd.

THE DEVIL'S COACH HOUSE.

This vast cavern, which tunnels through the mountain limestone, is of an enormous size. The roof is decorated from end to end with stalactites—some twenty feet in length—which are tinged with delicate hues of almost every colour.

These caves are situated in the Blue Mountains on the eastern watershed of the great range which divides the waters of the Fish and Cox rivers. They are of vast extent, and of singular attractiveness in their limestone formations, and present, when illumined by the electric and magnesium lights, scenes of unparalleled loveliness, rivalling, in their marvellous and fantastic beauty, the airy fancies of the Arabian Nights, and the brilliancy of Sindbad's Diamond Valley.

The caves were discovered in 1841 by a Mr. Whalan and two mounted policemen, while in pursuit of a notorious bushranger, named McKeown, who had retired for security into the mountain strongholds in which the caves lie. For about a quarter of a century after their discovery little or no notice was taken of them. They were regarded by the few who frequented the neighbourhood for the purpose of hunting wild cattle as remarkable freaks of Nature, but were allowed to remain unexplored. Their hidden beauties soon became so talked about, however, as to arouse the enthusiasm of a Mr. Jeremiah Wilson, who, subsequently, as cave-keeper for thirty-five years, was instrumental in exploring and opening up some twenty miles of subterranean channels. As the fame of the caves became bruited abroad the number of visitors rapidly increased. Among them there were many who did not scruple to remove portions as mementoes, so it soon became evident that, unless something were promptly done for their protection, their beauty would quickly be destroyed. The Government of New South Wales, therefore, took the matter in hand, proclaiming the district, in 1866, to be public property, and, to their infinite credit, have since expended, annually, considerable sums of money in the work of development and exploration.

The caves lie in a limestone belt, probably of Lower or Middle Devonian Age, which runs with



Photo by] [Kerry & Co., Sydney.

THE CARLOTTA ARCH.

The Carlotta Arch stands 200 feet above the valley, and lies between the Grand Archway and the Devil's Coach House. Its roof and sides are ornamented with a pretty fringe of blue and grey limestone formations.

a comparatively unbroken crop for approximately three miles from north to west, and two miles from south to east, varying in thickness between five hundred and six hundred feet, corresponding to a surface width between six hundred and seven hundred feet. Through this formation two main creeks have excavated a number of subterranean channels, and have thus formed the caves.

The caves may be classified into two kinds—Day and Night. The Day Caves consist of three magnificent natural arches, viz., the Grand Arch, The Devil's Coach House, and the Carlotta Arch, and are so called on account of the daylight streaming through their entrances. The Night Caves,



Photo by] *[The Photochrom Co. Ltd.*

THE WILLOWS, NETTLE CAVE.

In the Nettle Cave, at the upper end of some stone steps cut out of the rock, are the beautiful green formations, termed the Willows, because of the resemblance they bear to the graceful foliage of that tree.

of which there are several, are the interior caverns in the limestone, into which a ray of natural light has never penetrated.

The Grand Arch and the Devil's Coach House, the two principal Day Caves, run right through the mountain limestone, to a depth of four hundred and fifty feet, and are exposed to the daylight at both extremities.

The Grand Arch runs east and west. The western entrance is seventy feet high and sixty feet wide, and, in its graceful semi-circular form, looks like the approach to a railway tunnel. The eastern entrance widens out to a span of two hundred feet, and is a marvel of natural architecture. Along the walls inside the Arch are caves running into the limestone to a depth varying from ten to twenty feet, the bottoms of which are covered with fine dust, pulverized from the rocks lying about by animals passing from one rocky hall to another. Midway between the floor and the roof, Mr. Wilson, the cave-keeper, had his sleeping-place for twenty years in the midst of rock-wallabies,

and near to the haunt of a lyre bird. There he strewed his bed of ferns, grasses, and mosses, and certainly not even Robinson Crusoe had a more magnificent dormitory.

The Devil's Coach House runs north and south, and is therefore at right angles to the Grand Arch, from which it is separated only by a few yards. This huge cavern, which rises to a maximum height of three hundred feet, or nearly as high as the dome of St. Paul's Cathedral, is a scene of indescribable grandeur. Lying about in the wildest disorder are tumbled blocks of limestone, making a scene of such grand confusion as the soul of a Doré would love to picture as the abode of some mythical dragon. High up on the roof are two natural openings, probably blow-holes, through which water spouted in remote ages. Scores of gaps in the roof and sides lead to cave upon cave, the bottoms of which are covered with bones. The teeth of bats, the backbones of marsupials and snakes, the wingbones of birds, and various other fragments of the animal world are mixed together as in a vast charnel-house.

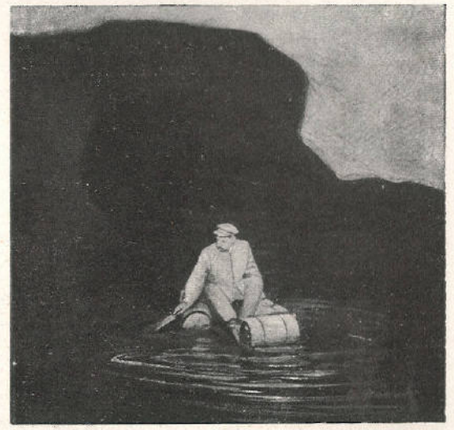


Photo by] *[Kerry & Co., Sydney.*

THE STYX.

Below "the Precipice," lost in inky darkness, there is a deep chasm, terminating in the far distance in a dismal pool which has been named "the Styx."



Photo by] *[Kerry & Co., Sydney.*

THE FORMATION OF STALACTITES.

Water filtering through the limestone, deposits particles of lime on the roof of the cave; these gradually form an extended tube, and when this becomes choked, the water flows down the outside, and the stalactite becomes encrusted.

The Carlotta Arch, although the smallest of the three Day Caves, is by no means the least important. It stands at an elevation of two hundred feet above the Cave Valley, and makes a beautiful framework to the bush and mountain scenery beyond. The jagged fringe of blue and grey limestone, and the pretty natural formation of the sides, in appearance much like hanging curtains, make the entrance to the cave look like a ruined window in some grand monastic pile, fretted and scarred by centuries of decay.

Conducting an underground survey into the Great Unknown, amid rugged rocks and tortuous pathways, with nothing to illumine the Stygian darkness but the faint flicker of a candle or the chemical rays of the magnesium light, can scarcely be regarded as a pleasant pastime. In all, some twenty-five miles of underground channels, radiating in every conceivable direction, have been surveyed; but owing to the difficulty of access not all are open to public inspection. Fortunately, those which are not accessible are of a minor character, and aggregate only a small total of distances. How far the caves extend, future exploration alone can reveal; but, in consequence of a peculiar similarity in the rocks, it is believed that, in addition to the

caves which have already been opened, the subterranean channels continue for one hundred and eighty miles, *i.e.*, from Mudgee to Goulbourn, where the Wombeyan Caves are situated. Although grandly picturesque, the Day Caves differ as greatly from the Night, or Crystal, Caves as do the pearls in a costly coronet from the rough oyster shells which once concealed them. Exposure to all kinds of weather has given to the Day Caves most of the lovely colouring and sombre shades which distinguish them; but the Night Caves, shut off from all atmospheric disturbance, have been preserved in all their virgin purity. As it is not possible in a short description to deal with all the caves known, and visited by tourists from all parts of the world, the principal ones only can be described, viz., the Nettle, the Arch, the Lucas, the River and the Imperial, all of which contain an intricate network of chambers, and almost every type of limestone beauty to be met with in the subterranean world. With the exception of "the Nettle," which is partly exposed to the daylight, and, therefore, may be called a Twilight Cave, the limestone deposits, hidden away in the deep hollows of the mountain, are for the greater part as white as driven snow, and of the most delicate and fragile nature. Wherever the eye rests, nothing is seen but myriads of limestone formations, streaked with the most delicate colours. When the electric and magnesium lights, which are used for illuminating, are thrown on to the many crystalline formations, the effect is one of bewildering splendour.

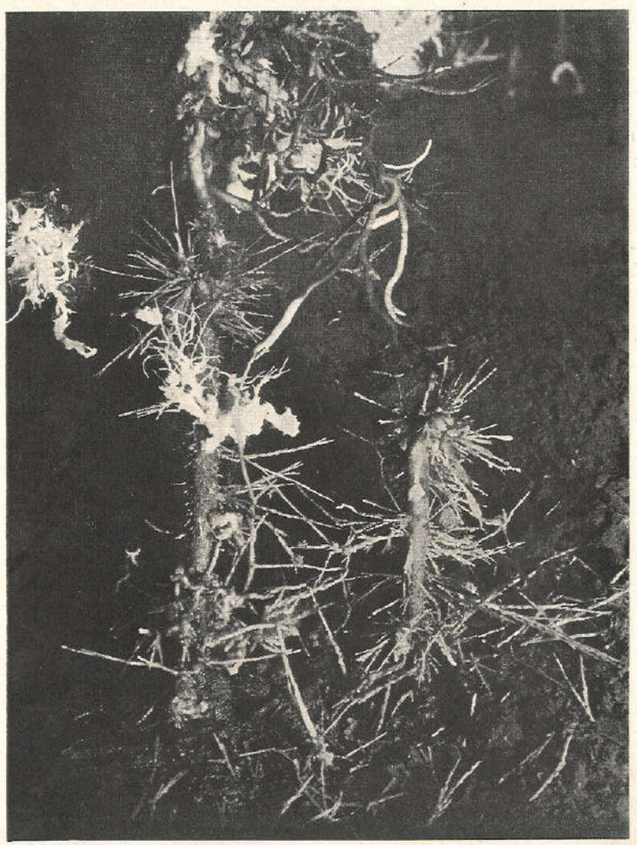
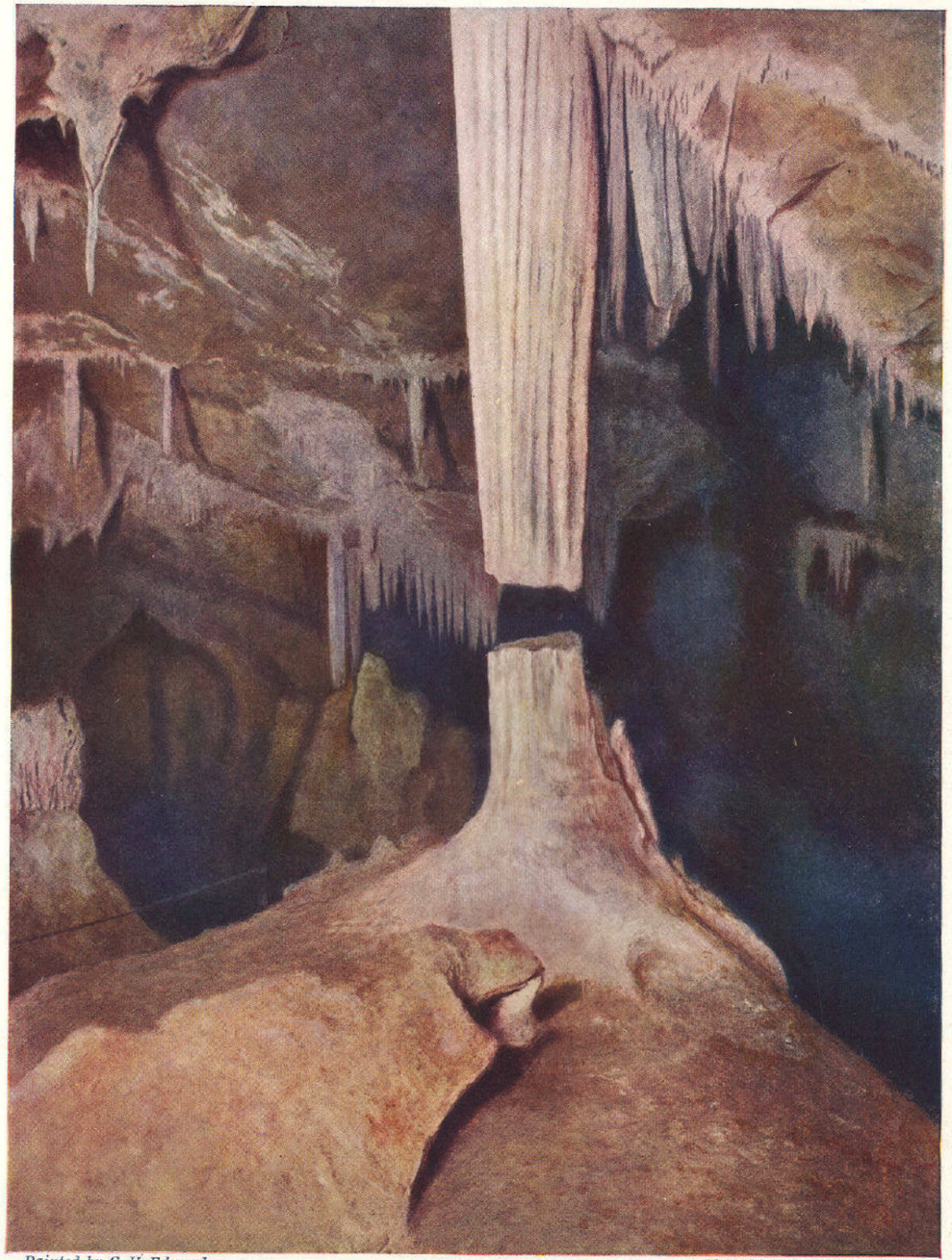


Photo by] *[Kerry & Co., Sydney.*

THE FURZE BUSHES.

A good example of the freakish architecture of the caves. Unexplainable formations of this type are known as "Mysteries."

The Nettle Cave was discovered in 1845. The origin of its unromantic title incautious visitors will quickly discover by the abundance of stinging nettles growing round the entrance. After ascending a flight of steps cut out of the rock, the tourist descends into a chamber, beneath a magnificent cluster of formations of a bright green shade, called the Willows, as graceful in form and in harmony of colour as any willow in Nature. The general appearance of the cavern is like a ruined palace, or the silent cloisters of some ancient abbey, its gloomy recesses and dim corners, its rugged roof and walls, looking like the remnants of past splendour and glory. In one part is a chamber called the Ballroom, containing a number of fluted pillars looking like Corinthian columns,



Painted by G. H. Edwards. *Photo by Kerry & Co., Sydney.*

THE BROKEN COLUMN, LUCAS CAVE, JENOLAN.

The Broken Column is surrounded by tinted draperies and sparkling stalactites. At one time it was a grand pillar uniting roof and floor, but snapped in two by the sinking of the soil beneath, it now consists of two sections, the one separated from the other by a space of ten inches.

while in another the curious formation of the stalagmites into groups closely resembling partly finished statuary, have earned it the name of the Sculptor's Studio. The figures are tall and rough, some life-size, some of heroic stature, and it requires no effort of imagination to see in them many striking and distinct forms, such as a woman looking upward in a big bonnet of the early Victorian period; an orator in the act of exhortation, with one arm upraised; and a man under an eider-down quilt, in a calm sleep, with his arms thrown back and his hands placed on his head. Other fantastic resemblances are the Hand of Joshua and the Judge's Wig.

The Arch Cave was also discovered in 1845, and owes its name to its being under the Carlotta Arch, and also because it forms a perfect arcade, one hundred yards in length. The roof of the cave is decked with a rich profusion of stalactite formations.

The manner in which stalactites and stalagmites are produced is simple and interesting. Water percolating through the roof of a limestone cavern is enabled to dissolve a small amount of lime by reason of the carbonic acid it contains. Upon evaporation of the water, the lime is left attached to the roof. When the water filters sufficiently slowly, the lime is deposited on the roof in the form of a ring, or an extremely thin layer, with a cavity in the centre of the diameter of the drop of water. Whilst there is a constant supply of water, the process continues, and produces, in the course of time, a tube more or less extended. So long as the water continues unceasingly to flow, the tube lengthens, but so soon as the supply ceases, the last drop, in leaving its deposit of lime either at the top or at the bottom, blocks it, and in this way the tube becomes sealed. In times of moisture the water again flows, but finding no outlet, either at the top or the bottom of the tube, makes its escape at the weakest place, which is usually where the stalactite is joined to the roof. Encrustation then takes place on the outside. When the water drips slowly to the floor, the lime deposited forms a stalagmite on the spot where the drops of water fall and evaporate. At times this forms continuous sheets over the floor, and a

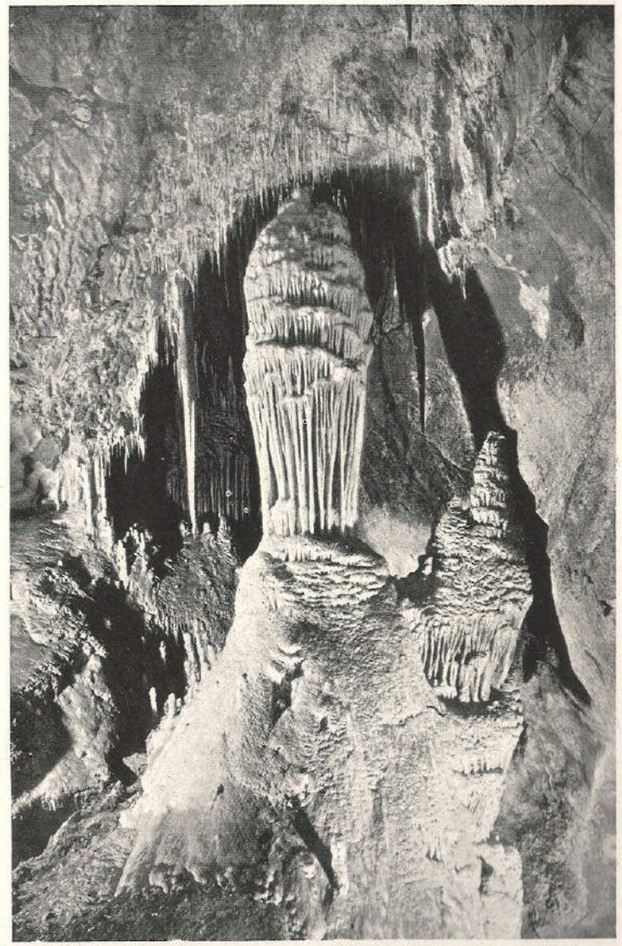


Photo by permission of [*The Agent-General for New South Wales.*

THE GRAND COLUMN.

A mammoth fluted stalagmite of an amber tint, supported by a second column, from which the crystalline floors descend in graceful curves to a beautiful bower.

stalagmite floor results; or it rises into columns, which meet and unite with the stalactites above.

In the centre of the Arch Cave is a slender column tapering from the roof to the floor. At one time there were five pillars as perfect as the one which remains, but in 1860 they were hacked down by someone to place as verandah posts in front of his sumptuous log-hut! In this cave there are two small stalactites of exceptional interest, less than a quarter of an inch in diameter, and barely an inch in length, which have been under constant observation for thirty-five years. As they have never been dry, and no water has been seen to drop, they have consequently never ceased growing, and yet the actual addition to the stalactite has only been three-quarters of an inch. The rate of growth of the stalagmite deposits is appallingly slow, and affords a striking object lesson, not only of the enormous age of the caves, but of the globe upon which we live. Mr. Voss Wiburd, who is the present curator of the caves, was born and bred in the Blue Mountains. He has been in and out of the caves nearly all his life, and computes, from careful observations extending over a great length of time, that the rate of increase does not exceed the thickness of a sheet of notepaper in thirty-five years, or about one inch in two thousand five hundred years. This is the evidence of a practical geologist, whose knowledge of limestone caves, and especially of the peculiar structure of stalactites, is unlimited.

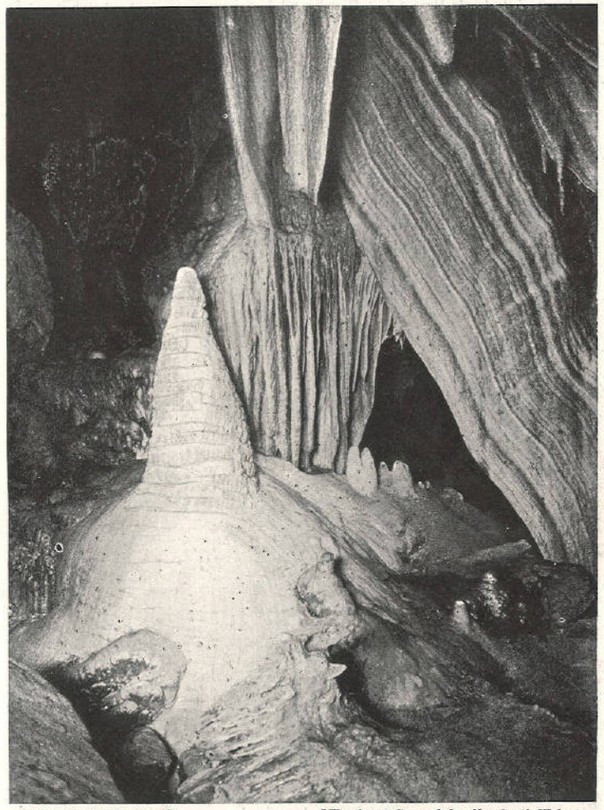


Photo by permission of] [*The Agent-General for New South Wales.*

THE SHAWL.

This beautiful formation is situated in the Mons Meg Branch. It is superbly banded, but is chiefly remarkable for its size, measuring twenty feet by four feet.

The growth of the formations depends, among other conditions, largely on the temperature, the degree of moisture, and the amount of carbonate of lime in the water. The mean temperature in the caves is about fifty-two degrees Fahrenheit. The formations are by no means constituted on any given plan. Every variety of shape and complexity of form is found, accordingly as the water becomes distributed, such as columns, domes, pinnacles, minarets, temples, cathedrals, canopies, shawls, draperies, and contorted forms known as "Mysteries." The rich tints and shades which lend such a charm to the formations are due partly to atmospheric influence (especially near the entrances), although the filtering drops of water, charged with mineral matter, have effected a great deal towards the harmonious and delicate colouring of the whole.

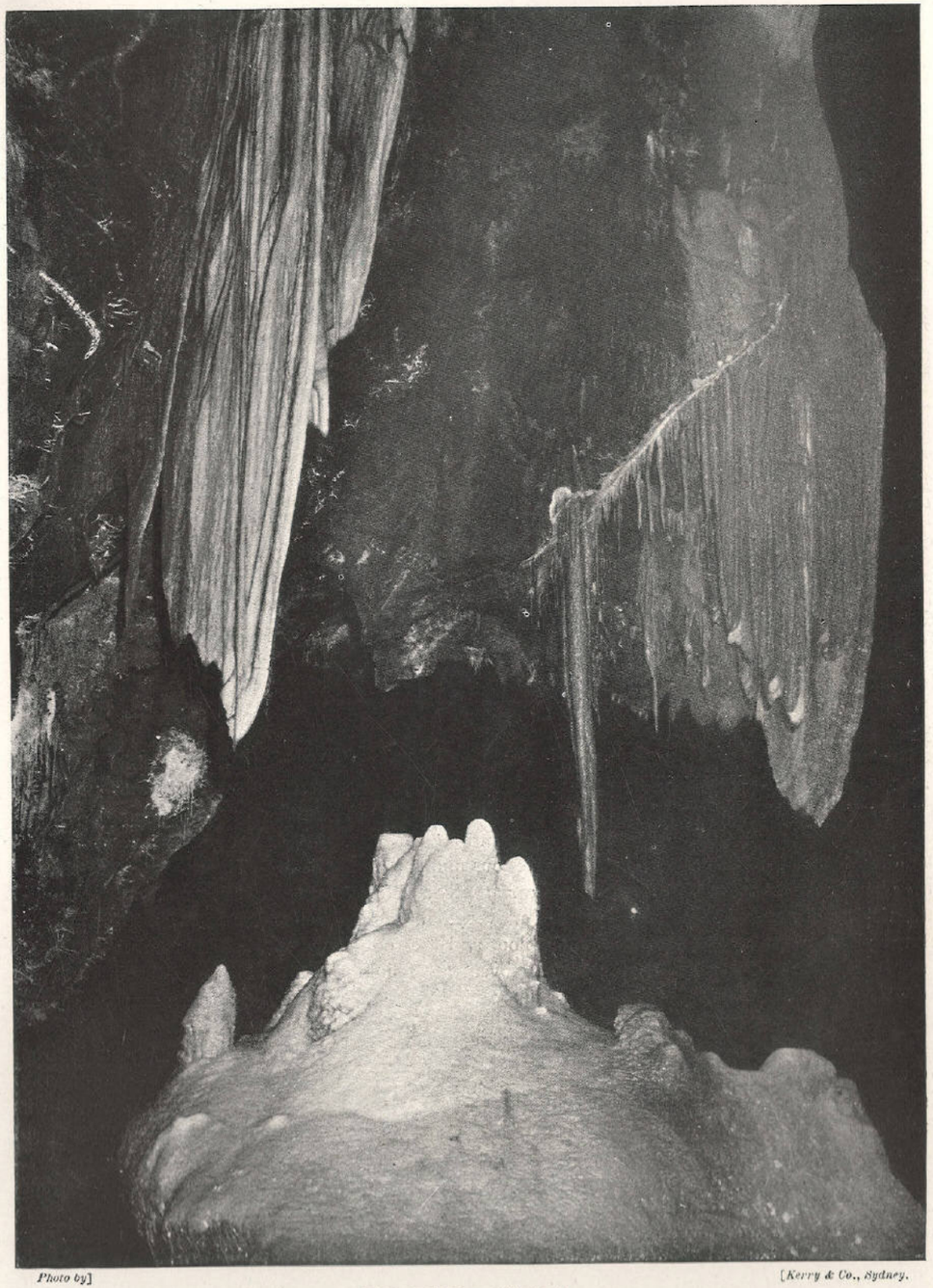


Photo by] [*Kerry & Co., Sydney.*

THE TEMPLE OF BAAL.

In the centre of this magnificent chamber there stands a superb glistening and pure white stalagmite mass, thirty feet across. On either side white and reddish shawls are hanging from chocolate-tinted walls, which curve upwards to a lofty dome.

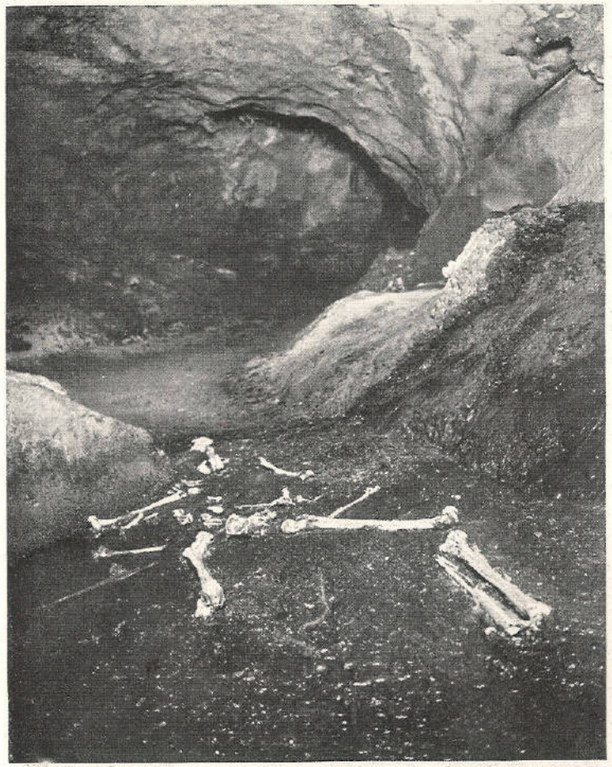


Photo by permission of [*The Agent-General for New South Wales.*

THE SKELETON CAVE.

In this cave there is a skeleton of an Australian aboriginal. It is difficult to account for its presence at such a depth.

The Lucas Cave was discovered in 1860, and consists of a succession of large chambers and narrow passages.

One of the most majestic in the Jenolan domain, this cave is in the region of eternal midnight. It presents in grand combination almost every type of limestone beauty; and although the wealth of detail is less than in the Imperial Cave, one is awed by the magnitude of its chambers and the gloomily impressive outline of the deep recesses and tumbled rocks. The first cavern, named the Cathedral, is so vast that the rich chemical rays of the magnesium light fail to penetrate its vault; approximately, it is three hundred feet high, or seventy feet higher than Notre Dame. Its lofty dome provides sanctuary for countless numbers of bats, which cling together like swarms of bees.

Another chamber of huge dimensions, leading out of the Cathedral, is the Exhibition Cave, so called on account of the great variety of its specimens. This cave has an unsupported roof, four hundred feet in length, enveloped in a mysterious and soundless gloom. The unresponsive echo of the place is almost painful, the only sounds apparently audible being one's quickened respiration and the ticking of one's watch. An object of universal interest is the *Broken Column*, a beautifully fluted pillar, which at one time united the floor and the roof, and which is not even now shorn of beauty, in spite of the fact that some earth movement or sinking of the floor has fractured it at the base. The stalagmitic portion rests on a large rock, the stalactitic portion being suspended from the roof. They are ten inches apart and about four inches out of plane.

Between the Cathedral and the Exhibition is the Shawl Cave, a magnificent chamber, the roof of which slopes at an angle of forty-three degrees. Hanging in graceful folds from the sloping roof is a group of "shawls" as white as virgin snow, fifteen feet wide and twenty feet deep, and of this kind of ornamentation the Imperial Cave contains the finest specimens. They are usually produced by the water flowing along an inclined plane.

Among a multiplicity of dazzling and bewildering formations the *Jewel Casket* attracts special interest by its exquisite beauty. It is only one foot square and six feet long, and is hidden away in a small cryptic recess four feet above the level of the main floor.

The scene which bursts upon the senses, when the light is flashed on, is like a vision of fairyland. The ceiling is literally covered with tiny glistening pendants of the most fragile

nature, and the walls and floor are a mass of beautifully coloured crystals, which look in the reflected light like a rich and rare collection of gems.

At the end of the Exhibition Cave an iron bridge spans a yawning chasm about fifty feet deep; below the bridge an electric light illumines the clear waters of a still and silent pool from sixteen to twenty feet deep. The pool is connected with the water way which drains the belt of limestone on the south side of the Jenolan River and forms many of the caverns in the River Cave.

Looking across the vast chasm at the huge rocks lying piled one over the other, the scene is weird and wild in the extreme. Leading out from the Exhibition Cave is the Lurline Cave.

The discovery of the "River" branches of the Lucas Cave in 1903-1904 has added over half a mile of caverns of unrivalled beauty and grandeur to the revealed treasures of the Wonderland of Jenolan. In his book on the Caves, Mr. O. Trickett informs us that the branches are all contained in the system of channels which have been excavated by the waters underground, and running from south to north, find their way through the western bank of the Jenolan River, opposite the outlet of the underground waters of the Imperial Caves.

Starting from a point about twenty-five feet from the western end of the Lucas



Photo by] [*Kerry & Co., Sydney.*

GRANNY'S SHAWL, ORIENT CAVE.

This formation, in the Orient Cave, bears a striking resemblance to a folded shawl of soft woollen texture, complete even to the knots and fringes.

Bridge, a descent is made to the mammoth tumbled rocks forming the floor of the Exhibition Cavern. From here a pathway leads down to the present waterway, and an ascent is then made into the Tower Chambers. In these there are groups of beautifully tinted pillars, superb cream-coloured stalagmites, forming terraces, and including that named *The Minaret*. (An illustration of this beautiful pillar appears in the Introduction.)

A ledge at the end of the Tower overhangs the precipice, which terminates in a partly concealed pool, varying in depth from thirty-five to forty-five feet, according to the season of the year. From this ledge a weird and awe-inspiring scene is presented to the spectator; sombre walls, whose contour is lost in inky darkness, surround a chasm which seems to terminate in the far distance in a dismal pool, called the *Styx*.

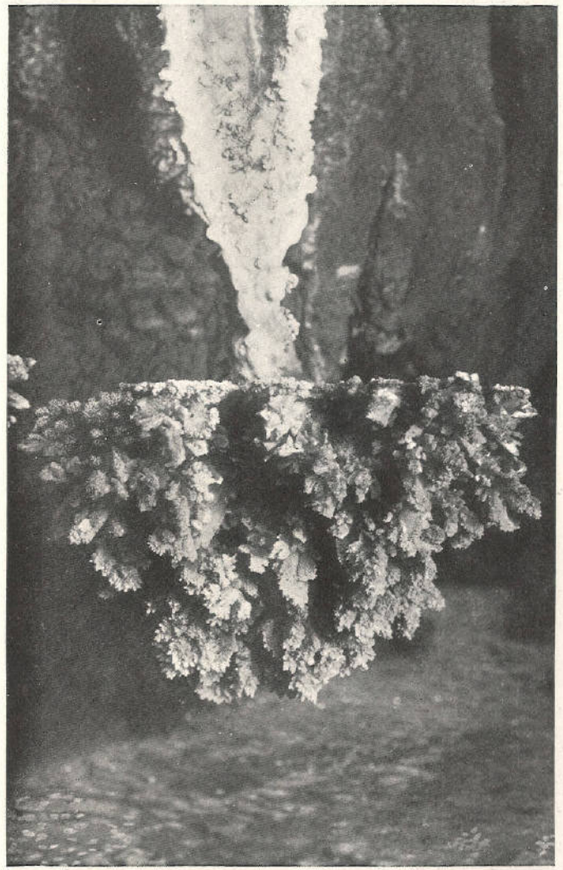


Photo by] *[Kerry & Co., Sydney.*

SUSPENDED CRYSTALS, ORIENT CAVE.

Proceeding thence to the Junction Chamber, the *Shower of Shawls* comes into view. This beautiful formation is one of the many amber and chocolate tinted mantles which decorate and drape a series of rounded ledges.

Leaving the *Shower of Shawls*, a network of passages is traversed, which leads to the *Furze Bushes*. Deposits of clean sand carpet, in a fitting way, the approach to *Olympia*. In this gorgeous chamber the central figure is the *Grand Column*, a mammoth amber-tinted, fluted stalagmite, supported by a secondary column, from the base of which the crystalline floors descend in graceful curves to a symmetrical mantle hanging over a beautiful bower. All round the *Grand Column* there are pillars, stalactites, shawls and draped recesses, some majestic and imposing, others diminutive, but all resplendent in shining tints of varied hues.

The "Mons Meg" branch is an upper chamber running from the formation referred to as the "Shower of Shawls" to *Olympia*. It is lofty in places—upwards of forty feet—and is named from a huge fallen pillar twenty-two feet long and five feet in diameter, which lies on the floor like some ancient dismantled cannon. Near this pillar there are some beautiful terraced stalagmites, and a superb *Banded Shawl*, twenty feet long and four feet broad, which is especially interesting on account of its unusual size. Looking back from a point above these formations, a splendid group of shawls, in tints varying from a delicate amber to a deep chocolate, are revealed by the magnesium lamp.

The Temple of Baal is the Western branch, which leaves the River Cave a short distance from



Photo by] *[Kerry & Co., Sydney.*

LYRE BIRDS' NEST, ORIENT CAVE.

This glistening mass of stalactitic formation is one of the most beautiful examples of "the Mystery" type. Imperceptibly tiny ribs of lime with water are gradually adding further pieces, each doing their own little part to make an even more detailed and dazzling whole.

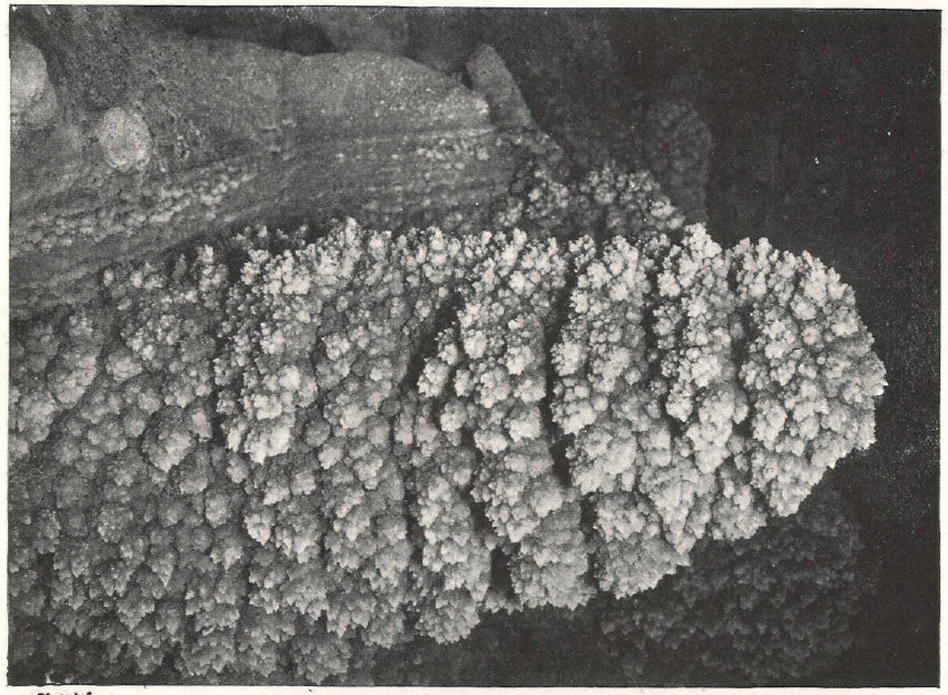


Photo by] [Kerry & Co., Sydney.

THE "GIANT SAPPHIRES," ORIENT CAVE.

the *Furze Bushes*. It is two hundred feet long and reaches a width of sixty feet and a height of eighty feet. In the centre there is a superb glistening and pure white stalagmitic mass thirty feet across; on either side white and reddish banded shawls of great length hang from chocolate-tinted walls, which curve upwards to a lofty dome.

The Oriental Cave is an upper branch of the River Cave, which rises from near the *Furze Bushes*, and runs in a southerly and south-westerly direction.

After climbing up sparkling frozen cascades, past crystal walls, and a beautiful canopy richly festooned in twisted lime sprays, a halt is made at a glorious basin, whose floor and sides are formed of masses and bunches of amber crystals. In the ascent over crystalline floors, along the Western branch, many beautiful cream and amber tinted dripstones are passed, among which a folded shawl, like soft wool in texture, with knots and fringes, is a special feature.

Rising over a ledge canopied by the Diamond Wing, a passage of over two hundred feet in length runs southerly. It is complete from end to end with a succession of enchanting bowers and grottos, decked with tendrils, garlands and festoons. Occasionally a be-ribboned garland seems to glisten with a silvery radiance. Close inspection shows this to be due to tiny ribs of lime charged with water which are silently yet imperceptibly adding further floral tributes, "The ever-playing shuttles which weave the fairy fabric."

Proceeding down the Underground River from the ladder leading to the Main River Cave, an entry to the Skeleton Cave is found on the eastern bank. About one hundred and fifty feet from the entrance, the skeleton of an aboriginal lies partly embedded in the stalagmitic floor. It has probably lain in its present position for a period extending long before the colonization of Australia. How the unfortunate man got there is difficult to conjecture, knowing the antipathy the Australian

aboriginal has to enter any place where the daylight is excluded. It appears possible that he fell through the opening from the face of the cliff up in the Cathedral, thence groping in the intense darkness, he must have rolled and tumbled into the Bone Cave, and from thence through a chasm, which appears to have existed at no distant date, immediately above where the skeleton now lies.

The Imperial Cave was discovered in 1879. For exquisite beauty and the delicacy of its limestone deposits it is not only the finest in the Jenolan district, but is unsurpassed by any other cave in the world. It is divided into two branches, viz., right and left, and consists of a labyrinth of passages and chambers, twisting and twining in every direction for miles through the mountain limestone. Through a gloomy tunnel below the general level of the floor flows the Underground River, carving out of the raw material its beautiful subterranean channels. In a compact array, a thousand marvels glitter in the electric rays; lovely stalactites and stalagmites in endless profusion, alabaster columns, sparkling limestone waterfalls and cascades, lilliputian cities, caskets of rich jewels, recesses and grottos filled with crystals of many hues, and shawls and draperies of wondrous fabric like delicate lace. Many of the formations are as white as the foam of a storm-tossed billow; some are delicately coloured in brown or yellow, or in deep red, while others are resplendent in all blended tints of the rainbow.

Where all are so beautiful it is difficult to make a comparison, but among others which may be marked for special distinction are *The Madonna and Child*, a pure white stalagmite, resembling a woman carrying an infant in her right arm; the *Snow Drift*, looking as crisp and sparkling as if a heavy fall of snow had just descended; *Lot's Wife*, a remarkable imitation of the Pillar of Salt on the Dead Sea plains; *Crystal Cities*—a magnificent creation—looking from the distance like a dazzling Oriental

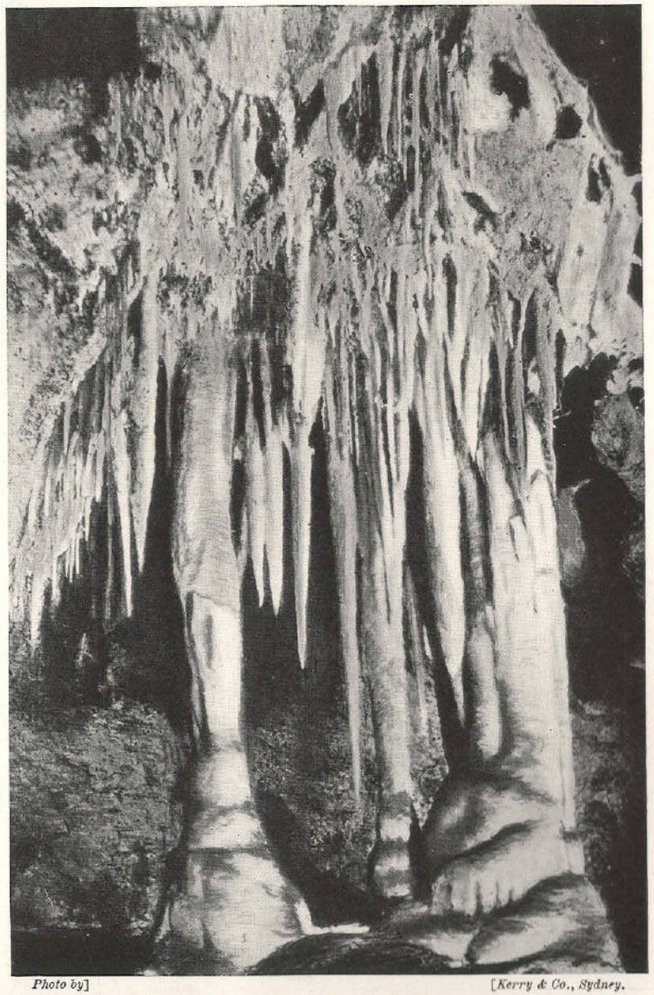


Photo by] [Kerry & Co., Sydney.

GRAND STALACTITES, IMPERIAL CAVE.

These stalactites, of massive grandeur and of dazzling whiteness, are fringed at the top with a superb drapery; two enormous columns on either side rest on a solid limestone base.

city, whose miniature walls, fortifications and buildings are of the purest crystal; and the *Grand Stalactites* of massive grandeur, and of dazzling whiteness, fringed at the top with a superb stalactite drapery, and flanked on each side with an enormous column, which rests on a limestone base that sparkles like diamond drift.

One of the most marvellous spectacles of water sculpture is a superb creamy white canopy of a nondescript character, projecting eight feet from the wall, called *The Mystery*. It is embellished with an endless variety of stalactites, many being as fine as the filaments of a spider's web, others like spun glass, the whole complex mass looking more like the freak of a glass-blower than anything else; moreover, contrary to the law of gravitation, it sometimes travels upward, at other times grows horizontally, or takes a twist and then descends in a perfectly straight line. The *Furze Bushes* and the *Lyre Birds' Nest* in the River Cave are other examples of the "Mystery" type. Currents of air effect formations in various ways, causing some to grow obliquely, others to assume a warty-looking form, others to thicken more on one side than another. Whether air currents have influenced the "Mystery" it is difficult to say. Perhaps future scientific investigation may reveal the secret.

CHAPTER X.

Whakarewarewa.—At the very heart of the North Island of New Zealand, on a tableland varying from one thousand to fifteen hundred feet above the sea level, and occupying an area about one hundred and fifty miles in length and from ten to fifteen miles in breadth, may be seen the greatest geyserland in the world. White Island, in the Bay of Plenty, on the east coast, may be considered its most northerly point, whilst it extends south-west to Mount Ruapehu, a snow-clad mountain near the centre of the island.

The whole territory within this space is teeming with wonderful sights, the plateau being

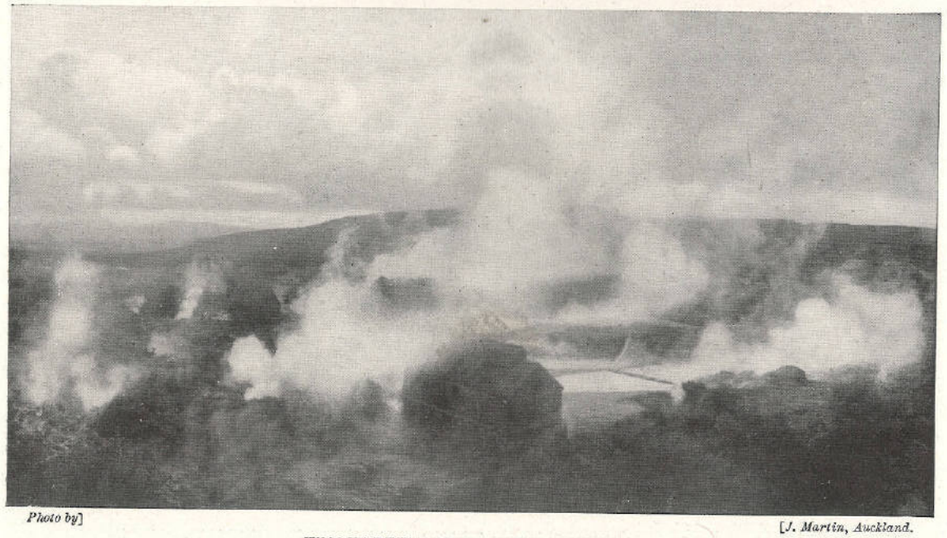


Photo by] *[J. Martin, Auckland.*

WHAKAREWAREWA, NEW ZEALAND.

Whakarewarewa is a small Maori village two miles south of Rotorua, the very centre of Geyserland. A thick white fog of steam, enshrouding everything, creeps out of countless holes which perforate the earth's surface, and finally loses itself in the air above.



Photo by] *[The Photochrom Co. Ltd.*

THE GREAT WAIROA GEYSER.

This Geyser is very irregular in action, but it is a truly magnificent sight when in play. Occasionally soap may be thrown into its basin, and this invariably has the effect of raising its column of water to a great height.



Photo by permission of [*The Agent-General for New Zealand.*

A fine view of Wairoa hurling its boiling water into the heavens.

pitted with deep wells in the earth's crust as thickly as the holes in a sieve; while to break the monotony, if the word may be used in such surroundings, volcanic mountains rise in wild and broken outline.

Countless boiling springs, escaping from the earth's interior, burst on all sides; beautiful clear blue waters of heated lakelets contrast themselves with the white and brown cones of geysers; and with its fumaroles, volcanoes, and ever bubbling mud-springs, the whole stretch of country possesses a mass of marvels which perhaps cannot find its equal anywhere in the world.

In the very heart of all this activity is Whakarewarewa, a small Maori village two miles south of Rotorua, the very centre of Geyserland. Around this district may be seen an endless variety of Nature's extraordinary handiwork, and wandering through it is an experience never forgotten. One is overawed by the great hidden power which yet manifests itself on every side. The whole outlook is weird and even terrifying; it impresses one with its might and one's own complete helplessness. A thick white fog of steam, enshrouding everything, creeps out of the thousands of holes which perforate the surface of the earth, and, clinging to the dwarf rocks, rises, and is wafted gradually away to lose itself in the air. It is this cloud-like mist, enveloping everything and filling the air with the

fumes of sulphur, that more than anything else, perhaps, renders the whole atmosphere uncanny and full of mystery. One would imagine that no vegetation could exist in this heated soil with the turmoil all around it; but the manuka scrub grows on quite disconcertingly, and may be seen spreading itself everywhere in small patches between the geyser basins. The leaves and branches, however, lose their greenness and become tinted a yellowish brown by the spray from the surrounding geysers, and the hot fumes cause the leaves to shrivel somewhat. On every side the surface of the ground is broken and curled up into fantastic forms. In one direction lies a great grey mass of molten lava; in another, a huge deposit of brown mud; whilst strewn everywhere are small rocks and stones beautifully tinted with different hues, mostly of a yellowish and grey-white colour. To many, one of the most interesting spots is that where smaller jets and constantly bubbling fountains have produced an exquisite, widely-curving terrace of numberless shades of delicate colour, from a washed-out yellow to a pale green.

This terrace slopes to the sulphurous waters of the clear Puarenga, a cold stream winding its way in its narrow channel regardless of the heated springs around.

Next to an extinct geyser is a rude circular basin, known as Te Komutumutu, "the Brain Pot," standing alone on a raised platform of decomposing geyserite. There is an interesting but yet horrible history attached to this, taking one's thoughts back to the days of cannibalism. Legend says that a chief named Te Tukutuku hid from his enemies for two years in a cave near Waikite. After this time had elapsed, however, his enemies succeeded in finding him, and having put him to death, they then cooked his brains in Te Komutumutu and ate them.



Photo by permission of [*The Agent-General for New Zealand.*

THE MOUTH OF WAIROA GEYSER.

This is an excellent example of the white silicated formations, worn smooth by frequent eruptions, which surround the funnel-like mouth of a geyser.

Not far from this "Pot" is Waikorohihi, the most regularly active geyser in the valley. Rather nearer to the stream the great Pohutu plays, fed daily by Te Horo, a deep well of boiling water about eighteen feet in diameter by its side. The beautiful blue waters of this well are continually rising and sinking, giving off swirling clouds of steam as they boil furiously. When the water has reached its highest, its surface is covered with countless bubbles forming and bursting, and little fountains rise in the air and fall again in a shower upon the geyserite surrounding them. Then suddenly the overwhelming column of Pohutu is thrown skyward to a height, often, of one hundred feet, from the depths of its crater below: a magnificent thrust of water and steam, sometimes maintained for over three hours.

Not far away is the little "Kereru," with its thousand tiny steps forming terraces of gorgeous hues on one side and a small cliff of geyserite on the other.

Below, at the foot of the hindmost terrace, one has a view of "The Torpedo," keeping up its series of thundering and crackling noises and occasionally shooting up a column of mud; while a short distance away, on a large terraced cone of gleaming white silica, rock-streaked here and there with various faint colours, the Waikite geyser spouts away, its waters heavily charged with the silica which by artificial means has been made to spread over a very large surface. This has been done in the hope that, as time advances, the area around the geyser will be coated with a delightful enamel, and eventually form a terrace similar to the famous Pink and White Terraces at Rotomahana, which were so unfortunately destroyed by the eruption of 1886.

Not far from the "Waikite," but higher up the creek, stands "The Giant's Cauldron," a very fierce and active crater, and in a lower part of the valley Te Roto-a-Tamaheke, a great boiling pond some four hundred feet long, bubbles away, filling the air with a thick, heavy cloud. In the centre is a little geyser incessantly casting up its tiny "shot" and supplying Te Roto-a-Tamaheke with water from its bed.



Photo by permission of [*The Agent-General for New Zealand.*

THE GEYSER KERERU.

This shows how the water, heavily charged with silica from the geyser cone, gradually forms beautifully tinted terraces around the geyser cones.

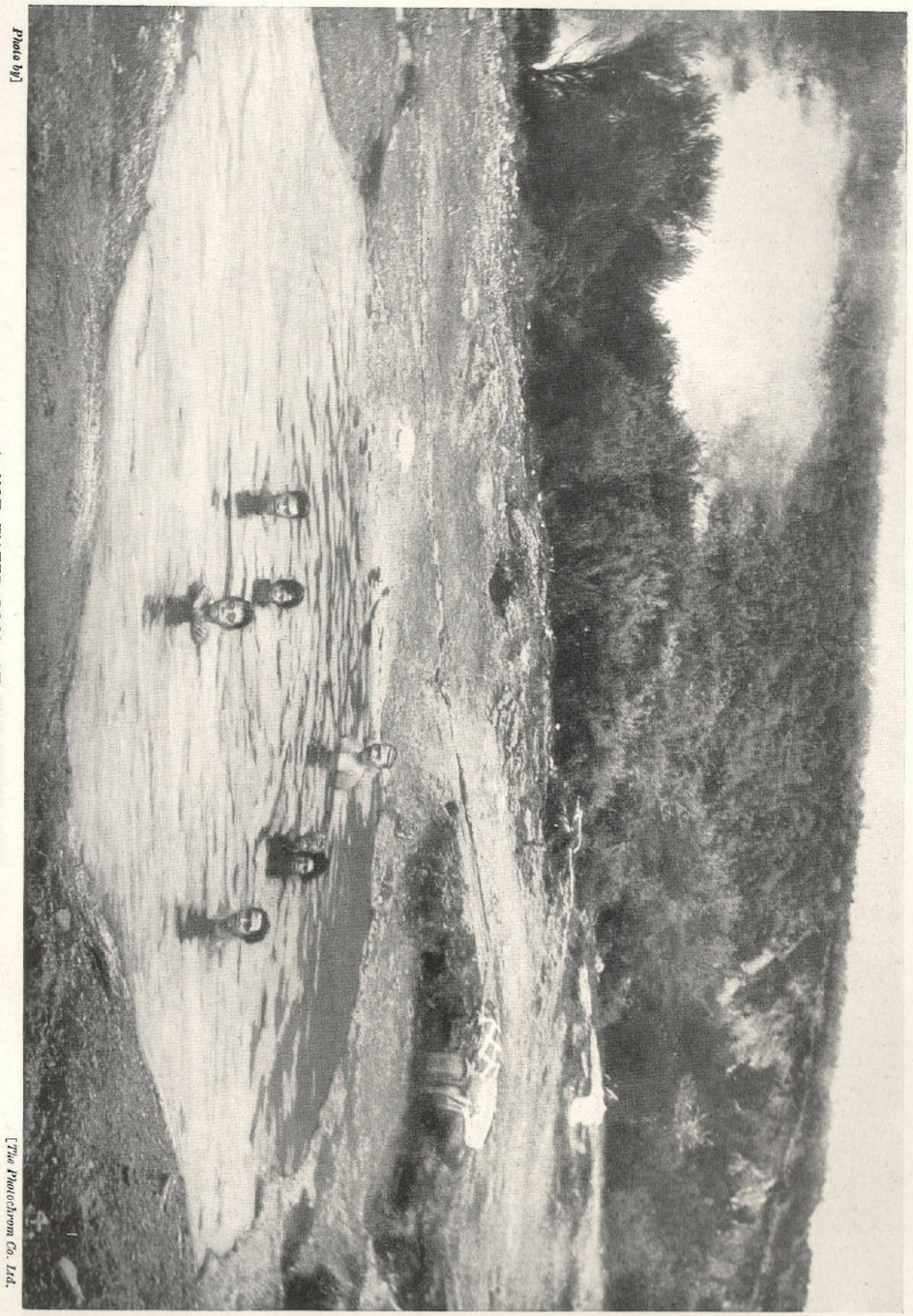
There is still one more sight in this district which, on account of its importance, must be particularly noted. On pages 267-8-9 will be found photos of the great "Wairoa Geyser." Irregular in action, and seldom seen, it is truly magnificent when in play, a huge column of water being shot from its enormous mouth to a height which rivals even that of Pohutu.

Although Wairoa plays very seldom of its own accord, visitors may occasionally have the pleasure of seeing its column of water forced into the skies by artificial means.

On special occasions leave may be obtained

Photo by] A HOT WATER POOL AT WHAKAREWAREWA. [*The Photochrom Co. Ltd.*

This illustration shows one of the hot water pools which abound in the district and in which it is perfectly safe to bathe. The beautiful clear waters contrast to the silica geyser cones to be found on every side.



from the Government Tourist Department in Wellington to dose the geyser with soap; but this is very rarely granted, for the reason that the constant throwing of soap into its mouth often causes a geyser to cease playing altogether. This process of "soaping" is a very interesting one, and is one well worth describing.

A certain date having been fixed and agreed to by the Government, notice is given to the town that Wairoa is going to be "soaped," and the fascinating operation commences. A quantity of soap is first of all cut up into small pieces; then, when everyone is ready, the whole is thrown into the gurgling basin. If one looks over the cone immediately after this, rumbling noises from the heated mass will be heard, while at the same time it will be seen that lather is beginning to form.

After this, it is unsafe to remain near the cone any longer, as the geyser may begin to spout at any moment, everything depending upon the actual temperature that there happens to be at the time in the well below. After some minutes water will bubble over the basin's sides and small fountains will be lifted a few feet. Then follows a tremendous roar as the column from Wairoa is hurled up to a height of over a hundred feet, its waters coming down with a tremendous splash around the geyser cone below, its spray scattered with the wind in all directions. Then the monster gradually ceases, and losing its power, settles down again in its ugly basin once more to carry on its grumblings amidst the heated atmosphere around.

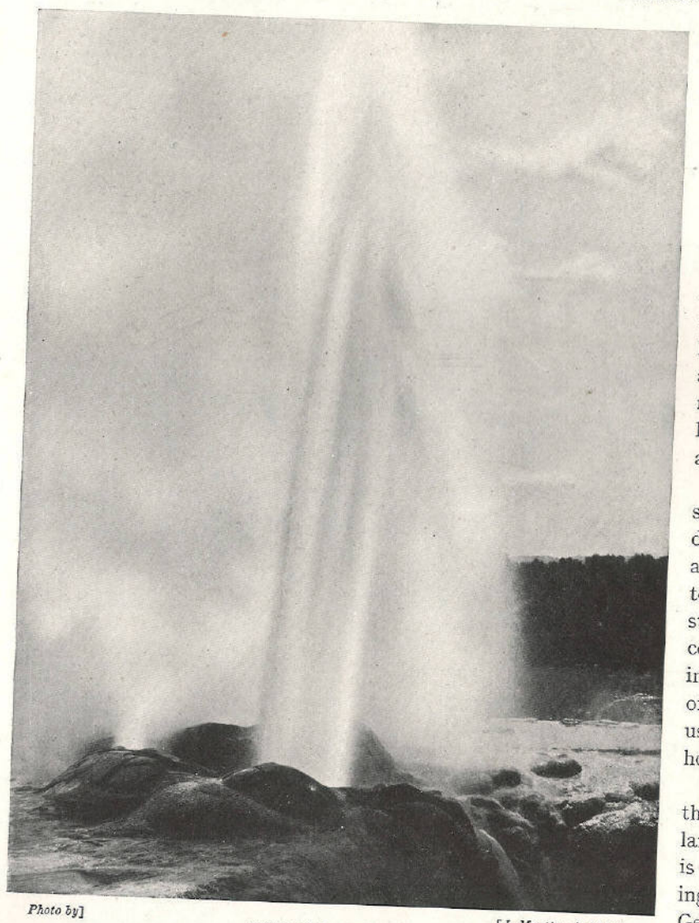


Photo by] POHUTU GEYSER. *[J. Martin, Auckland.*

Pohutu is one of the most powerful geysers in that district. Its overwhelming "shot" is often thrown to a height of 100 feet from its crater below.

Fires would certainly seem out of place in such a district as that just described, and the Maoris are not slow to make use of Nature's substitute. Frequently one will come across them washing in the naturally warm waters of a spring or lake, and using the hot soil and steamholes for cooking their meals.

In the midst of so much that is mysterious, Geyserland, as one would imagine, is full of romance and teeming with Maori legends. The Geysers are the sacred fires "of Ngatoroirangi," the wizard-priest of the Arawa

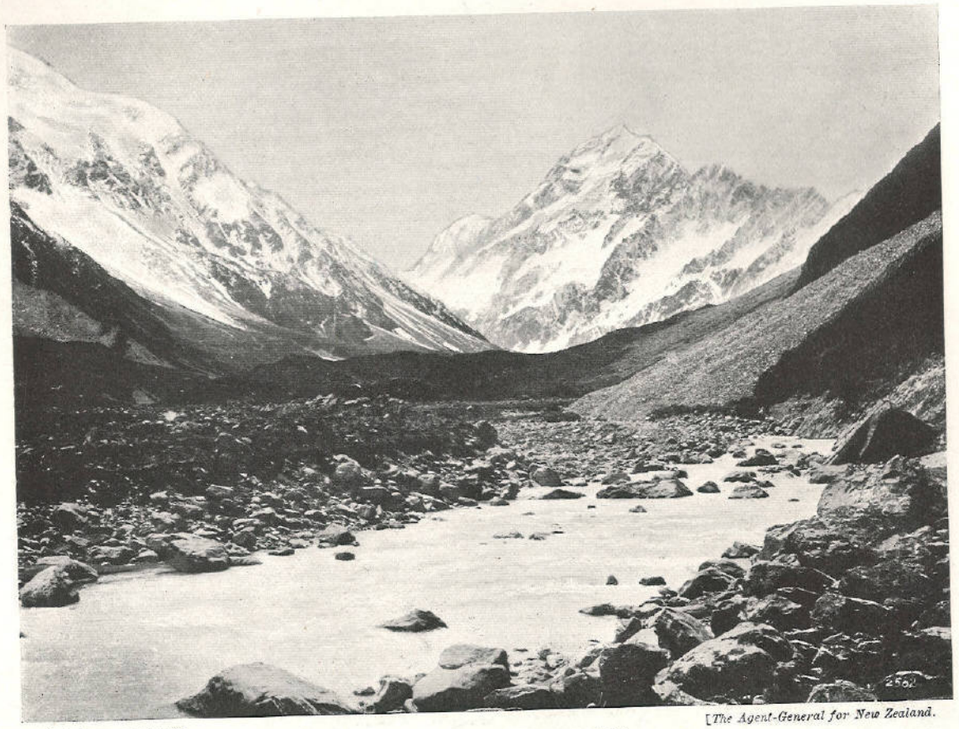


Photo by permission of] "AORANGI," OR MOUNT COOK. *[The Agent-General for New Zealand.*

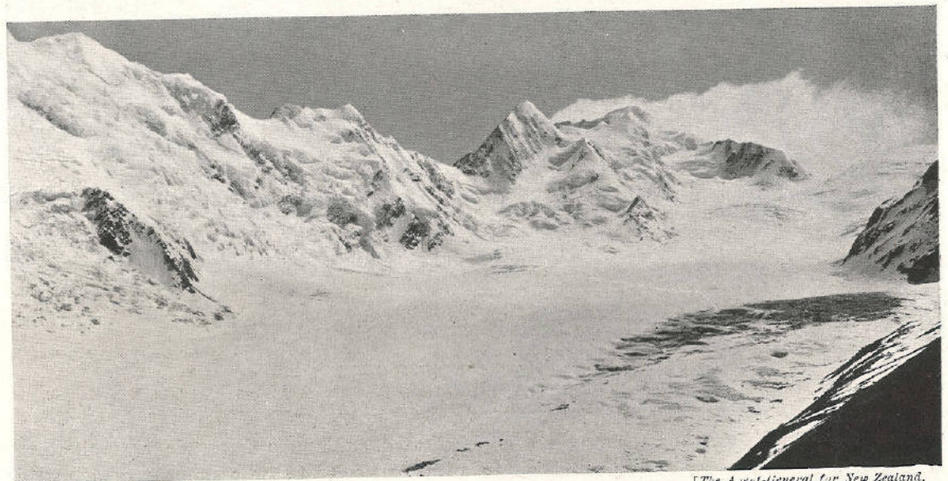
Aorangi is the highest of the magnificent group of peaks and sierras of the Southern Alps, South Island, New Zealand. Cliff mounted on cliff, and icefield on icefield, Aorangi soars 12,349 feet high.

Canoe, and to the biggest of them poems are dedicated. Many a fairy-tale is told of the spouting springs, and every deep pool claims its own particular taniwha or ngarara, a mythic dragon-like monster whose origin dates back to time immemorial. There is a very favourite Maori legend that, when the moon disappears each month, she goes to the great Lake of Aewa, and in the Wai-ora-a-Tane ("The Living Waters of Man"), bathes to renew her strength and prepare her for the next month's work of travelling again over her accustomed way through the heavens. This myth has a modern application, for in the warm pools Maoris are wont to stand and bathe themselves daily. Nor is such bathing confined to the Maoris, for the waters are believed by many to have great healing qualities, and they are now used by thousands of people from all parts of the world, who come to be strengthened by the mineral-charged waters of Geyserland.

The Southern Alps.—That sublime range of mountains, the Southern Alps, runs for over three hundred miles through the South Island westward, dominating with their superb ice-peaks and snow domes the great Canterbury plains, whose mighty and swift rivers are fed at their glaciers, and whose blue ice-lakes are nursed in their arms, their dazzling summits silver and purple and blue, their lower ranges densely clothed with forest and fringed with flowers. Among the ranges of Southern Westland, untrodden forests climb to vast snowfields; cascades tumble and thunder into deep ravines, blue lakes covered with bright-plumed ducks—sapphires set in extinct craters. Long green ascending aisles of dense fern, where the sun can scarcely penetrate, open to glimpses of foaming cataract, and stainless snowfields bound in a silence sacred to the ages, except for the echoes of avalanches falling far away among the fastnesses touching the sky.

Until comparatively recent years mountaineering in New Zealand had no scientific organization. The Southern Alps in all their glory were unexplored except by a few adventurous spirits, who, with more courage than organized skill, aspired to the conquest of heights as majestic as those of Switzerland. Skilled mountaineers from Europe afterwards joined the adventurous band of New Zealand alpinists, but not before Mount Cook, or in native, "Aorangi," twelve thousand three hundred and forty-nine feet high, had been captured. The early alpinists had to battle with trying weeks of travelling to the base of the mountains to be scaled, before bridges were built and tracts cut and huts erected. Even yet, there are countless unconquered peaks, for one peculiar feature of the whole range of the Southern Alps is the comparatively few natural passes.

Mount Cook, or Aorangi, is the highest of a magnificent group of peaks and sierras, "a glorious galaxy of snowy heights." Cliff mounted on cliff, and icefield on icefield, mount to a rarefied world, where man and his small doings seem puerile. Waterfalls and avalanches voice the white solitude; ice-cataracts and ice-spray dazzle the vision. To right and left, above and below, a



[Photo by permission of] [The Agent-General for New Zealand.

THE TOP OF TASMAN GLACIER.

The Tasman Glacier is the most famous one of the Southern Alps. A huge sloping glacier, 11,467 feet high and two miles wide, it is studded with ice-towers, and broken with gorges and valleys of ice.

stainless paradise of glittering beauty, and below the slopes, where the avalanches fall from the upper icefields, and dancing cascades run to meet them, in a valley rich with mountain flora, is the Hooker River, one of those white, turbulent, foaming mountain streams that has its origin in the glaciers.

At Mount Cook the botanist may revel. The alpine flora is exquisite. At three thousand feet above sea-level the edelweiss is luxuriant. Near the rivulets of the lower slopes the violet and evening primrose and forget-me-not are scattered, and many blossoming shrubs. All along the Hooker Valley the ferns and flowers are very beautiful, and at points magnificent views of Mount Cook and the Hooker Ice-Fall are obtained

Proceeding down the lower Hooker Valley, a magnificent view of the Tasman Glacier is seen, the most famous glacier of the Southern Alps, and all along the valley, framed by ice-pinnacles and majestic forest-hills, purple shadows alternating with gold, the luxuriant banks of the river are abloom with flowers and flowering shrubs. Giant mountain lilies and alpine daisies vie with violets and pimpernels.

Eleven thousand four hundred and sixty-seven feet high, eighteen miles long, and two miles wide,



[Photo by]

THE HOCHSTETTER ICE-FALLS, TASMAN GLACIER.

The Hochstetter Ice-falls have been described as a Niagara of frozen ice, a mile wide, falling four thousand feet in waves of milky whiteness, plunging down a rugged mountain side of more than 12,000 feet in height, a many-coloured, downward-rolling, frozen cataract.

[Muir & Moodie, Dunedin.



Photo by permission of] *[The Agent-General for New Zealand.*

TASMAN GLACIER.

All along the valley it is framed by ice-pinnacles and majestic forest-hills. Vast icefields stretch on its slopes and plateau, and blue snow-streams rush through its valleys and gorges.

this stern, proud monarch of the Southern Alps holds its snow-cowled head next highest of the peaks to its neighbour and giant chief, Mount Cook. The Tasman is a huge sloping glacier, studded with ice-towers, and broken with gorges and valleys of ice. Vast icefields stretch on its slopes and plateaus, and blue snow-streams rush through its valleys and gorges. Numerous ice-cascades descend into the Tasman Valley from its neighbouring glaciers and glittering domes.

The Hochstetter Ice-Fall of the Tasman Glacier has been described as a Niagara of frozen ice, a mile wide, falling four thousand feet in waves of milky whiteness, plunging down a rugged mountain side of more than twelve thousand feet in height, a many-coloured, downward-rolling, frozen cataract, "its hollows glinting a wondrous ethereal blue, and its splintered bergs and minarets glittering like countless points of fire." At the foot of the great ice-fall there are marvellous ice-caves and grottos, "gleaming with the strange lustre of refracted light, their floors gemmed with the loveliest of little purple pools."

No photograph or brush can give the faintest idea of this world of glittering ice and dark crag, with waterfalls flashing in sunlight or moonlight.

The Hochstetter Ice Cave is another of the wonders of this indescribable region: a grotto or cavern lustrous and gleaming white-blue, amid a wilderness of turrets and domes of ice, which catch and flash back marvellous colours of the changing sky—a world of ice afire with sparkling glints of rose and heliotrope and blue. Under the undimmed moonlight the region is a magic world, where it would be easy to imagine that in the exquisite ice-caves and grottos pure, cold spirits dwelt apart from the earth-dwellers of the lily fields that carpet the valleys below. In that upper white world of the Southern Alps thousands of sub-glacial rivers are born, which, under feet of solid ice, seek their way downward, emerge far down, and with the triumphant roar of white foaming rapids thunder their freedom to forest-shores.

The Blue Mountains, New South Wales.—In the Blue Mountains New South Wales possesses a feature which any country could be proud of including amongst the natural wonders existing within its boundaries. This mountain chain, whose highest peak is Mount Beemarang, four thousand one hundred feet high, forms part of the Great Corderillera, which runs parallel with the coast about eighty miles inland. The construction of the Blue Mountains is of ferruginous sandstone, whose cliffs and headlands rise up precipitously from the gullies ever green with ferns and other thick luxuriant foliage.

At the foot of the mountains, about thirty-six miles from Sydney, there are the Emu Plains, after which the elevation of the country gradually heightens until it reaches well over three thousand feet in the extreme west. Proceeding westward, after the Emu Plains, the "Sassafras Gully," which is not far from Springwood, demands special attention. This gully is very deep, and presents an absolute mass of rich fern foliage, shaded on every side by immense honeycombed overhanging rocks and ending in a lovely lagoon. Near Faulconbridge, forty-nine miles from Sydney, for the first time Mount Hay becomes visible. This lofty summit constitutes one of the precipitous sides of the tremendous ravine called the "Grose Valley," rising to an altitude of three thousand feet. Continuing westward, the scenery is wild and romantic, the bluish broken hills rising and overlapping each other in the far distance. Standing two thousand three hundred and forty-seven feet high is the famous resort, Lawson. The mountains here break more gently into the glens, while many a waterfall pitches over the brink of a steep precipice; this view, together with the innumerable hills and ravines, presents one of the finest sights imaginable.



Photo by permission of] *[The Agent-General for New Zealand.*

THE HOCHSTETTER ICE CAVE.

This gleaming white-blue cavern is situated in the Hochstetter Ice-Falls amidst a wilderness of turrets and domes of ice, catching and flashing back the marvellous colours of the changing sky.

Soon King's Tableland is reached. This is a fine promontory jutting out into the Jamieson Valley, where very beautiful mist-effects are often observable. A further attraction here is the curiously weathered sandstone cliffs, in which bands of ironstone in thin layers stand out in bold relief. To the north the waters of the glorious Wentworth Falls are descending, like a silver current over its three cascades of fully a thousand feet, to the basin at the head of the gorge. In the final drop the depth is so great that the continuous stream is scattered into spray. Rambling on through sublime and picturesque scenery, one approaches the Leura Falls, where many think the finest views of the Blue Mountains are to be seen. Near here stands a rocky hill whose summit has been moulded by Nature into three pinnacles and which has been called "The Three Sisters." Not far distant, also, is the "Orphan Rock," a grand old picturesque pillar of grey stone, detached from the main mass, towering far up into the sky. Further westward at Black-



Photo by permission of] [*The Agent-General for New South Wales.*

THE BLUE MOUNTAINS, NEW SOUTH WALES.

This is a view of the Blue Mountains, near Govett's Leap, showing how the rocks stand out on either side of the gorge, which is thickly covered with a rich luxuriant foliage.

heath, the world-famed "Govett's Leap" is seen, a descending mass of water of vast height swaying as the wind blows, to and fro, like the veil of a bride, the strong contrast of colour and the undulation so produced imparting a very singular and charming effect. Near by, there is the "Mermaid's Cave," giving one the impression of a glimpse into fairyland.

Some distance south-west are the famous Jenolan Caves, of which mention has already been made. The Blue Mountains, with their innumerable hills and ravines, their thousand valleys stretching like ocean waves to the horizon, hundreds of waterfalls with their beautiful cascades tumbling from the cliff, present extensive panoramas of the grandest description.

The Great Island-Venice of Nan-Matal.—On the east coast of Ponapé, a small island on the eastern edge of the Caroline group in the North-Western Pacific, lies a remarkable ancient water-town called Nan-Matal ("The Place of the *Matal*, or Water-ways"), which consists of a parallax of over fifty artificial islets of varying sizes, which lie dotted amongst

Photo by permission of] [*The Agent-General for New South Wales.*

THE BLUE MOUNTAINS.

A view showing the outline of undulations about and around the Kanangra Valley, near the Jenolan Caves.



Photo by the Author,] [*F. W. Christian, F.R.G.S.*

THE PRINCIPAL GATEWAY OF THE SANCTUARY OF NAN-TAUÁCH.

The entrance lies to the right of the great fallen horizontal basalt pillar, and is shadowed by a mighty *Ikoik*-tree, a mass of deep green foliage and vivid scarlet bells of blossom.

an intricate network of canals.

Some of these islets are merely small platforms of stone, much overgrown with a tangle of creepers, ferns and low scrub, standing only a few feet out of the water; whilst others are faced with solid and lofty walls, enclosing paved spaces, neatly-designed courts and ancient burial-places. All of them are constructed of prismatic basalt-blocks, laid alternately lengthways and crosswise in the shallow water.

The most remarkable of the larger islets of the Nan-Matal Venice are Itet, in the south, Pan-Katara, near the centre, and Nan-Tauách in the north-east corner. On Itet, according to native tradition, was kept an *I't*, or sacred Eel of enormous size. It lived in a long stone house, or den, with walls five feet high and four feet thick, enclosed by a small court. On a pavement within, regular offerings of food were laid—sometimes the entrails and flesh of a turtle; sometimes the body of a slave or prisoner of war.

Pan-Katara lies about half a mile to the north of Itet. Its name means "*The Place of Proclamation*," or "*The House of Government.*" It was the scene of the annual assembly of the Metalanim Parliament—king, priests, chiefs and commons together.

The northern angle of the ruined wall formerly surrounding the sacred precinct on Pan-Katara is twenty-seven feet above the canal.

Nan-Tauách, "*The Place of the Lofty Walls*," the largest and most important structure of the Nan-Matal ruins, lies about two miles north of Pan-Katara, a little to the right of Uchentau islet. It is almost square, and occupies an area of some twenty-three thousand four hundred square feet.

The water-front consists of a terrace of immense basaltic blocks, about seven feet wide, running the whole way round the foot of an outer wall of very solid masonry, fifteen feet thick and from twenty feet to nearly forty feet in height. Some of these basaltic shafts of which it is constructed are ten or twelve feet in length, three to four feet in thickness and three and a half feet across.

The style of architecture is massive, and grand in its simplicity, the blocks being laid alternately lengthways and crosswise. The outer wall measures one hundred and eighty-five feet by one hundred and fifteen feet, the only entrance being a large and imposing gateway on the western face towards Uchentau, and a small ruinous portal in the north-east corner. As one enters from the terraced landing-place, the wall measures twenty-five feet, and on the right side some thirty feet in height. The latter is almost hidden from view by a great *Ikoik*, or *Kanáwa* tree, a mass of splendid, deep emerald-green foliage, starred with small scarlet trumpet-shaped flowers, vivid as sparks of fire. Beyond is a spacious *Ilu*, or courtyard, strewn with fragments of monstrous fallen pillars, overgrown by weeds, ferns and shrubs of varying height springing up between them.

An inner terraced enclosure, topped by a projecting frieze, or cornice, of quite a Japanese design, forms a second conforming parallelogram of wall, eighty-five by seventy-five feet in length, eight feet in thickness, and fifteen to eighteen feet in height.

The great central vault of Nan-Tauách presents a very striking appearance. It is roofed in by basaltic blocks of great length and thickness, and resembles some of the sepulchral structures of the mysterious early folk who preceded the Ainoe in Japan. Native tradition declares it to be the mausoleum of King Chau-te-Leur, a mighty monarch of old, slain in battle with a horde of invaders who came in a great war-fleet from the south, under the leadership of a fierce and terrible warrior named Icho-Kalakal, now enshrined as a formidable local deity, the War-God, and ancestor of the present line of *Ichi-pau*, or titular kings of Metalanim.

It seems that these Metalanim ruins are very old, and, indeed, the presence of great forest-trees, such as the lofty Indian fig-tree, or banyan, is decisive of a considerable antiquity. The long



Photo by the Author,] [*F. W. Christian, F.R.G.S.*

NAN-TAUÁCH.

The north-eastern angle of outer wall at Nan-Tauách, showing a great *Aio*, or Indian fig-tree, firm-rooted in the masonry, together with masses of micronesian hartstongue or birds'-nest fern, some of the spathes or fronds of which are nearly six feet long.

root-sprays buttressing these banyan-trees are continually sending out myriads of tiny root-fibres into every crevice of the masonry, which, as they swell into growth, are continually wrenching the enormous blocks out of their places.

Local tradition is somewhat meagre about the origin of this mysterious City of the Waters; the ruins are certainly not Javanese, their design not in the least recalling that of the Buddhist temple of Boro-bodoer, or the Shiva temples of Brambanam.

Javanese settlers have certainly visited Ponapé, for the Kiti district on the south-west coast has several well-defined Javanese place-names, and the chief's language, or court-speech, of the island is full of Javanese words. But these arrivals probably came as conquerors and civilizers of a later date, not as architects or engineers. A quaint old Ponapean legend declares that the Nan-Matal



Photo by] [*Muir & Moodie, Dunedin.*

THE ARATIATIA RAPIDS.

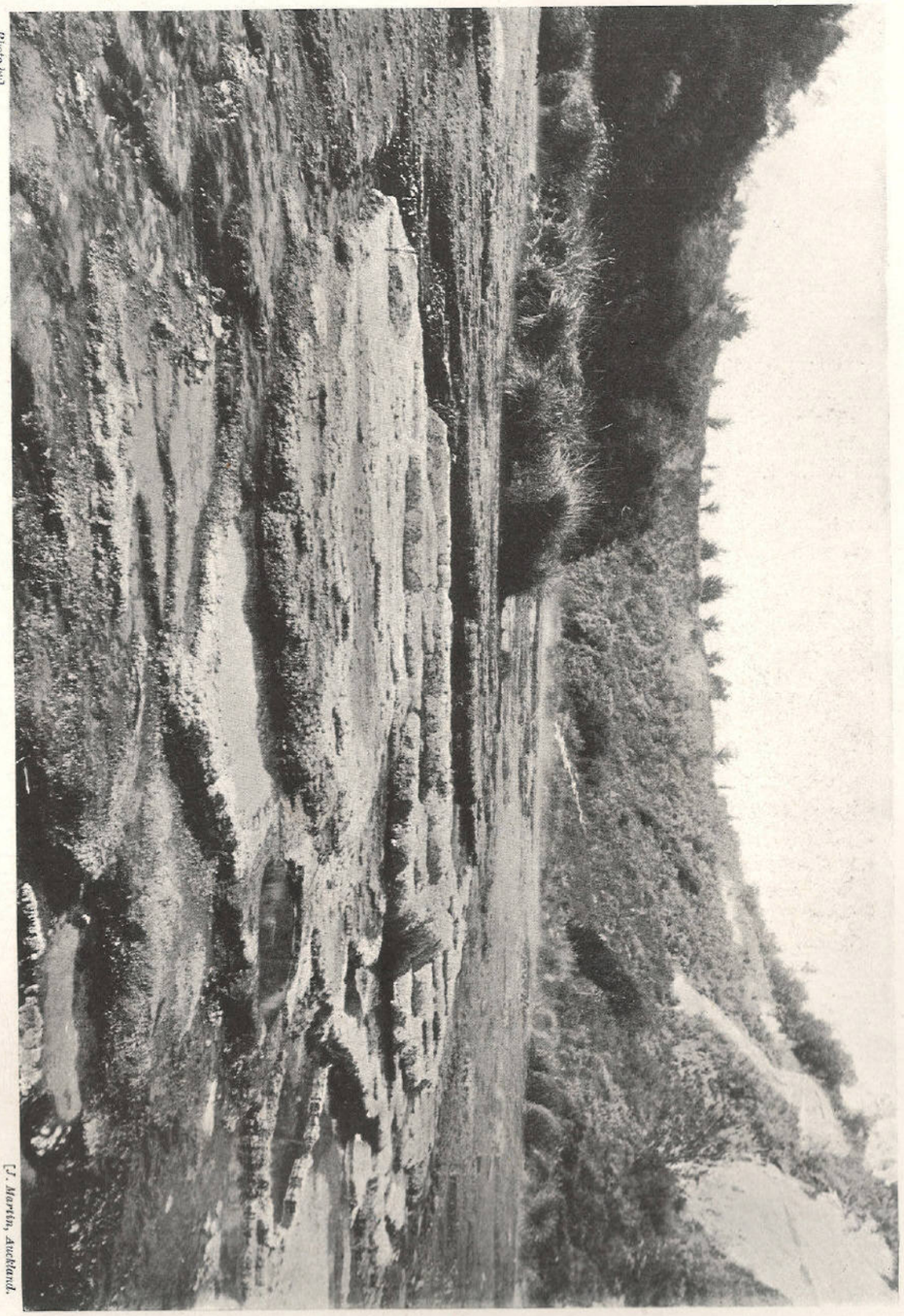
About three and a half miles from Wairakei the river Waikato rushes with furious speed through a narrow rocky channel about fifty feet wide, forming foaming cataracts, rushing rapids and deep dark pools.

Venice was built by the magic power of two great princes of the ancient *Ani-Aramach*, or Titan races, named Olo-sipa and Olo-sopa, who, by incantations of mighty power, caused the great masses of stone in the hands of invisible genii to come flying through the air to settle in their appointed places.

Perhaps early Japanese adventurers discovered Ponapé before the Malays and Javanese, and have helped the rude, clumsy giant-folk of the old black Ocean-Custite races to plan just such a structure as the Water City of Nan-Matal. For Japan is full of water-towns, thickly seamed with moats and canals, and the Japanese of old were mighty builders in stone.

Another curious piece of evidence is that, about two hundred and fifty miles south-south-east of Ponapé, there is a lagoon-island, called Lele. This small speck of land, only a few miles square, is

Photo by]



THE WHITE TERRACE, TAUPO.

This beautiful sinter terrace gives an idea, in a very minor degree, of the appearance of the famous Pink and White Terraces which were destroyed in 1886 by the eruption of Mount Tarawera.

[*J. Martin, Auckland.*



"THE PORRIDGE POT," TIKITERE.

"The Porridge Pot" is a remarkable lake where boiling mud and water is ever bubbling and hissing.

[The Agent-General for New Zealand.

Photo by permission of]

faced with solid wharves and piers of stone, and covered with remains of vast Cyclopean walls, built of basaltic stones of an extraordinary size, and cut through and through with artificial canals. A little way back from the beach lies a massive ruinous fortress, with walls fifteen feet in thickness and from sixteen to thirty feet in height.

This might very well have been the work of some Southern Japanese Dai-Miyo, or great feudal noble, exiled, perhaps, in one of the civil wars, who, coming down from Nagasaki, Hiro-shima or Osaka, in a big war-vessel, or, possibly, a small fleet of them, conquered this little spot.

The Cyclopean fortress of Lele is laid down on very much the same lines of ground-plan as the old feudal castle of Osaka, but, naturally, on a somewhat smaller scale.

So quite likely it was some adventurous noble or great sea captain of the race-stock and dauntless spirit of our brave Japanese allies who took the chief part in building these wonderful works in stone, the standing wonder and mystery of these far-off Eastern Carolines.

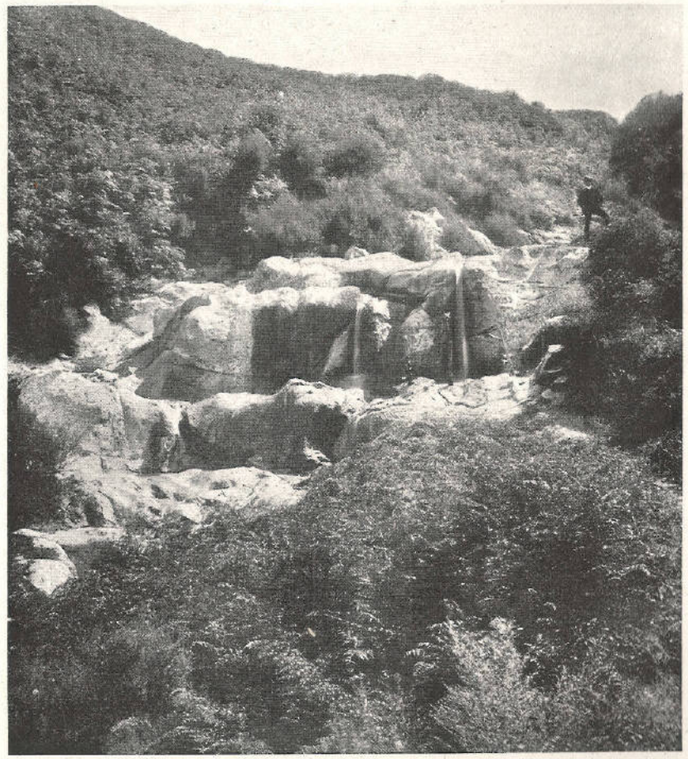


Photo by] [J. Martin, Auckland.

TIKITERE HOT WATER FALLS.

There is a place where a warm stream leaps into a series of cascades over a rocky decline.

The White Terrace, Taupo.—The volcano, Tarawera, which in June, 1886, destroyed the famous pink and white terraces, is in the great volcanic track known as the "Taupo Zone," but Lake Taupo and its white terrace were too distant from the eruption to suffer. The lake covers an area of about two hundred and forty-two square miles, and the White Terrace, Taupo, is at the height of a hundred feet above the present shores. A second terrace, but less perfect, is at the height of four hundred feet above the lake. The Maoris told Von Hochstetter that the White Terrace, Taupo, was once upon the level of the lake, which has subsided, but no living native knew the lake at the terrace height. The whole area of the Taupo volcanic zone is a region of hot springs, solfataras, warm creeks and active geysers, and it is probable that, as the pink and white terraces were unknown for ages, except to a few Maoris, there may be other of the beautiful terraces hidden away in the wild tangle of mountains and lakes. A few miles south of the Kakaramea, another of the mountains in the Taupo volcanic zone, is the "Primrose Terrace," which Professor Thomas describes amid a group of hot springs and sulphur fumaroles: "One of the most considerable of these springs has formed a deposit of sinter which has received the name of the



Photo by permission of] [*The Agent-General for New Zealand.*

"THE INFERNO," TIKITERE.

"The Inferno" is the chief boiling pool of Tikitere, and is a precipitous yawning black pit in which a great mud geyser is in full activity.

'Primrose Terrace.' On the flat summit of a slight elevation is a platform of sinter some five yards in diameter. In the centre is a large circular pool of water, its margin formed by a raised rim of sinter of beautifully-fretted form. . . . The water falls down a gentle slope, which spreads out in fan-like shape. This water is covered with greyish-white sinter, which is not properly terraced, but shows very beautiful ripple marks. To the right is a pool of intensely yellow (or sometimes orange-red) mud, which owes its colour to the presence of sulphur containing selenium." The water from the terrace forms a waterfall into a gully, and both the waterfall and the bed of the stream are lined with grey and white sinter, and the course of the stream marked by small hot springs.

But a word description can convey little of the marvellous colour-scheme of the setting, the blues and golds and greens, or of giant Mount Kakaramea dominating the scene, its sides covered with many-coloured earths, with steam-wraiths beckoning here and there.

Although the White Terrace of Taupo and the "Primrose Terrace" by no means approach in loveliness the destroyed pink and white terraces of Lake Rotomahana, the value of their strange beauty is enhanced that they are still in existence.

On the Waikato River, about nine miles from Taupo, there are the marvellously beautiful Aratiatia Rapids. Here the river, in its winding course between steep rocky banks, drops over two hundred feet in the short distance of half a mile. The whole is confined within a narrow channel about fifty feet wide, which still further increases the impetus to the agitated waters, while, as

if to add insult to injury, vast boulders stand in midstream attempting to stay the foaming torrent, which is always endeavouring to release itself and so be free of the rushing mass behind it.

The Valley of Tikitere.—A drive of several hours from Rotorua, within sight of the fatal Mount Tarawera, is the valley of Tikitere, a portion of which is known as the "Gates of Hades," but, unlike the popular conception of Hades, its beauties are as wondrous as its horrors. The hydro-thermal action is so great that the ground all around is in a continual tremble. In the centre of the valley are two boiling lakes, with mud volcanoes and boiling springs in sinister activity.

"The Porridge Pot" is one of the most famous of the boiling mud pools of Tikitere and "The Inferno" is the chief of its boiling springs. Among the remarkable thermal wonders of the district are the Tikitere Hot Waterfalls, tumbling over a rocky decline, between ferny banks backed by luxuriant forest.

This "Gate of Hades," as Tikitere has been called, leading to an inferno of sulphurous horrors, is entered, not by those who have "abandoned hope," but chiefly by those who are in search of a new term of life by bathing in the warm mineral waters, or those in search of Nature's strange and awe-inspiring sight. The whole surrounding country is rich with forests and streams and glows with colour.

It is the diversity of the scenery that makes this district so wonderful; the horrors and terrors of the steaming, hissing and trembling earth are forgotten in the vistas of blue lake and shady forest and swift, bright streams. It is a fairy-spot of gorgeous painting, despite the Inferno of the valley.



Photo by] [*Muir & Moodie, Dunedin.*

ALL THAT IS LEFT OF WAIROA.

Wairoa was a village nestling amidst green trees on the borders of a lake till the fatal night in 1886, when the Tarawera awoke, without warning, from a sleep of centuries, and poured destruction on the village.

the dark greens of the bush-clothed hills contrasting with terraces glittering like snow, and with the reds and yellows of the foliage. Innumerable bright, cold springs gush forth over fern and rock, forming coloured pools. It is a realm of sulphur, and within a mile of the hot valley a large quantity of the sulphur is dug by the Maoris. It is the sulphur and other minerals in the baths that have made them so valuable to invalids. The sulphur is in the air as well as in the water, and streaks the landscape with beautiful colours—blue, red, orange and other brilliant hues.

Icebergs.—Owing to the spherical form of the earth and the obliquity of its axis, the sun's rays are entirely withdrawn from the land in the Arctic and Antarctic zone for a portion of the year. Of course, the result of this absence of any warmth from the sun is that this part of the earth's



Photo by [*Nordenskjöld.*

AN ICEBERG IN THE ANTARCTIC.

Antarctic Icebergs have excited the wonder of travellers chiefly by their enormous mass. Unlike those of the northern seas, they are little indented, but often they attain a precipitous height of over 230 feet.

surface is always wrapped in ice, and intense frost rules supreme through the long and dreary nights that prevail.

Huge glaciers, very similar to the great icefields of the Alps, abound everywhere amidst their snow-white surroundings, and gradually slipping from the mountains and hills from which they take their origin, finally reach the sea coast. On this downward path tremendous pressure is brought upon the sliding snow, and by the time it reaches the sea it has become a huge mass of ice upon which the waves are constantly breaking, with the result that the overhanging parts become detached and drift out to sea in whatever direction the prevailing current happens to lead them. These bergs, as they are now called, vary considerably in size, some being quite small, while others cover large areas and rise to a considerable height. It is estimated that as only one-ninth of the bulk of an iceberg appears above the surface, it is not less than nine times as large as it looks.



Painted by G. H. Edwards. *Photo by Muir & Moodie, Dunedin.*

THE SUTHERLAND FALLS.

This famous waterfall in the Arthur Valley, New Zealand, measures 1,904 feet from the top to the bottom, and is thus the highest known fall in the World. It is divided into three leaps of 815 feet, 751 feet and 338 feet.

Icebergs have frequently been mistaken by travellers for little snow-clad islands, as in many may be seen small inlets made by the continuous washing of the waves, giving the appearance of little bays, and so helping the illusion.

No sight is more interesting than the view of a number of these ice formations in the distance. There is an infinite variety of shapes, and it requires but little stretch of the imagination to picture them as towers, churches, obelisks and pyramids, or a floating mountain range, their great beauty and grandeur enhanced by their slow and stately movements, which bring into the rays of light the snow-white ridges and pinnacles which glisten at every angle. As these icebergs drift from the scene of frost and snow, they gradually melt away, their size diminishing by slow degrees until they finally lose themselves in the oceans of the world.

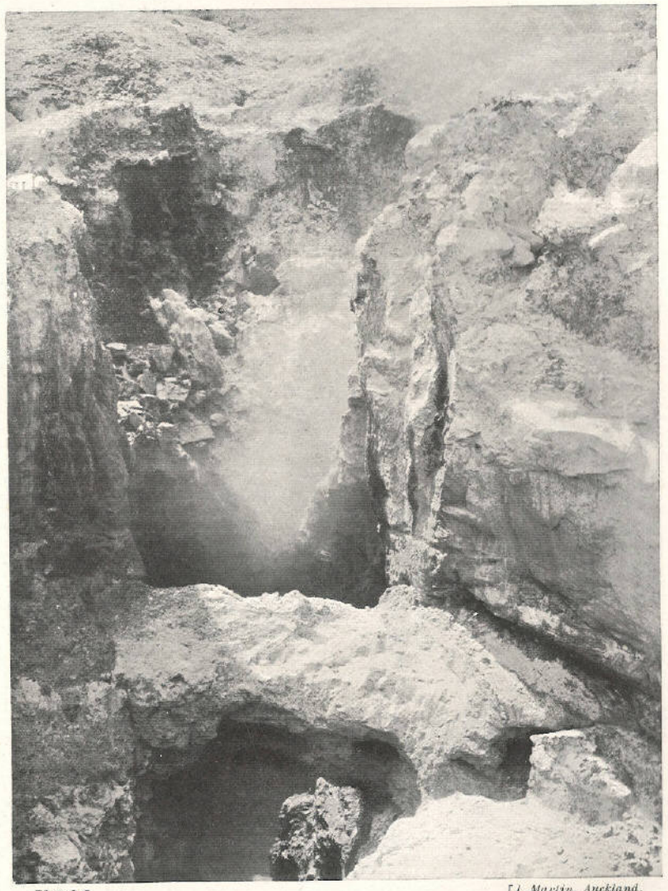


Photo by] [*J. Martin, Auckland.*

THE DEVIL'S BRIDGE, WAIOTAPU.

Nature has thrown a perilous bridge over this mighty crevasse, from whose horrible depths arise sulphurous fumes and strange rumblings ominously bearing witness of the volcanic activity of this district.

Wairoa.—The native village of Wairoa, before the eruption of Mount Tarawera, in 1886, was one of the beauty spots in the Thermal district of the North Island, connecting Rotorua, nine miles distant, with Tarawera and Lake Rotomahana. The old road from Rotorua was of enchanting loveliness, the slopes were crimson with rata and yellow with broom, and everywhere the glinting, dancing water. But the fatal night the volcano Tarawera awoke without warning from a sleep of centuries, and poured mud and lava and stones on the valleys beneath, Wairoa was destroyed. "Wairoa is gone!" was the cry of those at Rotorua. When the paroxysm of the volcano had spent itself, and light struggled through a noonday dawn, a weird, desolate world emerged. All that was left of the village, among green trees which had stood on the shores of a lake intensely blue, were the roofs and broken timber of the old mill and bridges and warés embedded in ash and caking lavas. All the once flowering hill-slopes, green valleys and prancing streams, for miles around, were desolate, lifeless reaches of slate-coloured mud, and the once lovely lake an immense and awful basin, studded with innumerable volcanic cones and geysers, and the site of the famous pink and white terraces a hideous abyss.

CHAPTER XI.

By L. "ALIEN" BAKER.

The Sutherland Falls.—In the Fiordland of the South Island of New Zealand, seven miles from Milford, are the Sutherland Falls. But the overland route to the falls from the head of Lake Te Anau, through thirty miles of magnificent scenery of the wildest and most beautiful description, is more popular. The way through inland Fiordland is for some distance beside the Clinton River, which cuts through the great valley-cañon—a billowy, roaring, white-crested glacial torrent—



By permission of] [*The Agent-General for New Zealand.*

"THE GIANT'S PORRIDGE POT," WAIOTAPU.

The seething surface of this lake of mud is covered with bubbles caused by the gas thrown off in the ferment. These bubbles as they disperse form ever-changing patterns in the "porridge."

through scenes of gorgeous colouring, between cliffs three thousand feet and four thousand feet high which slope back to snowy peaks six thousand feet and seven thousand feet high, whose summits vanish in the clouds. Much of the track through this marvellous valley goes through forest which drapes even its granite walls. Clumps of rata are red with blossom, clematis, whose purity rivals the distant peaks, rests lightly like a snow-shower on the dark beech trees, or, entwined with its purple sister, flings garlands from bough to bough. Tall palm-ferns grow on every side, and through long aisles, carpeted with thick moss of the fallen leaves of centuries—terra-cotta, gold and green —the over-arching forest roof sheds down a green transforming light. The strange cries of the *wekas* and other native birds accentuate the forest silence. But approaching the Sutherland Falls, there is a mighty roar of waters—not from this fall alone, but from the cascades and foaming cataracts which hurl themselves down grim precipices and rush through hidden gorges and ravines. Waterfalls are everywhere. The quicksilver of cascades flashes from dark cliffs and quivers in the sunshine. Many of the falls are so ethereal that they sway to the wind. Mountains are every-



Photo by] [*Sir Ernest Shackleton.*

AN ICE-CAVERN IN THE ANTARCTIC.

These photographs of ice-caverns in the vicinity of Mount Erebus were taken during the expedition of Sir Ernest Shackleton.

where. And amid this scenic paradise of snow-capped peak and fairyland forest and stream the Sutherland Fall bounds down its one thousand nine hundred feet in three great leaps. It measures one thousand nine hundred feet from top to bottom, the first is eight hundred and fifteen feet, the second seven hundred and fifty-one feet and the third three hundred and thirty-eight feet, but it is one fall, not a series of cascades.

Waiotapu.—Waiotapu, one of the three wonderful geyser-valleys of the Thermal Springs country, lies twenty miles from Rotorua. From Wairoa, for some distance up the valley which at one time was a totara forest, traces of the eruption are many. At the top of the hill looking towards Tarawera its enormous chasm is seen, and the magnificent Munga-Kakaramea, "Mountain of Coloured Earth," or "Rainbow Mountain," stands a gorgeous sentinel guarding the valley steaming with hot springs and gleaming with coloured pools. On every side is evidence in the coloured earth and the fissured sides of the mountains of a long-past fierce volcanic activity—so long past that fern and cool green forest groves shade the crater-cliffs.

In this valley of colour the contrasts are exquisite. Nature, the great artist, has toned the yellows and reds with the greens, has set cool blue and heliotrope lakes beside hot cauldrons and waterfalls. Here sinter levels and gleaming alum cliffs and the brilliant-hued pools that vie with the coloured earths are fringed and belted by dark tropical vegetation and manuk shrubberies, while the leaping Waiotapu coursing down the cañon to meet the Waikato, fringed with flax and palm, completes the picture.

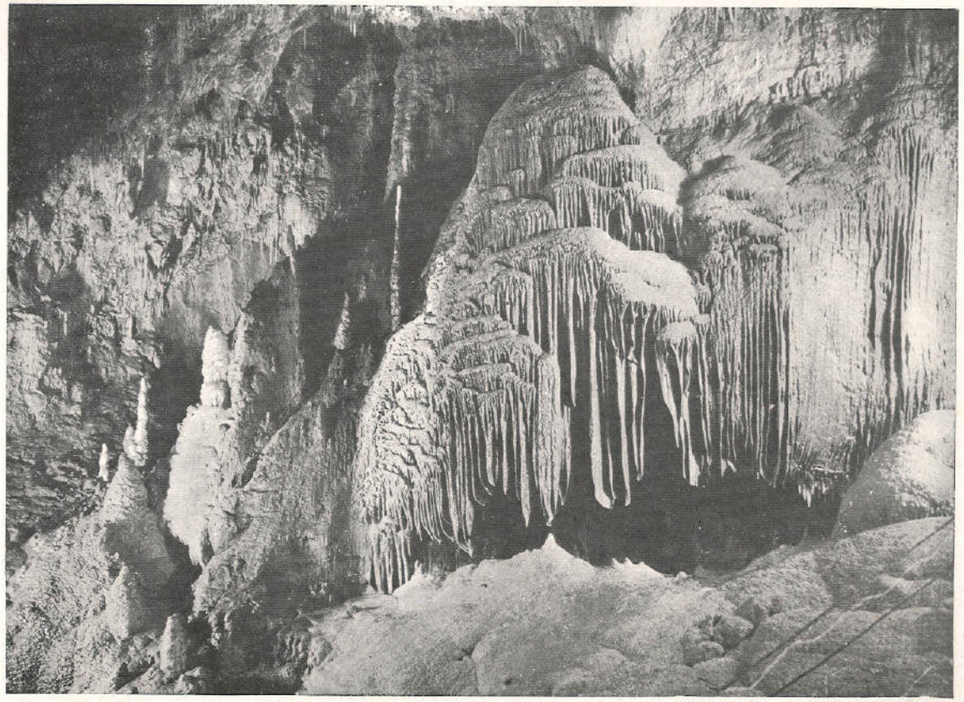
On the upper Waiotapu stream is the large mud-volcano here illustrated, known by the name



Photo by] [*Sir Ernest Shackleton.*

AN ICE-CAVERN IN THE ANTARCTIC.

The walls that support the tons of snow forming the roofs of these caverns are also of snow, packed so closely that it becomes ice.



By permission of] [*The Agent-General for New South Wales.*

THE YARRANGOBILLY CAVES, NEW SOUTH WALES.

The stalactites in King Solomon's Temple, as this cave is called, are particularly remarkable for their wonderful colouring and beautiful shapes.

of "The Giant's Porridge Pot," a conical mound ten feet high, open at the top and filled with thick boiling mud that resembles porridge, from the seething surface of which bubbles of gas throw up small spurts of mud, which, falling into the pot again, take on shapes of flowers and rosettes. Steps have been erected at one side that the visitor may ascend and watch the action of the crater.

Another of the remarkable sights of Waiotapu is the great fumarole, "The Devil's Bridge," in formation like a bridge of rock over a chasm, from which at intervals issue sights and sounds reminiscent of the "lake of fire and brimstone" of another region.

A few miles further away, under the shadow of the Paeroa Mountain, "a great green range sodden with thermal action," is Waikite, with its boiling river flowing through a natural park of trees and flowering shrubs. Here are enchanting translucent springs of boiling water bubbling between forest and fern.

The Ice Caves, Antarctic.—Professor Douglas Mawson, in "The Heart of the Antarctic," describing the beautiful ice and snow phenomenon in the district of Cape Royds, says:

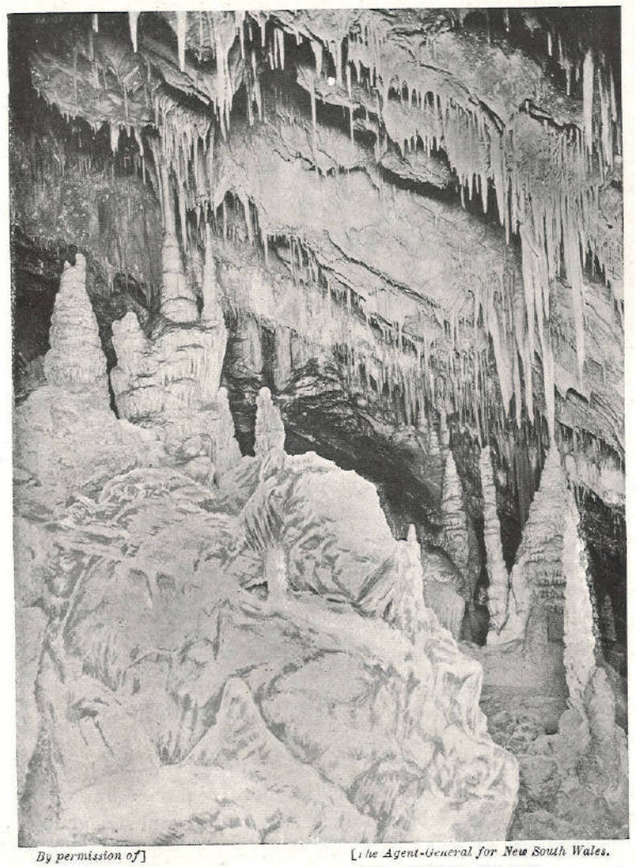
"During the autumn, sea spray, dashing on the coast, remains behind as ice. Thus a huge ice-foot develops along the coast. Grottos are not uncommon in this ice-foot, resembling limestone caves of remarkable beauty, filled with stalactites (up to several feet in length) and stalagmites of ice. These owe their origin largely to the fact that the more saline residual water dripping from the roof is further chilled by exposure, and thus continual additions are made to the formations from which the drip has taken place. The water is highly saline, and stalagmites are produced only at very low temperatures, when they consist entirely of cryohydrate."

The accompanying illustrations convey an idea of these beautiful caves, in a region of prisms and crystal flowers.

King Solomon's Temple, Yarrangobilly Caves.—The caves of New South Wales are situated in country of the most beautiful description among the hills and valleys of the Blue Mountains, "far from the madding crowd," where the wallabies run free.

The route to the caves through these precipitous gorges and valleys of gigantic and glorious views is a preparation for anything of the marvellous that Nature may have further to offer. Caves are more or less alike in all parts of the world, but the wallaby is not always met on the route, nor does the route always afford such a magnificent panorama as that spread out before the visitor of these caves of New South Wales. Arrived on the summits where the caves are situated, headland beyond headland and miles of valley stretch out, and a thousand mountain peaks raise their heads from gorgeous forest.

Not volcanic fire, but running water has formed the caves. They are in a bed of limestone, through which the underground creeks, working their way, have carved through many ages fantastic caverns, temples and grottos and tunnels, that no art can equal. They take innumerable forms, these glittering stalactites and stalagmites—statues, birds, delicately wrought lace, shawls and cascades. Some of them are pure white, and others are red, yellow, grey or apricot. In these Aladdin caves lighted by electricity, gleaming as with a million jewels, the mystery is enhanced by the sight and sound of underground water.



By permission of [*the Agent-General for New South Wales.*

YARRANGOBILLY CAVES, NEW SOUTH WALES.

Adorned with turrets and minarets of jewel-like brilliancy, and hung with a "fringed curtain" of diamonds, these caves rival the fabled splendours of an Aladdin Palace.

The Yarrangobilly River has cut its way through in a belt of limestone from half a mile to a mile in width and for six or seven miles long; the weather-worn and water-worn precipices are carved into grotesque shapes, and where the river has cut its way through the limestone and flows under it the Yarrangobilly caves are formed. The entrance is from the top of a plateau.

"King Solomon's Temple," with the other Yarrangobilly Caves, has a kingly surrounding of Alpine scenery; but the beauties of the upper world are forgotten in the underground temple that Nature built long before man erected his sacred edifices. It is gorgeous with

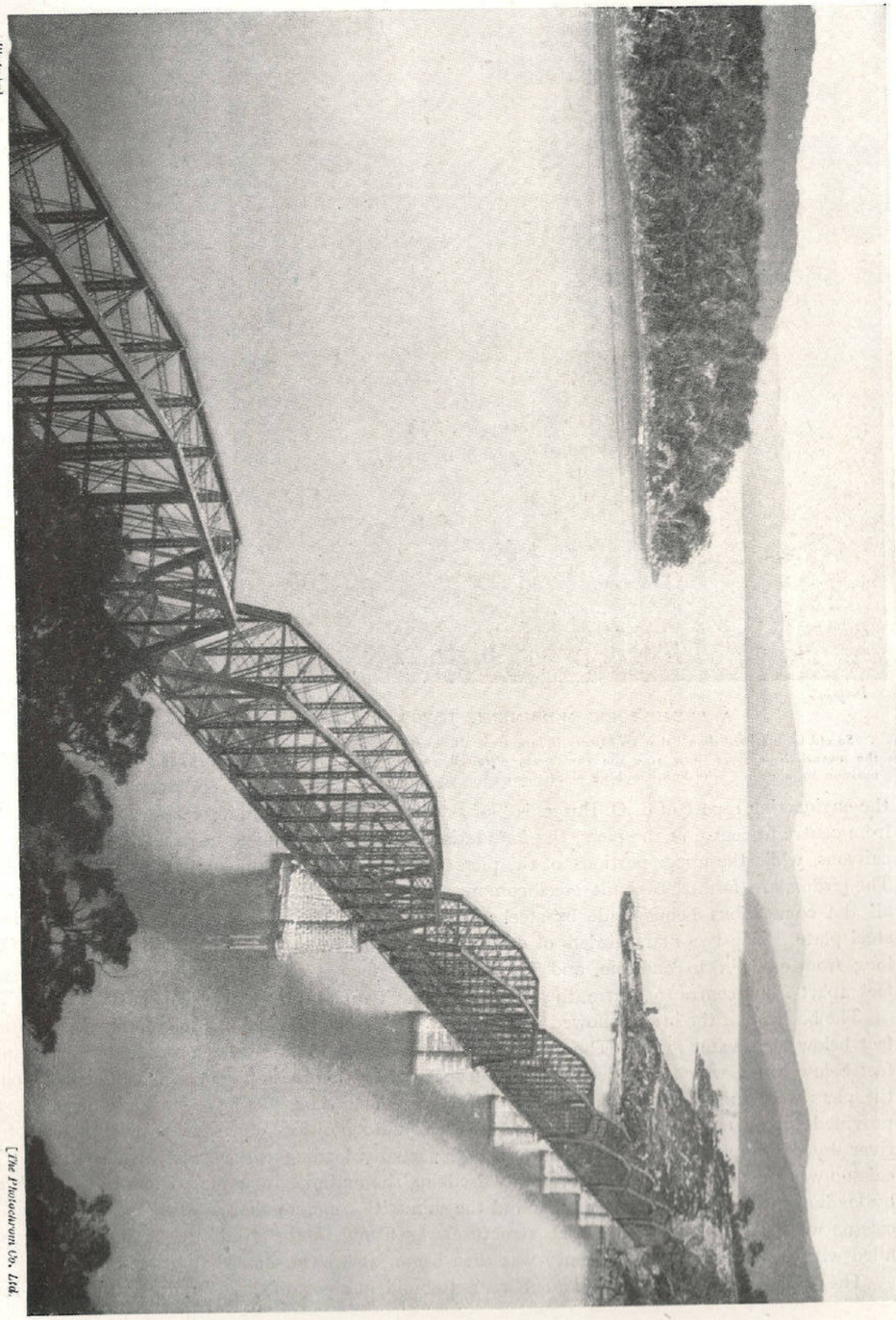


Photo by [*The Photochrom Co. Ltd.*

THE HAWKESBURY RIVER BRIDGE.

This bridge, measuring over 9,000 feet, is the longest in Australia. It is the deepest-set bridge in the world, the piers which support the spandrels reaching a depth of 162 feet in the bed of the river.

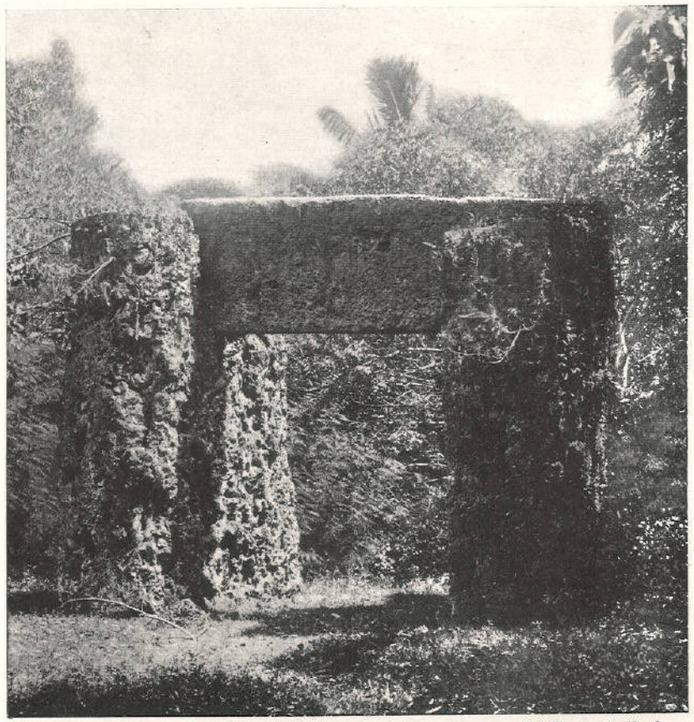


Photo by [*J. Martin, Auckland.*

A PRE-HISTORIC MONUMENT, TONGA.

So old is this "trilithon" that its history is forgotten. It remains to be an enigma for the twentieth century—how was the centre stone raised twenty feet to its present position by a people who knew nothing of mechanics?

coral-like drapery and exquisite carving and pillars, and, as its name suggests, might have been one of the chambers of King Solomon's Temple which he adorned for the Oracle.

The Hawkesbury Bridge.—The Hawkesbury Bridge, Hawkesbury River, New South Wales, one of the marvels of engineering, was designed to unite two great sections of railway, one starting from Sydney and branching in a westerly, southerly and south-westerly direction, the other from the sea-coast, one hundred miles from Sydney, communicating with the northern district and with Queensland.

At the site of the bridge, about seven miles from the sea, the engineers were confronted by an estuary width of six thousand feet. The bridge from embankment to embankment, according to the engineering report of C. O. Burge, is "of seven spans of four hundred and sixteen feet each, from centre to centre of the piers, the foundations for the latter being of concrete encased in steel caissons, while the upper portions of the piers and the whole of the abutments are of masonry. The girders are formed of built steel compression-members and solid steel eye-bar tension-rods, all the connections being made by steel pins. The cross-girders and rail-bearers are of riveted steel plate. The two main girders of each span are four hundred and ten feet and a half-inch long from end pin to end pin, and forty-eight feet deep at centre, and are placed twenty-eight feet apart from centre to centre, the bridge carrying two lines of railway."

The borings for the bridge showed a mud bed to a depth of from sixty to one hundred and seventy feet below high-water mark. The greatest depth of the foundations is one hundred and sixty-two feet below water, which is stated to be the deepest bridge-foundations yet sunk. The caissons for the piers were sunk through the mud as follows: "The shoe, having been built on shore, and provided with a timber false bottom, was floated out to position, and sunk to the bottom of the river by removing the temporary bottom and partially loading the caisson with concrete. The caisson was then sunk through the mud by dredging the material from the bottom of the wells and by loading the space between the wells and the skin with concrete, more steel being built up as the caisson went down. As soon as the structure was firmly in the sand, the dredging wells were filled with concrete, and the masonry was then begun at a level somewhat below low water."

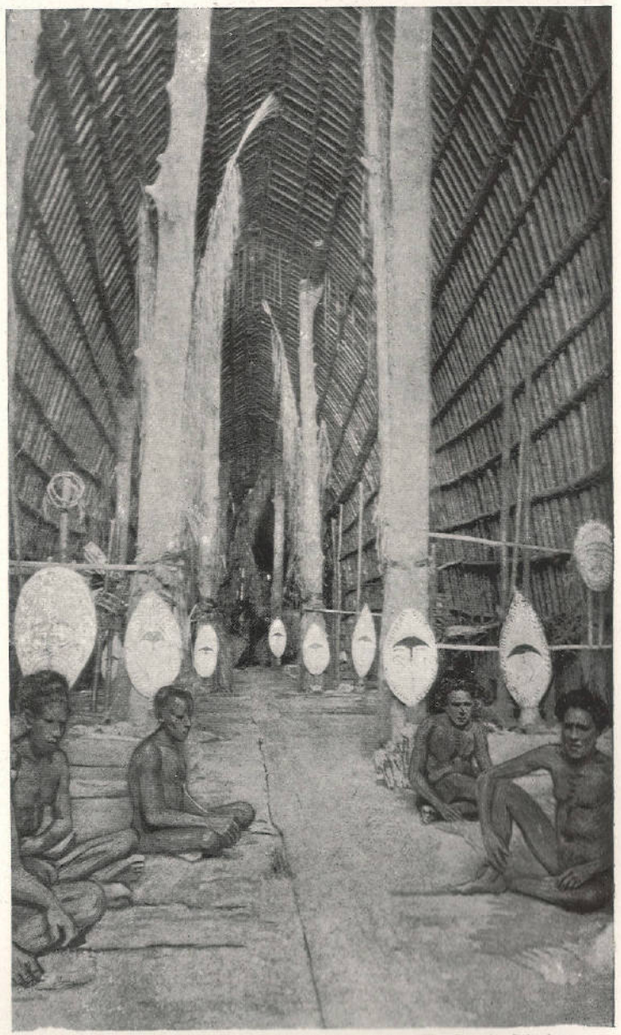
The bridge, which took two and a half years to build, at a cost of three hundred and twenty-seven

thousand pounds, is as graceful as it is strong, and is more than half a mile in length. Before its opening, in 1889, the trains from Sydney were met at the river and the passengers transhipped and conveyed across to the connecting cars for northern stations. At the site of the crossing the scenery is picturesque and wild, and at all points along the river is grandly impressive. To the west the Blue Mountains touch the sky, and the grandeur of hill and valley scenery is unsurpassed. Anthony Trollope, drawing comparisons between the Hawkesbury River and the Rhine and the Upper Mississippi, says:

"The Rhine has its castles and its islands, and it has, too, in its favour, the bright colours of its waters. The Upper Mississippi has no castles, nor are its waters bright, but it has islands. . . . The Hawkesbury has neither castles nor has it bright, clear waters like the Rhine, but the headlands are higher, the bluffs are bolder, and the turns and manœuvres of the course which the waters have made for themselves are grander and to me more enchanting than those of either the European or American rivers."

Prehistoric Monument, Tonga.—The Tongan and Samoan natives of the Friendly Islands had in their pre-Christianized days many strange gods. The Tongans ascribed all their evil to the anger of the good gods, or to the evil intention of the bad gods. The Samoans had a multitude of gods, one for every village. They had a tradition of a time when only the heavens were inhabited, Bettany says; then a long time ago the heaven-inhabitants fell down into the sea which covered the earth, and so the earth was peopled. In one district they had a stone rain-god; when there was too much rain it was put to the fire to dry to cause the rain to stop, and when there was drought dipped into water.

The Tongans had spiritual chiefs supposed to be descended from the gods; most of the gods had a separate temple and a separate priest. But to Bolotoo, the abode of the gods, where the



From "The New New Guinea," by permission of the author, Miss Beatrice Grimshaw.

A CANNIBAL TEMPLE, NEW GUINEA.

Associated with the horrors of cannibalistic rites, the temple is suitably ornamented with alligators' skulls, pigs' jaws, and hideous carved faces.

souls of the aristocracy appeared in human likeness immediately after death, the "lower classes" did not go. And this accounts, perhaps, for the rarity of their prehistoric tombs and monuments. Miss Beatrice Grimshaw, in "The Strange South Seas," commenting on the tombs of the chiefs of Tongans of divine descent, says that for many centuries they were buried in "great oblong raised enclosures, three-terraced, and built of rough-hewn, closely-fitted slabs from the coral reef." Two of these great tombs remain, but they are older than the recollection of the Tongans, and there are no data concerning them.

The prehistoric monument of the illustration is evidently that of which Miss Beatrice Grimshaw says: "There is also a 'trilithon' erection of three large blocks of stone some miles away [from the tombs], concerning which island traditions are silent. It could not have been constructed by hand labour alone; some mechanical device must have been employed to raise the centre stone to its present position. The ancient Tongans, however, knew nothing of mechanics, and an interesting problem is, therefore, set for antiquarians to solve. The height of the side supports is about twenty feet, and the centre cross-piece, which rests in a socket on each side, is a little less in length."



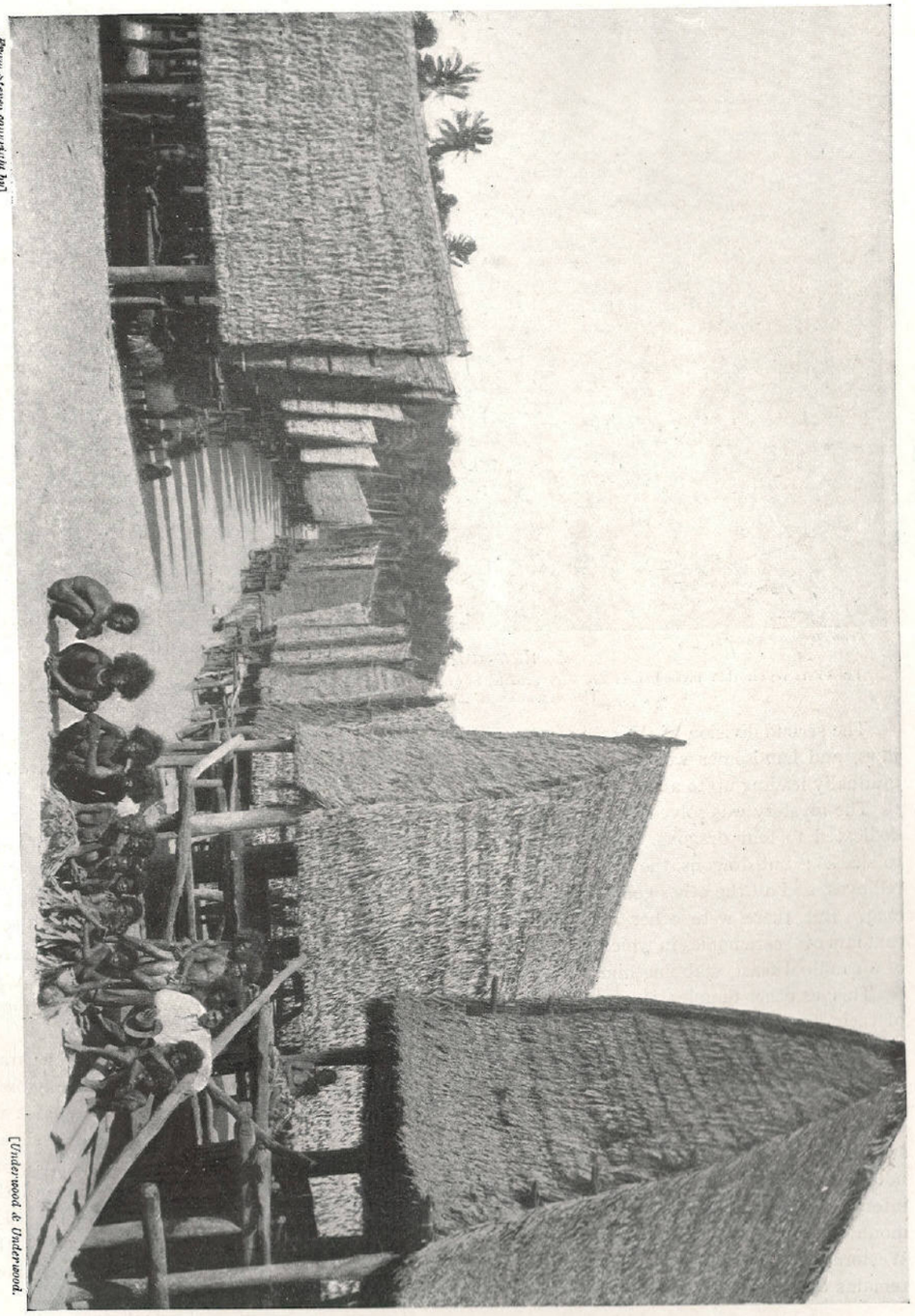
From Stereo copyright by] [*Underwood & Underwood.*

A NEW GUINEA HOUSE.

For greater security these people build their houses on piles. For thus they are protected against marauders and the floods that occur in the rainy seasons.

A Cannibal Temple, New Guinea.—The modern idea of a temple is not associated with cannibalism: rather as a place where worshippers assemble. But the older significance of the word as an abode of the gods and a place of sacrifice is the more applicable to the temples or club-houses of the savage gentlemen of New Guinea.

The unique illustration of one of these cannibal temples, or *rabis*, was obtained by Miss Beatrice Grimshaw, who, in her "New New Guinea," describes her exploration experiences in the Purari delta village, where this particular rabi was visited. Like the houses of the village, set upon high piles and connected by "nightmare bridges" upon tall trembling supports eight feet high or more, the temple was approached by such another rickety platform. "Coming out of the dull glare and heat outside, the dark coolness of the rabi made one draw a breath of relief. . . . It was partitioned off into four separate sanctuaries, the three first being divided from each other by rows of wooden pillars. The outmost was the largest and highest: as the building went back it became narrower and lower." Alligator skulls were in neat rows on the ground; pigs' jaws hung in strings down the pillars; wooden shields were carved with faces, "devilish, bogey, goblin, comic or fierce." The human skulls have been removed; for although the taking of heads is a distinction in Sarawak, the white rulers have other views.



From Stereo copyright by] [*Underwood & Underwood.*

A NEW GUINEA VILLAGE.

These tribal villages of quaint brown dwellings are peculiar to New Guinea. No fresh settlements are now built, but the old houses are carefully repaired by the natives.



From Stereo copyright by] *[Underwood & Underwood.*

NEW GUINEA HOUSES.

Travellers report that these houses are very artistic, but most insecurely built. The floors are practically of lattice work. The verandah is the "lounge" of the house.

The second division of the rabi was a replica of the first, with enlarged alligator skulls and pigs' jaws, and handsomer weapons; so the third. "The whole rabi seemed designed with a view of gradually leading up to and enhancing something."

The mystery was solved. The fourth chamber was the inner shrine, the "Unholy of Unholies," dedicated to four dragons. "They had a certain resemblance to alligators, a slight resemblance to sharks; but dragons they were in all essentials," with tapering tails and small sprawling feet, red eyes, and all the other goblin features. They were made of plaited wickerwork, about nine feet long. But there were other rumours concerning the images beside their ornamental quality—rumours of "ceremonies in which a man; hidden inside the wicker body, feigned to devour the victim of a cannibal feast, stabbing him as he was put into the mouth of a figure."

This, as other temples, is used partly as a club, the aristocracy of the young men spending much of their time in it.

Native Houses in New Guinea.—The isolation of each island of the Pacific makes each a separate country distinct from any other of the many groups, and New Guinea is as yet but half explored. Miss Beatrice Grimshaw, in her "New New Guinea," says: "When the secrets of South America are almost all told, and even Central Africa and Central Asia have little more to give, New Guinea should still flaunt defiance in the face of all research. There have been numberless exploring parties, but not one has done all that it set out to do, though each has added a little to our knowledge of the interior. Not a single one of the great rivers has been traced to its source. Most of the high mountains have not been ascended. No one knows what lies in the great blank spaces of the Western Division." What is known of New Guinea, however—and it is much, though much more remains to know—has all the attraction of the unusual.

The romance of its great rivers—seas of rivers and homes of the alligator—holds the explorer by an uncanny spell, for they flow between hundreds of miles of silent shores of coconut-palms, nipa-palms, with their roots in the mud and their plumed heads against the burning sky, backed by untrodden forest. Rivers and rivers interlacing and crossing over submerged forest, past pandanus-trees, mangrove wastes and sago-palm swamps, on and on into the vast unknown.

The native villages and temples that here and there accentuate the solitude of the river-wilds are built on piles over the water for protection, for the rivers are the highways of the "Head-hunters"; while this is a peaceable race occupied chiefly among the sago-palms fringing the streams.

These quaint land-houses of New Guinea are built upon piles out of reach of things that crawl, as the sea-houses are of the alligators. Brown, palm-thatched and windowless, with deep-pitched roofs and overlapping eaves, their doorways admitting the only light, they are dim, cool retreats from the tropic sun, set in the midst of luxuriant vegetation. Their access is by ladders, and their furnishings chiefly mats and camphor-wood boxes, and fire-clay pots for cooking and holding water, and the absolute necessities of the simple life.

Although the New Guinea houses differ in construction in various parts of the country, the common plan of building is on raised platforms. Wood and bamboo walls and palm-thatched roofs are the chief features, the roof raised some feet above the walls to allow a free current of ventilation. The broad deep verandah, a feature of many of the land houses, as of all the sea-villages, is the social hall where guests are received, and the women perform those arts and crafts which require the light for their accomplishment. The groups of pile-dwellings on land, set amid plantations of bananas, limes and coconuts, are intersected by broad paths, as the sea-villages are traversed by waterways.

The bush-tribes of New Guinea built their villages in secret places among the hills, cleverly concealed from their enemies and out of reach amid the tropical forest. Many of



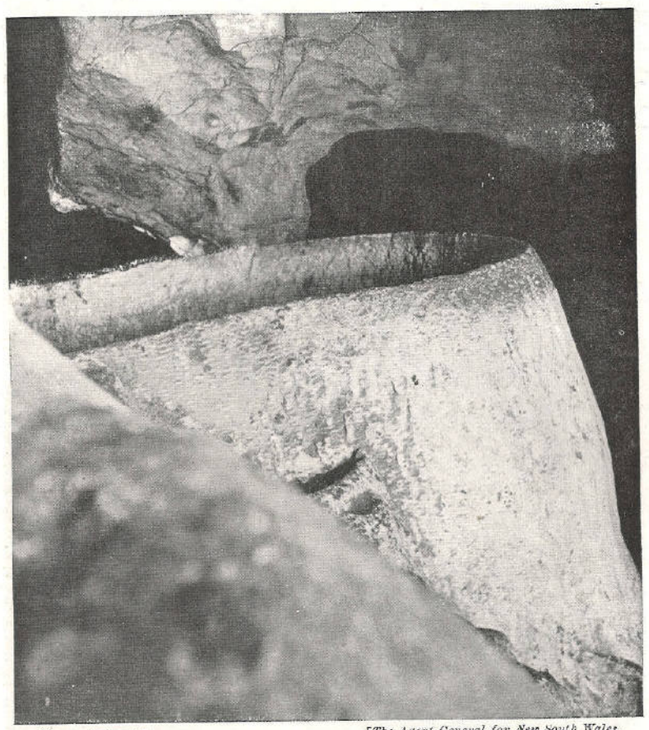
Photo by] *[Muir & Moodie, Dunedin.*

THE KARAPITI BLOW-HOLE.

The steam from this mighty trumpet, which has been called the safety valve of New Zealand, bursts forth at a pressure of 180 lbs. to the square inch.

the old hill-villages had tree-houses where those attacked took refuge and hurled down stones and spears upon their enemies.

The Karapiti Blow-hole.—The wondrous valley lying near the banks of the Waikato, through which Karapiti is reached, is as marvellous as it is exquisite. The wraith-arms of geysers beckon to a fairyland where terraces of snow whiteness or coral pink or yellow gleam among mosses and vines, backed by manuka-draped hills. Great and small geysers shoot up at intervals from the rocky beds. The sunlight plays upon the gleaming spray of these jewelled fountains. The white, surging, river foam, here glancing green, there steely blue, intensifies the colouring of the sinter slopes. Pools of brilliant colour vie with the pale yellow and Indian red patches of the hills. Never was there a transformation scene so perfect, so gorgeous, so bewildering in its magnificence!



By permission of [*The Agent-General for New South Wales.*

THE TUB, WOMBEYAN CAVES.

Pinnacles, rather than cavities, are the usual shapes taken by stalagmites. The extraordinary formation of those in the Wombeyan Caves has given them the name of "The Basins."

The Karapiti Blow-hole lies back on the dark hills. This "Devil's Trumpet" is heard for some distance as the hill is approached, roaring with ceaseless energy. What would happen if this monster steam-vent ceased its work can be imagined, for the pressure is one hundred and eighty pounds to the square inch, and within the memory of man it has been blowing off steam at that rate continuously. It is said to be the safety-valve of New Zealand; of that portion—the hot-water district—it must be. In shape it is like a huge stone trumpet or funnel, ten feet across the top and widening at the bottom. The sight of the mighty blow-hole is awe-inspiring and more suggestive of the tremendous forces lying under the crust of volcanic country than any other fumarole in the North Island, and it is long before the visitor can dismiss the uncanny monster from his mind.

The Tub, Wombeyan Caves.—The Wombeyan Caves, situated about one hundred and thirty-six miles from Sydney, are on the Wombeyan Creek, a picturesque stream, and lie in a limestone belt about two and a half miles long by one mile wide. The rock is coarse crystalline white marble streaked with yellow, and fossils that have been found show that the limestone bed is an old coral reef.

The surrounding country is magnificent, a wild scene of mountains and valleys intersected with streams. The Tub is one of a group of cavities in the Wombeyan Caves. A descent from the main cavern, surrounding which are many wonderful caves and passages, leads



By permission of [*The Agent-General for New South Wales.*

LOT'S WIFE AND THE COCKATOO, WOLLONDILLY CAVES.

Unconscious Nature has here modelled a woman in a shroud and a bird brooding on a snow-white nest so faithfully that these stalagmites can easily be identified by their names.



By permission of [*The Agent-General for New Zealand.*

MOUNT EGMONT.

Towering 8,200 feet above the sea-level as though proud that it is the most perfectly-shaped volcanic mountain in the world, Taranaki rears its cone of snow as a landmark to the sailor miles away in the Tasman Sea.

to a magnificent natural hall one hundred and seventy feet long and forty feet high, to the left of which are formed stalagmite cavities which are called "the Basins," owing to their form, for some are shaped like bowls, others like tubs of various sizes. Professor David, B.A., F.R.S., accounts for their formation by the sloping rock on which they stand, once forming the bed of an underground stream, dissolving and wearing a passage through the marble and descending in a series of small cascades into the channel below. These cascades where they fell wore out the marble in basin shape. The discovery of these enchanted coral-like groves and chambers of the Blue Mountains is attributed by one report to a bushranger, who made one of the caves his hiding-place, and by another to a stock-drover. But to whomever the discovery of Australia's great limestone caverns is due, the Jenolan, Wombeyan and Yarrangobilly Caves of New South Wales are no mean addition to the list of Nature's wonder-works.

Lot's Wife and the Cockatoo, Wollondilly Caves.—A steep mountain climb leads to the Wollondilly Caves; then a difficult descent into the dim tunnels and galleries where are statues and skeletons of stalactites and dripstones. This cave is one of the group of the great Cathedral Cavern, vast and silent, and dark except where the guide turns the brilliant flash of his magnesium lamp. In the foreground of the Temple are the two strange white stalagmites known as Lot's Wife, which resembles a pillar of salt, and the Cockatoo, that might have been a marble carving of the bird.

Mount Egmont.—The Maori name of Mount Egmont is "Taranaki," and it stands "lofty and lone" in New Plymouth. Its lovely cone, which is said to be the most perfect in the world, is enhanced in beauty by the fact that it stands out in splendid isolation from other peaks. Its summit, eight thousand two hundred and sixty feet high, is a striking landmark for many miles, both by sea and land. Captain Cook, who first saw the peak towering above the clouds, in 1770, noted that in appearance it resembled the Peak of Teneriffe.

The ascent of Mount Egmont, above the lower wooded slopes, is steep and difficult. To the height of about two thousand feet the forest of giant pines and rata is very beautiful, but it changes gradually to a tangle of stunted trees and scrub, which at five thousand feet, beaten and twisted by the wind into fantastic shapes, is called "The Goblin Bush." The scrub in turn gives place to grass and rushes and moss; the moss-plateaus end in the rock and snow and ice that mass the top. But although the cone is capped with eternal snow, during the summer the greater portion of the mountain is without its white mantle.

There is an extensive and magnificent view from the peaks. Below are the shores of Taranaki, towns and rivers, waterfalls and forest, and in the distance the snow-clad peaks of Ruapehu, and of Ngauruhoe and Tongariro, and the shining waters of the sea.

Whakoupoku Boiling Well.—The Whakoupoku Boiling Well at Waikite is a beautiful sample of the many hot springs that abound in the valleys of the Paeroa Mountains. Of unknown depth, this sparkling, foamy pool bubbles amid luxuriant vegetation, warming the roots of the ferns that encircle it. These wells at Waikite are extraordinary in their character; some of them boil furiously in their crater-basins, others lie still and blue though at boiling point, and others again are constantly rising and falling, giving off dense masses of steam, their erupted waters rising perhaps twenty or thirty feet. When comparatively quiet the surface of the pools is often gemmed over with thousands of coloured bubbles, which dance and burst and reform. Some of the waters are highly charged with silica and, where they fall over a surface, coat it with a beautiful enamel. In the moist, warm atmosphere of the valleys of hot rills and springs the air is aromatic with the scent



Photo by] [*J. Martin, Auckland.*

THE BOILING WELL, WAIKITE.

Under the shadow of Paeroa Mountain in the midst of delicately-fronded fern and flowering shrubs, these boiling springs bubble up amongst the trees from an unknown depth.

of flowering shrubs; yellow gorse and broom contrast with the green flax and its iris-like blossoms, and white mountain lilies combine to rob the steaming land of sinister meaning. The acrid and brilliant-hued lakes are all fringed with forest, and the billowy, rumbling rivers zig-zag through forest-shores.

Ice Fumarole, Antarctic.—On their way across the old crater, at about eleven thousand feet below the active crater of Erebus, the Shackleton exploring party were attracted by the strange ice-formation of their photograph, which bears a strong resemblance to a couchant lion, and from which smoke appeared to be issuing. The peculiar structure proved to be a fumarole, or volcanic vapour-well; but, whereas in warm climates the emissions would be steam, at the Antarctic the vapour is frozen into ice as soon as it reaches the snow line.

The Erebus exploring party reported: "About fifty of these were visible to us on the track which we followed to and from the crater, and doubtless there were numbers that we did not see. These



Photo by] [*Sir Ernest Shackleton.*

AN ICE-FUMAROLE IN THE ANTARCTIC.

These unique ice-mounds are the result of the combined action of intense heat and intense cold—volcanic steam frozen immediately it issues from the crater of a volcano.

unique ice-mounds have resulted from the condensation of vapour around the orifices of the fumaroles. It is only under conditions of very low temperature that such structures could exist. No structures like them are known in any other part of the world." Varied and fantastic in shape, they were in the forms of mounds and turrets; some resembled animals and others beehives.

Mount Erebus.—Sir Ernest Shackleton, in "The Heart of the Antarctic," gives a graphic description of the ascent of Mount Erebus, named after one of the ill-fated ships of earlier expeditions, at whose base he with his fellow-explorers took up their winter quarters, and made a close study of the great volcano which stands "as a sentinel at the gate of the Great Ice Barrier."

The great mountain rises thirteen thousand three hundred and fifty feet above sea-level, "with its enormous snow-clad bulk towering above the white slopes that run up from the coast. At the top of the mountain an immense depression marks the site of the old crater, and from the side of this rises the active cone, generally marked by steam or smoke."



Photo by] [*Sir Ernest Shackleton.*

MOUNT EREBUS.

This great mountain rises 13,350 feet above the sea-level. The steam marks the active cone of the volcano, while at the summit is the site of the old crater, that is to say, the most important, for there are evidences of four distinct craters.



Photo by] [*Sir Ernest Shackleton.*

MOUNT EREBUS BY MOONLIGHT.

It is by moonlight, according to Sir Ernest Shackleton, that Mount Erebus is seen at its noblest, when, rising up 3,000 feet from the crater and silhouetted against the moon's disc, the huge column of steam travels upwards, "not quietly, but impelled by force from below."

In their winter quarters Sir Ernest Shackleton and his comrades had every opportunity of taking observations, for the great mountain was only about fifteen miles off and within full view of their hut, and during the winter encampment of the expedition they saw every phase of its activity; the glow was much more vivid at times than at other times, and occasionally great bursts of flame illuminated the crater.

By moonlight a magnificent view of the huge column of steam that rose three thousand and four thousand feet high from the crater into the cold air could be obtained, for when the moon passed behind the crater upon its disc could be seen "the great cloud travelling upwards, not quietly, but impelled by force from below."

At length a party of the expedition set off from the winter quarters to take the fort of Erebus. A sledge was packed and lashed, which on the moraines and steep slopes of small glaciers proved difficult to negotiate, the sledgers having much trouble in keeping their feet. The party the first day made seven miles from their winter hut-home and camped two thousand seven hundred and fifty feet above sea-level. Next morning, in a temperature ten degrees below zero Fahrenheit, they proceeded up a much steeper gradient, the sledge capsizing frequently, and only three difficult miles were accomplished during the day, camping at an altitude of five thousand six hundred and thirty feet, with a temperature twenty-eight degrees below zero.

On the following morning the climb was resumed, the snow slopes became steeper, but the third camp was eight thousand seven hundred and fifty feet up, and during the night a blizzard, which increased in fury by the morning, swept fiercely down the rocky ravine where they had halted, and they had much ado to keep themselves from being blown off the precipice. The following day, after a night of frozen terrors, the blizzard over, they made a fresh start, the ascent steeper than ever, the dazzling slopes too perpendicular to climb without cutting steps in the ice.

They had long abandoned their sledge, leaving it on the lower slopes. The progress was now very slow, and at a thousand feet below the active cone they had to be roped together, and make their cautious way over the snow-plain with their ice-axes, above them being the coveted crater, which was conquered after a five days' struggle. As the party came against the sky-line, they were

seen far down in the camp by their comrades in the winter quarters, who for two days had followed their ascent through the telescope, but had lost sight of them till their figures were silhouetted against the light.

"We stood on the verge of a vast abyss," the report runs, "and at first could see neither the bottom nor across it on account of the huge mass of steam filling the crater and soaring aloft in a column five hundred to one thousand feet high. After a continuous loud hissing sound, lasting for some minutes, there would come from below a big dull boom, and immediately great globular masses of steam would rush upwards to swell the volume of the snow-white cloud which ever swells over the crater. This phenomenon recurred at intervals during the whole of our stay at the crater. Meanwhile the air around us was extremely redolent of burning sulphur. Presently a pleasant northerly breeze fanned away the steam cloud, and at once the whole crater stood revealed to us in all its vast extent and depth. . . . There were at least three well-defined openings at the bottom of the cauldron, and it was from these the steam explosions proceeded."

When on the top of Mount Erebus the explorers remarked the great conical shadow it threw at sunrise over McMurdo Sound, and even as far as the western mountains. The colour effects were often very beautiful, especially at the intermediate season of the year, and at sunrise or sunset the mountain was often bathed in a delicate pink light, or seen beneath iridescent clouds. Some of the most brilliant displays of the Aurora Australis were in the vicinity of Mount Erebus, whose summit it sometimes encircled.

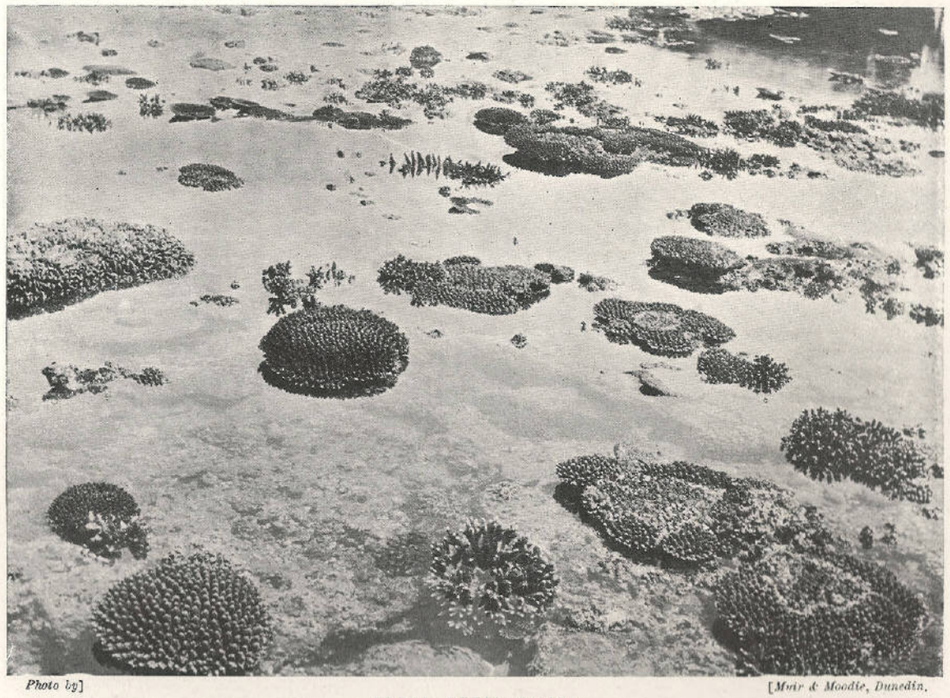


Photo by] [*Muir & Moodie, Dunedin.*

CORAL REEFS, SAMOA.

Although most of the Samoan coral is white, the deep transparent water, catching and reflecting the tropic sunlight, makes these ocean flowers beautiful with the hues of the rainbow, and creates a magical sea-garden for which these islands are justly famous.

Coral Formation, Samoa.—This lovely garden of living coral-flowers is one of the most beautiful known. Just below the surface these coral-flowers bloom in the most exquisite colours, of delicately-tinted shades, pink and green and purple, suggested rather than realized, for it is the water flowing over the beds that frequently gives colour to much of the white coral; the red is rare: the coral of the Pacific is chiefly white. But the transformation of light shining through water makes the dull or faintly-coloured coral alive with prismatic rays and forms bouquets of the hues of the tropic seas.

Coral Reef and Blow-hole, Samoa.—The innumerable coral-reefed islands of the South Seas, strange with relics of vague traditions and multiplicity of graven images and past gods, sacred groves, stones and temples, even yet, despite their semi-civilization, present the barbaric and grotesque in juxtaposition with the wonderful and beautiful in Nature. These green and fertile oases in the ocean waste, studded with great mountains, gemmed with rivers and waterfalls and coloured lagoons, plumed with feathery palms, groved with coconut and banana, scented with

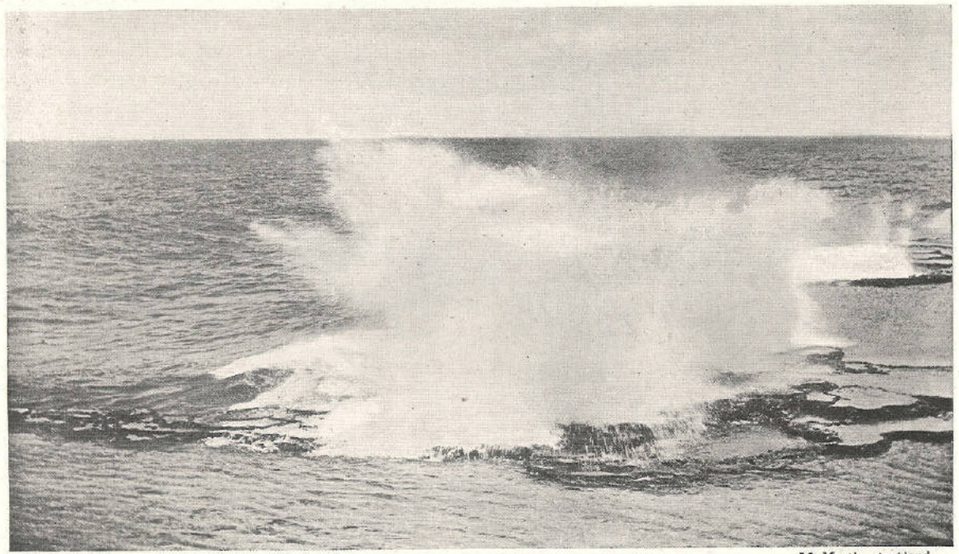


Photo by] *[J. Martin, Auckland.*

A BLOW-HOLE IN THE SAMOAN CORAL REEF.

This column of steam, issuing from a chasm in the deep sea, forces its way through the water and prevents the coral insects from building over the centre of activity. They, however, build as closely as possible round it, and so form a natural chimney for the steam.

orange and lemon blossom, and enriched with gorgeous foliage, are encircled and guarded round their thousand shores with rings of white branching coral flowering under water, over which the sea-surf washes on coral strands whiter than snow.

These coral islands have been the despair of the word and colour painter alike. Miss Beatrice Grimshaw, in "The Strange South Seas," says: "Outside the windy palms a dazzling beach runs down to the open sea all around the island—a beach that is like nothing the travellers ever have seen before, for it is made of powdered coral, and is as white as salt, as white as starch, as white as the hackneyed snow-simile itself can paint it." And the description paints not one coral shore alone, but hundreds—"flowering coral under water, white broken coral gravel above, with here and there a thin skin of earth collected by a century or two of falling palm-leaves and ocean waste."

The blow-hole illustrated, in its setting of coral coast, is after the nature of the fumaroles scattered by thousands throughout Australasia and the islands of the Pacific—Nature's safety-valves for subterranean fires.



By permission of] *[The New Zealand Government.*

THE FRANZ JOSEF GLACIER.

These Alps of Maoriland are a blaze of high dramatic colour. The crystalline atmosphere intensifies all landscape hues, accentuates all golden lights and purple shadows. The sky is a deeper blue than on the plains below. The ice-fields glow like white fire.



By permission of] *[The Agent-General for New Zealand.*

THE FRANZ JOSEF GLACIER.

The steeply slanting ice-flows of the Franz Josef Glacier descend from the perpetual snows of the Southern Alps, while on either side of the half-mile-wide tongue of ice the rocky scarps rise up, smoothly polished by the pressure of the mass.

The coral reefs have been divided into three classes—the atoll, or ring of coral surrounding a lagoon; a fringing reef, which is near the land; and a barrier reef at a much greater distance, the deep-water lagoons being within the reef. The upraised fringed coasts show that they have been elevated. Darwin says: "We thus see vast areas rising with volcanic matter now and then, and bursting forth through vents or fissures with which they are traversed." The Samoan Islands are in the vicinity of submarine volcanoes; hence the issue of steam from the reef.

The Franz Josef Glacier.—The Franz Josef Glacier is one of the most beautiful of the world. Situated on the western side of Mount Cook in the Southern Alps, and torrentlike in its ice-flow, it descends steeply from dividing ranges to within about seven hunded feet of the sea, where, like all the snow-domes and ice-fields of this incomparable range, the forest clothes all the lower slopes. One of Aorangi the cloud-piercer's glittering satellites, Franz Josef is a flashing ice-field amid a sparkling array of mountain domes and spires among monstrous peaks far as the eye can travel into distance or reach upward, a stately panorama of diamond radiance and dark rock; ranges beyond and behind; ranges piercing the clouds and standing above them in the purple haze.

The Alpine and sub-Alpine flora of the lower slopes of Franz Josef is very beautiful; the vegetation is almost sub-tropical; the rata, with its gorgeous masses of red blossom, the beech-woods, carpeted with gold and green mosses and hung with pale lichens, meet the snow-line, and the groves of ribbon-wood, and plateaus of mountain daisies and deep golden-hearted lilies, veronicas, and violets entice the thought from the mountain's austerity. In the autumn a variety of berries supply the colour-scheme.

The ice pinnacles of Franz Josef Glacier, a mass of glittering spires of a glacial city, surmount walls of solid ice, which it is the Alpinist's delight to scale. Up in that naked world of scarred and jagged outline, which from the earth valleys below presents a solid white rock-face, are crystal caves and glittering dales and crags, aglow with a million points of reflected fires of green, purple and blue. Nature has peopled the solitude of the lone ice-peaks with strange images cut in the ice-groved clefts, and adorned the ice-caves with delicate fretwork and carving of stainless white, set with twinkling diamonds of light.

Looking down from the glacier, weirdly magnificent lie crest below white crest, ice falls and cataracts and snow-rivers, fields and valleys and groves of snow—a world of dark rock and ice, dazzling and alive with ethereal hues.

Sydney Harbour.—It was Viscount Sydney, Secretary of State for the Colonies, 1787, who, more than a century ago, determined to "plant a coloney" in New South Wales (so named by Captain Cook in memory of the mining country of England where he, as a boy, worked in the coal mines).

The First Fleet, carrying the roots, five hundred and sixty-four men and one hundred and ninety-two women, from good British soil for transplantation in the untried land, consisted of eleven vessels. The military section of the expedition comprised one hundred and sixty-eight marines, and the wives and children of those who were married, commissioned and non-commissioned officers, medical men and mechanics.

But on arrival of the fleet at Botany Bay and Sydney Cove the captain in command was convinced that the shallow inlet, exposed to the full swell of the Pacific, without bays or coves to afford shelter, and with barren shores, was undesirable as a harbour.



By permission of] *[The Agent-General for New Zealand.*

AT THE EDGE OF THE FRANZ JOSEF GLACIER.

The Glaciers of the Southern Hemisphere descend to a much lower level than those of the Northern. This results in the extraordinary intermingling of gleaming ice and semi-tropical vegetation

After exploring the coast about nine miles distant, Captain Phillip discovered at close quarters the port—Port Jackson, now known as Sydney Harbour—which Captain Cook had sighted from a distance.

The first sight of this, the most magnificent harbour of the world, as the traveller sails over its blue waters on which innumerable "white wings" gleam in the vivid sunshine, gives the impression of approaching an enchanted land, whose city runs down to the shores stretching out hospitable arms, a forest of stately houses and picturesque villas, set amid sub-tropical verdure. The harbour is not one, but many: curved all along its shores are dreamland bays and inlets and creeks that have been the inspiration of poet and painter alike, yet the whole of their loveliness remains untold. The breadth of the harbour varies from three-quarters of a mile to two miles and more across, and the foreshores extend more than two hundred miles. The lake-like expanse of water stretches inland, high precipitious cliffs guarding the harbour heads for ten or twelve miles, then on either hand the

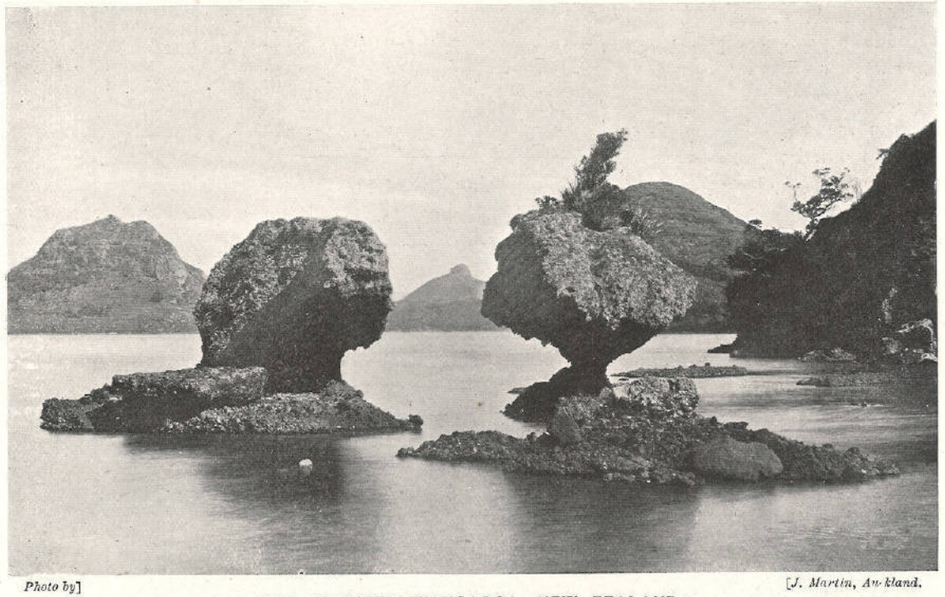


Photo by] *[J. Martin, Auckland.*

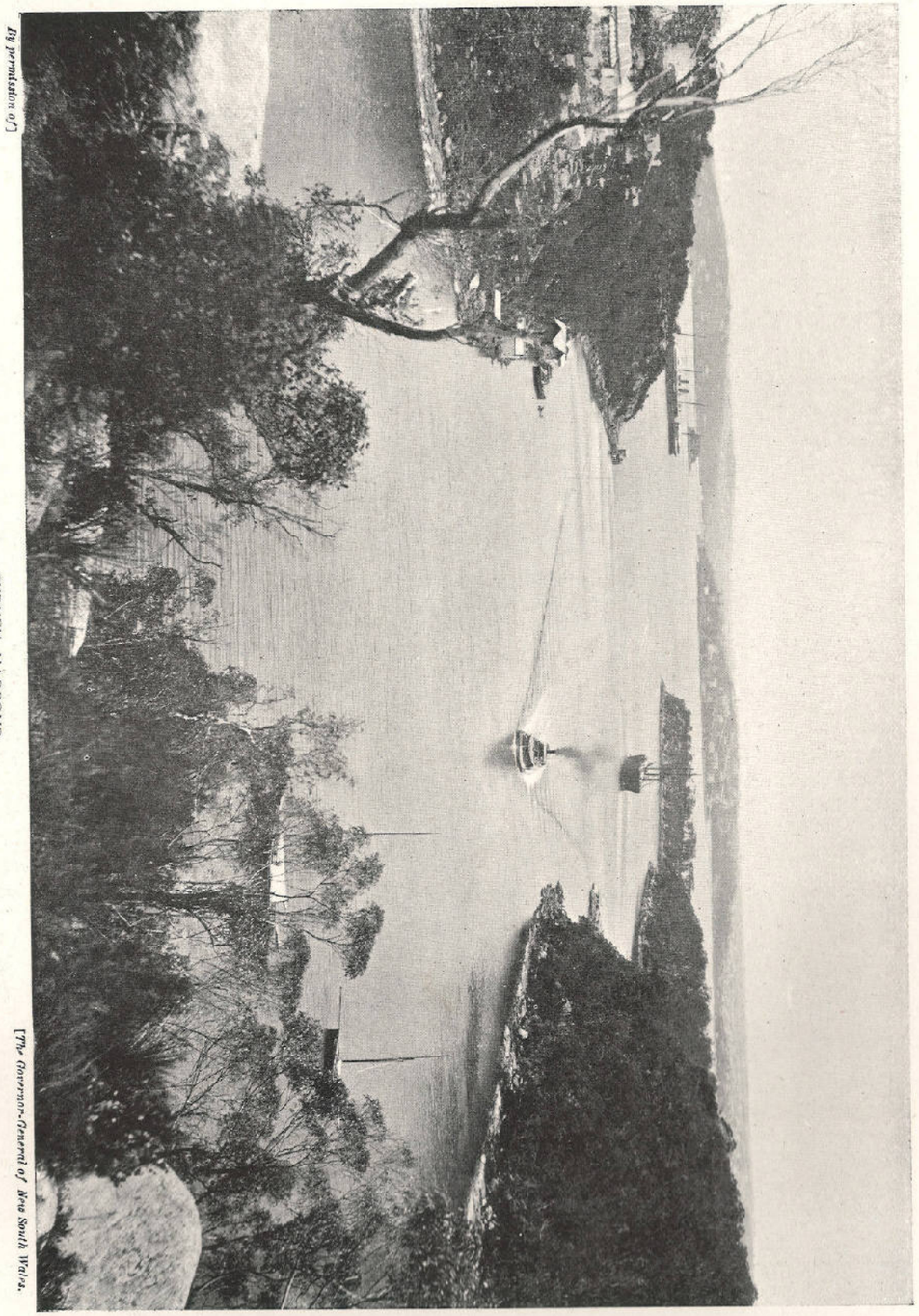
THE SPHINXES, WANGAROA, NEW ZEALAND.

Surrounded by the sea, the Sphinxes stand out like sentinels from the mainland. The action of the sea has given these rocks their peculiar shape.

waters wash over shelving beach. All along the coasts the innumerable harbours and bays which indent the shores are secluded and calm resorts of great picturesqueness, which, where cliffs and forest do not reign supreme, are fringed with flowering orchards and villa gardens rich with blossom.

Village of Sea-Dyaks, Borneo.—The Sea-Dyaks of Borneo (cultivators of maize, sugar cane, ginger, pumpkins, etc.) prefer the low-lying land swamps of the river-sides for their habitations. Formerly the Sea-Dyaks occupied only a few of the Sarawak rivers and their tributaries, but now that the warlike tribes of their enemies have retreated further into the interior, the Sea-Dyaks have extended their activities to many rivers, says Haddon, between Sarawak and Dutch Borneo.

The Dyak villages are built on piles running out over the mud-flats into the river. The village consists of a number of houses, some of which are of considerable size. The traveller quoted describes these riverside houses as consisting of two portions—"a verandah extending the whole length of the river frontage, and a series of domiciles opening on to the verandah. The verandah is entered



[By permission of

SYDNEY HARBOUR.

Sydney harbour is the most wonderful natural harbour in the world. Its vast expanse of deep water stretches inland for ten or twelve miles, forming not one but many harbours, where the largest vessels can anchor in safety. Thus it affords almost unlimited accommodation for shipping.

The Government-General of New South Wales.]



Photo by] [*Newton & Co.*

VILLAGE OF SEA-DYAKS, BORNEO.

Notorious for their cruelties, these people are nevertheless more cultivated than most of the neighbouring tribes. Each of these houses is the home of a clan, the larger containing apartments for as many as eighty families.

at the end and by two or three doorways at the side. The ladder consists of one or more notched tree-trunks, usually with a slight hand-rail, the use of which is as often as not dispensed with by the nimble, bare-footed inhabitants."

Light broad ladders also lead up to the verandah, which is partitioned off from the apartments. Every door gives ingress to a separate house, which is divided into various-sized apartments. Each dwelling is occupied by a separate clan, and the larger of them contain from ten to eighty different houses, or " doors," which are quite private to the families occupying them. The wife, or wives, and daughters of each house have each a separate room ; the men occupy their own quarters. The verandah is the great social lounge.

Over a considerable portion of New Guinea the men have a social life which is distinct from family life and " hedged round with observances and taboos." In that respect native club life does not much differ from that of the civilized world. The clubs of the Papuan, like those of the Mason, can only be gained by undergoing certain " initiation ceremonies," the mysteries of which are jealously guarded from women and children and the stranger, the rites of which are performed either in sacred spots in the bush or in their club-houses or temples.

Dyak Idols.—The chief deity of the Sea-Dyaks of Borneo is called Batava, a pure Sanskrit term for God, says Bettany. But they, like all the natives of New Guinea, have innumerable spirits and gods with whom they hold commune in the privacy of the woods. The Dyaks, both Sea and Land, have more religion than the natives of many of the islands, and traces of the Hindu faith are found in their beliefs. They attribute all their evils to their gods, and the beginning of their religious wisdom is certainly fear. Omens, especially bird and animal omens, and dreams are reckoned among their superstitions ; the medicine-man with his incantations ranks high with the people,

and human sacrifice on rare occasions (out of reach of the Government) is even now not unknown.

The idols and images of Dyaks bear a family likeness to other heathen idols—usually hideous, malevolent and fierce in appearance.

Wooden tablets covered with strange hieroglyphics, small figures carved in wood, reptiles, war-gods " covered with coarse red hair like an orang," are among the aids to devotion of these strange worshippers. And the history of religions shows that in all ages the world over, since mankind first dimly recognized the mystic something outside his comprehension, he has in " graven images " endeavoured to give expression to his conceptions of the unseen.

Eaglehawk Neck, Tasman Peninsula.—Tasmania is separated from Australia by the one hundred and twenty miles' width of Bass Strait, but although the smallest State of Australia—it is about the same size as Scotland—it excels in natural charms and scenic beauties. " The Halcyon Isle," and " The Garden of the South," are equally appropriate names for the island, in the vicinity of which are numerous other islands of considerable size.

The Tasman Peninsula, scene of dramatic incident and wild and rugged beauty, is linked to the mainland by a narrow neck of rock known as Eaglehawk Neck, which is barely two hundred yards wide, and upon which in the early days of the colony dogs were kept chained to give the alarm should a convict attempt to escape from the peninsula, a natural and lovely prison. The old convict settlement is now dismantled ; many of the buildings have been pulled down, and others destroyed by the fires of surrounding bush. The model prison and the fine old church are in ruins, but the beautiful avenue of oak trees that led to the church and is amongst the finest in the State, exists unharmed to-day.



Photo by] [*Newton & Co.*

DYAK IDOLS.

The Dyaks are teeming with superstition. Every tree and rock is the home of some demon. To ward off the attacks of the evil spirits carved images such as these are set up outside the villages.



Photo by] *[Beattie, Hobart.*

TASMAN'S ARCH, EAGLEHAWK NECK.

A monumental arch, formed by the action of the sea, that stands upon the shore not far from Eaglehawk Neck, a narrow isthmus alone connecting the Tasman Peninsula with the mainland.

The Devil's Kitchen, Tasman Peninsula.—In the neighbourhood of Eaglehawk Neck are a number of wonderful and strange rock-formations, for which this peninsula is famous. "The Devil's Kitchen," whose roof has fallen in, derives its name probably from the seething foam of the waves that boil about it. It is an extensive specimen of the tunnelling power of the sea, which has executed some magnificent engineering at this point of the coast, carving great arches and chiselling fantastic fretwork on a gigantic scale.

The Tasman Arch is one hundred and eighty feet deep. The bottom rock is of blue lava, through which the sea has engineered in a soft place and then has washed away the *débris*, leaving the arch. Much similar tunnelling has formed the Devil's Kitchen. The roaring waves and the whirling spray add to the fascination of this giant-causeway and the natural bridges. A near waterfall flashing among the dark rocks gives enchantment to the beauty and dignity of the spectacle.

These colossal arches and bridges of rock look like the picturesque ruins of some prehistoric castle that once was inhabited by giants, and the giants that were lords of this domain must have been exceeding cunning workers in stone. But only the sea was the architect as it swept tireless at the base of the cliffs, polishing with all the care and delicacy of a master-workman, or, lashing itself to fury, jagged out great masses of rock to form the arches where it could pass through into the land. How terrific must have been the force that thundered upon the blue rock until the whole wall crumbled beneath the gigantic pressure and a mighty arch remained—a triumphal arch to mark the victory of the waves in their struggle with the land! How delicate must have been the soft caress of the ripples that smoothed the wrinkles out of old Mother Earth and shaped lofty columns and carved graceful curves! Never was so great an artist as the sea, and nowhere is there greater proof of its wondrous skill as here in the Tasman Peninsula at the Bottom of the World.

The Tessellated Pavement, Eaglehawk Neck.—The Tessellated Pavement is a unique formation in this district of stone-curios. Not far from the blow-holes and arches, it is situated on the peninsula, near Eaglehawk Neck, in a region of remarkable caves and quarries.

This formation of silicious clay rocks has taken the shape of squares like those of a pavement. The interstices between these rocks are filled up with a formation

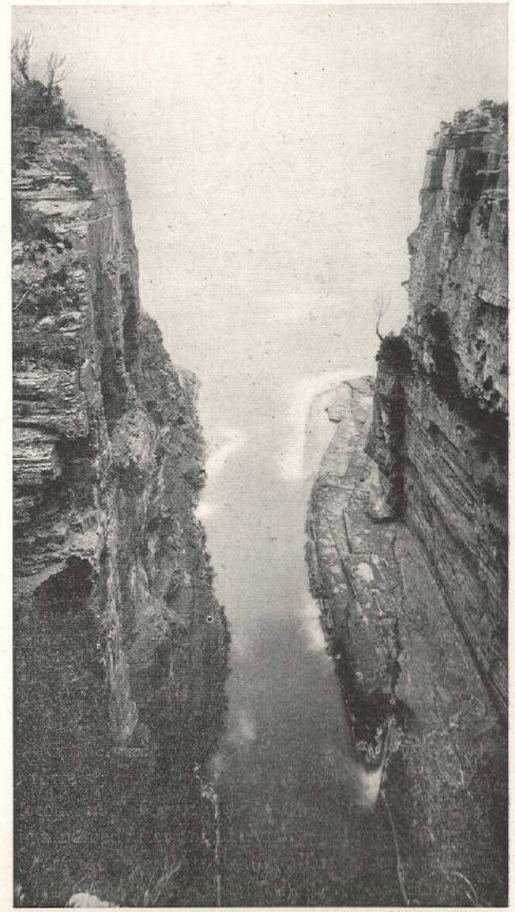
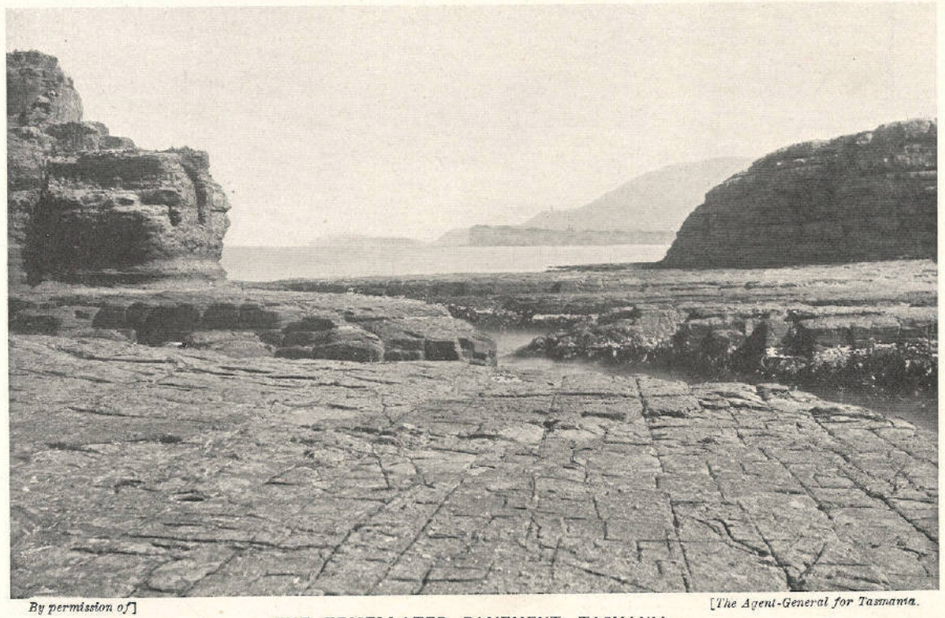


Photo by] *[Beattie, Hobart.*

THE DEVIL'S KITCHEN, TASMAN PENINSULA.

A mighty specimen of the tunnelling power of the sea. The Kitchen probably derives its name from the frothy "brew" of the waves that toss at the base of these precipitous cliffs.

of sand and cement-like material acted upon by the water so that it forms a kind of concrete. In colour it is brown, somewhat like mud. There is no vegetation on it save here and there a straggly clump of seaweed. These rocks stretch by the sea-shore for a distance of over four hundred yards, and are so even that in all respects the surface is equal to that of a well-made pavement; scarcely is it possible to trip up against an irregular specimen. The pavement is a geological puzzle, and authorities have not been able to come to a decision as to how this curious formation came about. The wildest guesses have been made as to its origin. One suggestion is that an ancient primeval race, after the manner of the wonderful Egyptian monuments, had built a sea wall which is the only monument surviving to their existence; but such an idea is altogether improbable. Other authorities have suggested a more feasible idea. It has been observed that the rocks forming the nose of Cape Raoul are of the same substance

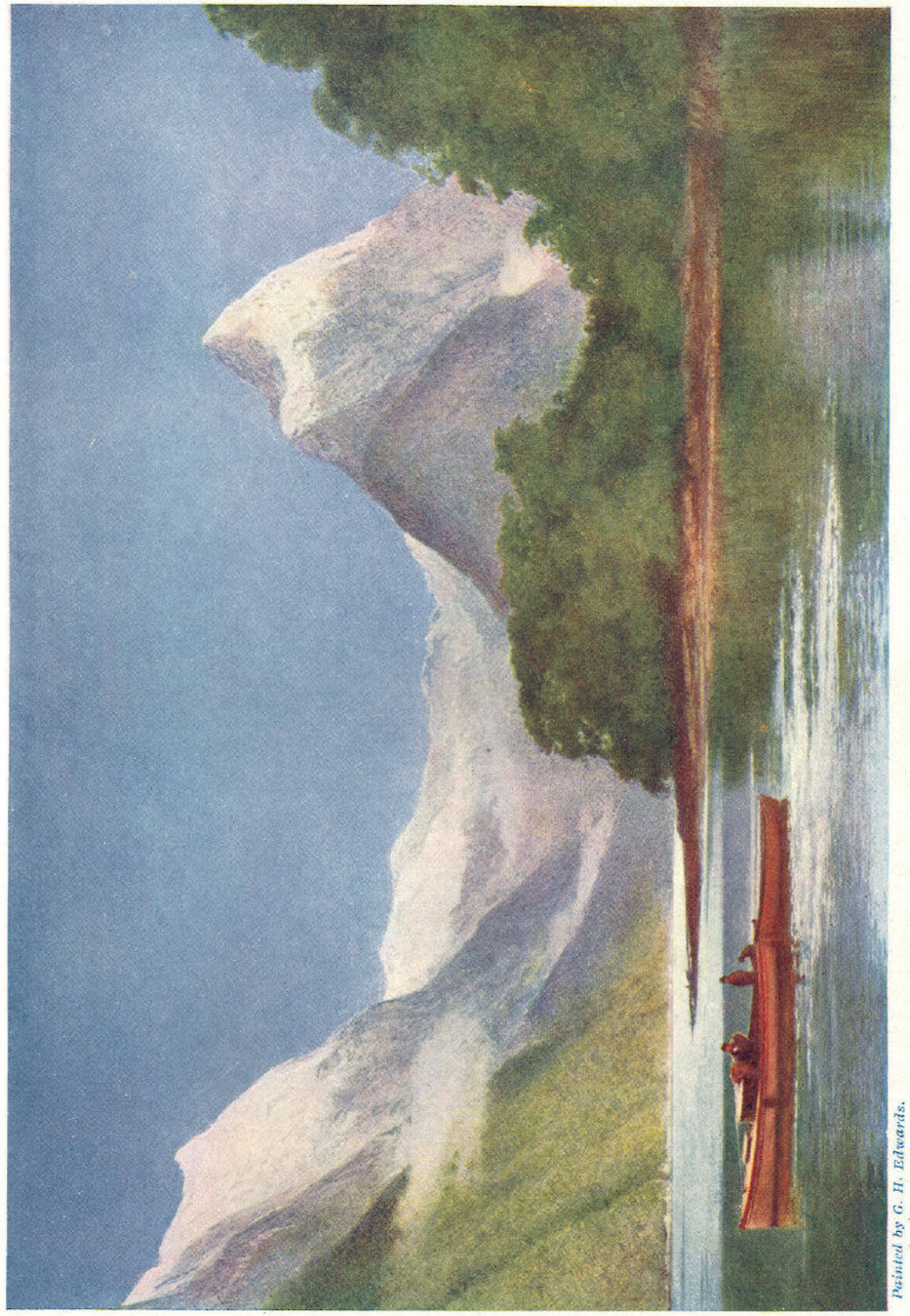


By permission of] [*The Agent-General for Tasmania.*

THE TESSELLATED PAVEMENT, TASMANIA.

This wonderful natural formation is composed of squares of silicious rock, neatly cemented together. It stretches by the coast for a distance of about 400 yards.

and in the same shape—that is, a congregation of square pillars. In another part of the island, five thousand feet above the sea-level, the same formation occurs on Mount Ben Lomond, and from these points it has been suggested that a strata of silicious material runs through the island, and that on this part the sea has filled up the cracks caused by erosion in ages past, and covering it, as it does at certain high tides, has worn down the rugged projections and so formed this unique pavement. But science has not made a final pronouncement, and the secret of the formation is yet to be revealed. The geological formation at Cape Raoul referred to, is a remarkable specimen of Nature's workmanship. Each pillar of the series is separate at the top; the columns join at the base and are of irregular height, giving the rock something of the appearance of a gigantic organ. They number many hundreds and rise to a considerable height. The hills and rocks of much of the Tasmanian coast are cragged into a thousand fantastical and beautiful shapes, which arrest by their unusual form and picturesqueness no less than by their scientific explanation.



MILFORD SOUND.

A beautiful view on Milford Sound, most famous of all the lovely Fiordland of New Zealand, where Mitre Peak, standing out from a mass of sub-tropical vegetation, rises to a sheer height of 5,500 feet.

Painted by G. H. Edwards.

Mauna Loa, The Island Builder.—On the island of Hawaii are three massive peaks, Mauna Loa, Mauna Kea and Hualalai, and the greatest of the three is Mauna Loa. This is the master worker, the Island builder. The other two are but satellites, dark-browed and clumsy; from a distance they are suggestive of three stranded whales sprawling over the island that they have made. But looking closer, the marvel and terror and beauty of their handiwork will be appreciated. For Mauna Loa is still an active volcano; he and his companions have built up the island, layer by layer, hill on hill, from the floor of the Pacific to the surface of the sea, and from the sea-coast to the topmost volcanic crest that rears its forbidding head four thousand feet above sea-level. Out of the awful depths far below the ocean bed, from which he derives his restless energy, Mauna Loa has ejected a heap of lava rubbish great enough to form a cone almost six miles in height. Within the heart of the mountain this melting, forging and welding have been going on for countless centuries; the molten matter has been cast forth from the furnaces within the crater, has fought with and conquered the ocean, has piled up cone after cone, has poured down its caked sides fresh streams of lava charged with chemical and mineral substances favourable to vegetation. And by the kindly action of sun and wind, heat and moisture, the lava beds have in time been fertilized and the naked rock clothed with tropical verdure. And still Mauna Loa is unsatisfied. He may stand quiescent for several years, but at intervals his great throat opens, and from the far high crater on his rounded crest which is known as Mokua-weo-weo, streams of lava break forth to deluge the surrounding country. The scenery is of the wildest, for nothing is so unutterably desolate and dreary as a congealed lava stream; while, in dramatic contrast to these barren wastes, the fertile shores and the extraordinary luxuriance of its tropical forests entitle Hawaii to the title of "The Paradise of the Pacific."



Photo by permission of [*Chas. E. Stamey, Esq.*

KILAUEA, THE SECOND CRATER OF MAUNA LOA.

Mauna Loa has practically built the island of Hawaii, on which it stands. For centuries it has emitted vast volumes of lava, the soil of the islands; but it has a second crater, Kilauea, which acts as a safety-valve for the mighty energy of this volcano.

Like several other volcanoes, Mauna Loa has its safety-valve. About half-way up the eastern flank of the mountain is a large crater named Kilauea. Its existence was first published to the civilized world by a party of missionaries in 1823. This remarkable crater is always active, yet it builds no lasting cone as a monument to its energies, nor does it pour destroying streams of lava from its lip. It lies upon a high exposed tableland many miles wide, about four thousand feet above the sea. This tableland has, of course, been formed by the activities of the parent mountain, Mauna Loa, and is covered with every variety of lava at its disposal. There are long stretches of smooth-faced, glossy, cream-coloured rock, called *pa-hoe-hoe*, which looks as if a swift river had been suddenly congealed with all its foam and ripples. Although in places very slippery, this is not very difficult to walk on, and is nothing compared to the horrors of crossing the rugged streams of the black *a-a*, which resembles huge blocks of concrete tossed and broken. It is the hardest, most cruelly jagged, most unyielding of all kinds of rock. To this lava Kilauea adds

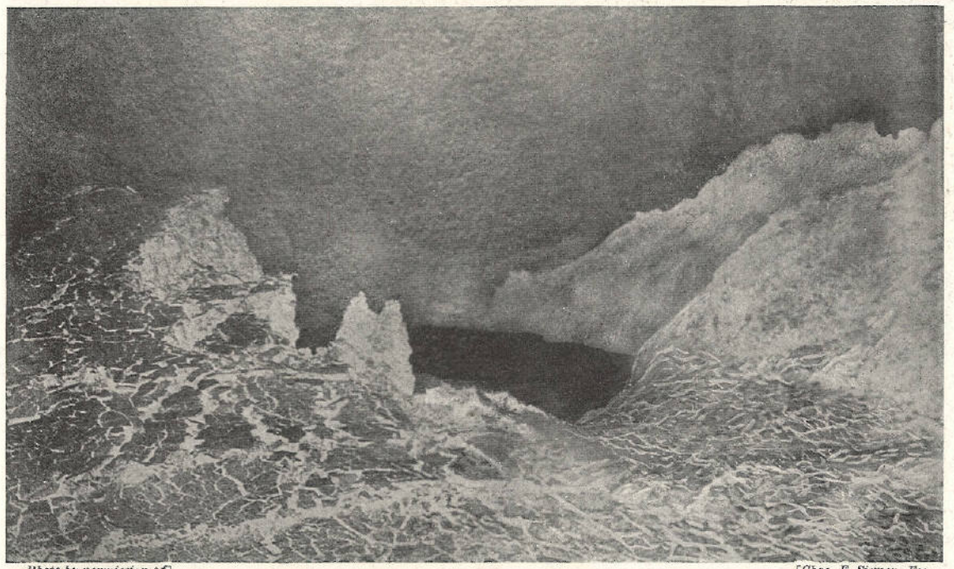


Photo by permission of [*Chas. E. Sisney, Esq.*

IN THE BURNING CRATER OF KILAUEA.

This oval crater is nine miles in circumference, and is a vast lake of living fire that rages at white heat, wherein waves of lambent fire dash against the lava walls that hem them in

nothing of its own. It was described by its discoverers as an oval crater, nine miles in circumference, sunk within precipitous walls of volcanic rock, with a lake of fire at one end. And thus it still appears to-day. Kilauea is always active, but its works are confined to its own playground. Here the volcanic agencies that make and unmake the world are to be seen at work, though their labours come to nothing, and their building up and breaking down are apparently aimless and merely self-destructive. Every traveller who visits the crater has something different to relate of what he has seen there. But there is always the oval crater, nine miles in circumference, the precipitous rocky walls, the grey floor of cooling lava, and the burning lake at one end. It has the appearance of a huge sunken pit paved with a cold blue-grey substance that might be stagnant, leaden-coloured water when viewed from above, but which is found to be a rugged mass of the roughest and cruellest lava blocks when the difficult descent has been made and the traveller attempts to cross the floor to the Lava Lake. This inner circle, the true chimney, is known as *Halemaumau*, or the "House of Everlasting Burning." It is always varying. Some have seen a lake of living



From Stereo copyright by] [*Underwood & Underwood.*

IN THE CRATER OF KILAUEA, HAWAII.

This vast wall of volcanic rock, nine miles in circumference, encloses the narrower circle of lead-coloured walls of the "House of Everlasting Burning."

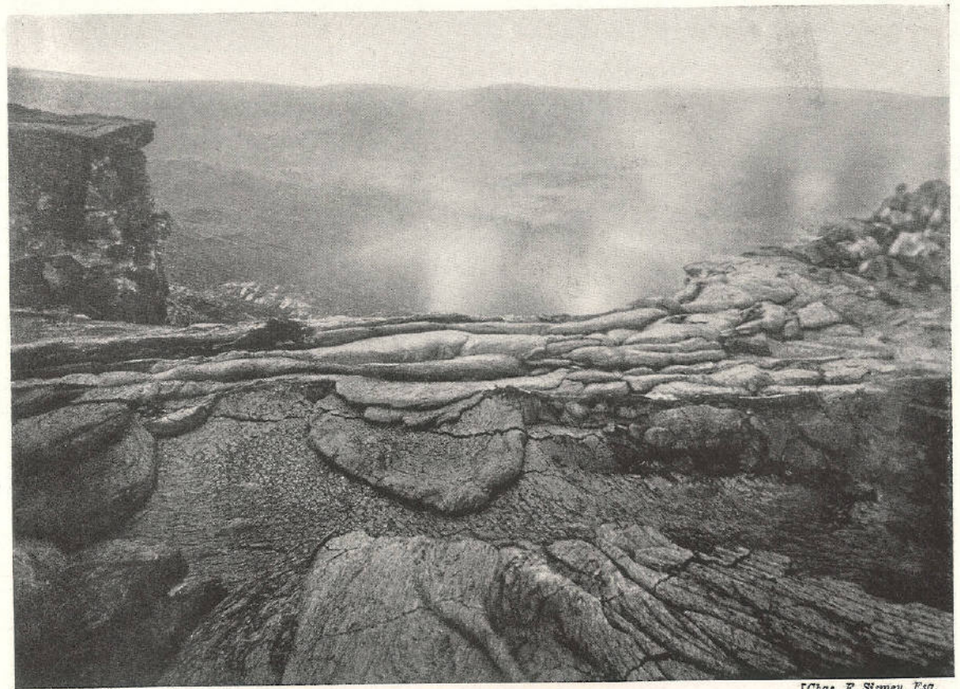


Photo by permission of] [*Chas. E. Stoney, Esq.*

THE LAVA DEPOSITS OF KILAUEA.

The eruptions of Mauna Loa are repeated on a small scale by Kilauea. It continuously sends forth floods of this flowing lava called *pa-hoe-hoe*, which varies in appearance from polished ivory to fawn-coloured velvet.

fire three miles in circumference, wherein burning waves of liquid lava dash themselves upon the walls that hem them in. Fiery spray is flung high into the air, and, in falling, turns to lava rocks which grow up round the shores of the lake and pen in the waves of fire, which, in turn, undermine the crags till they fall with a crash into the cauldron to be re-smelted and thrown up once again. Then perhaps within a few weeks the tide of fire recedes into the awful caverns in the heart of the mountain, leaving the high crags clustered about the lake's edge in tortured shapes. Or perhaps they, too, will go, and only a vast mysterious chimney remain open, from which clouds of steam and noisome vapour ascend.

The mountain is regarded by the Hawaiians with great veneration as the throne of the goddess Pele. Eruptions are the signs of her anger, and her terrified worshippers endeavour by prayer and incantations to appease her wrath, and by flinging into its burning waves things precious to themselves seek to stay the destructive lava floods. Many are the stories related to the credulous of the miraculous efficacy of these simple sacrifices.

The Boiling Lake, White Island.—White Island, Bay of Plenty, is situated on the volcanic line that stretches from the great cones of the south of New Zealand, and, says Professor Thomas, a submarine ridge runs from East Cape and Bay of Plenty along the bottom of the Pacific Ocean in a north-easterly direction as far as the Tonga group of islands.

The greater number of the famed hydrothermal phenomena of the Taupo zone occur on or near Ruapehu-White Island line, which is its normal terminal. White Island, a sylvan spot of forest and fern-groves with beautiful shores, is a volcano now in its solfatara stage, and in the centre of the island is a crater half a mile in diameter, which, until a short time previous to the eruption of

Tarawera, was occupied by a lake of acid water. But preceding the eruption thousands of dead fish, poisoned by submarine fumes, were cast up on the shores of the bay, and the crater-lake suddenly became dry. The lofty crater now continually gives off a dense body of steam, which rises in a great white cloud that is visible for fifty miles around.

Milford Sound.—That wild, and but half-explored vastness of magnificent mountains and deep fjords, known as the West Coast Sounds of New Zealand, is beyond description—an unpeopled wilderness of countless snow-domes and primeval forests whose silence of ages is scarce broken save by the echoes of falling fountains, the thunder of mighty waterfalls in majestic leap from the snow-capped towers, or by the foaming cascades dancing to swift snow rivers that roar their way through deep cañons to the Pacific Sea.

The crowning-point of this wonder-cruise is Milford Sound. It is the last of the fjords that, thirteen in number, stretch for hundreds of miles from beauty to a grandeur which culminates at this point.

Bounded by gigantic granite cliffs that rise five thousand feet sheer out of the water and dip a thousand feet beneath, Milford has been robbed of the glacial austerity of its origin by the wealth of the forests that climb over its shoulders and touch the snows under the clouds. That this stupendous inlet was once filled by a solid block of ice the face of the cliffs testifies. But everywhere that vegetation could, it has taken hold, and the forests, musical with the song of the *tui* and bell-bird, are sub-tropical, and over range beyond range to the hoary peaks the carpet of varied greens is spread of palm-trees and pine, totara festooned with flowering vines and green-grey mosses, and



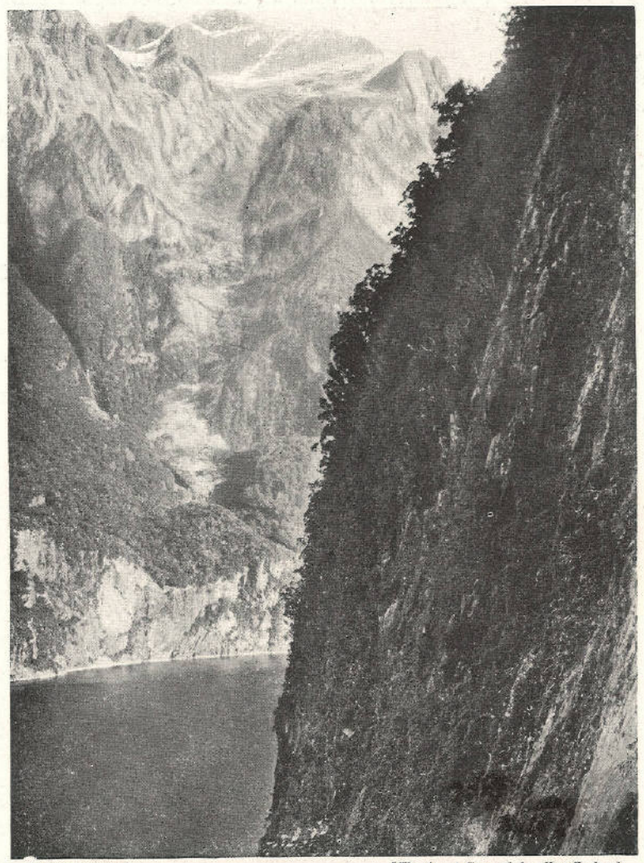
Photo by] [*J. Martin.*

THE BOILING LAKE, WHITE ISLAND.

This crater of an inactive volcano was once a lake of acid water, but since the eruption of Mount Tarawera, the waters are dried up and the crater gives off clouds of steam.

a wealth of rata in red masses flaming against the snow, and forming giant-bouquets amid the black-greens that overlap at the water's edge in a luxuriant fringe of orchids, ferns and rushes and the golden-hearted mountain daisy.

But the sense of majesty is never lost. One of the towering cliff walls is capped by Mitre Peak, another forms the Lion Rock—a dark granite perpendicular monster of three thousand feet, the outlines of which resemble the animal after which it is named. Stirling Falls are seen on the north side, five hundred feet high. Leaping from the snow-fields, and approaching the head of the Sound, the music of the white cascades that foam down the mountain-side is lost in the deep, continuous roar of the Bowen Falls, of five hundred and thirty feet, that pours its torrent into a great basin and spouts up again to some height before falling into the waters of the Sound.



By permission of [*The Agent-General for New Zealand.*

THE GRANITE WALLS OF MILFORD SOUND.

These massive walls tower 4,500 feet above the fjord and reach a depth of over 1,000 feet beneath the surface of the water. Long ago they formed a ravine for a glacier, and even now bear the deep marks of the ice-teeth.

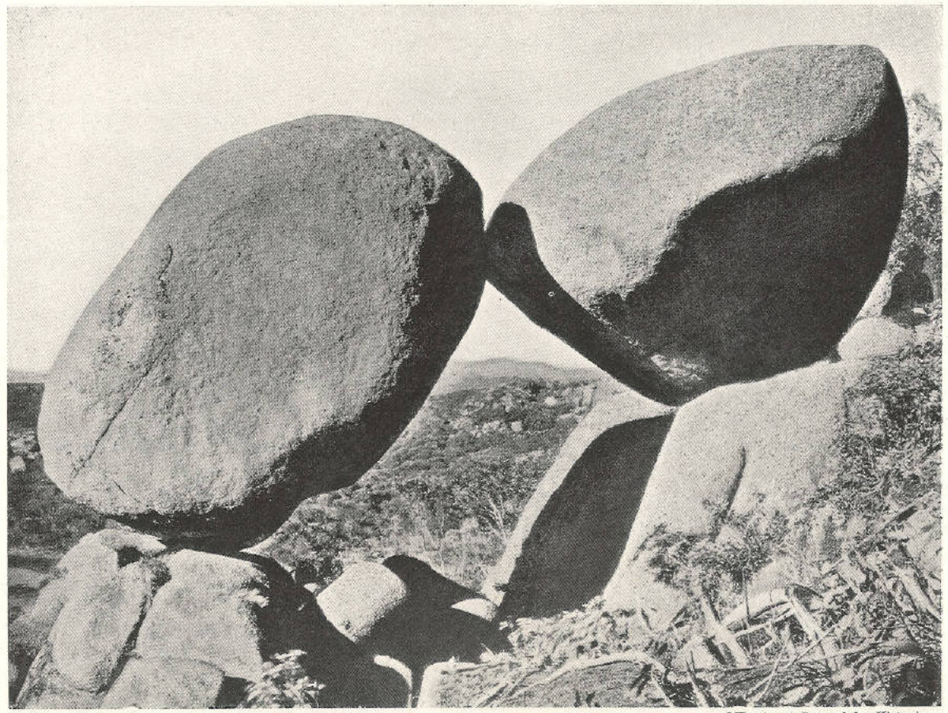
Buffalo Ranges.—This mountain range occupies an isolated position in the north-east division of Victoria, being about twelve miles north of the great Dividing Range, and it towers majestically above the surrounding plains. It is a gigantic mass of granite, which has resisted the denuding forces that have been at work through countless ages stripping off the covering of sedimentary rock and cracking and crumbling and washing away the surface of the granite itself. It is one of the finest spots in the world in which to see the dramatic evidence of the infinitely slow but resistless work of breaking down and building up that is continually proceeding on the face of our apparently stable world. They must have been originally an undulating surface of sedimentary rock, which by the action of weather and water was carried away and spread over the bedrock of the surrounding plain, exposing the great granite dome of which the remaining masses of the Buffalo Mountains are the rugged bones. Thus the plains have been raised many feet above their original level, and thousands of feet of the granite dome have been worn away, yet so great is its resistance to the gnawing tooth of the destroyer that the Buffalo stands still in its conspicuous position, proudly rearing its Horn five thousand six hundred and forty-five feet above sea-level.



By permission of [*The Agent-General for New Zealand.*

MILFORD SOUND.

In Milford Sound the scenery of South New Zealand reaches its culminating point. Under the shadow of the rocky steeps the deep water becomes blue-black in hue, and the feathery palm-tree fern and liana clothe the cliffs, while at the back of all the snow-white peaks sparkle in the sun.



By permission of] *[The Agent-General for Victoria.*

THE KISSING STONES, BUFFALO RANGES.

Nowhere is the process of denudation shown more strikingly than on this range of granite, but it has taken tens on tens of thousands of years of exposure to carve out these huge natural monoliths.

The general surface of the range is remarkable for the abundance of tors and great granite blocks that are strewn all over it. Isolated peaks and ridges piled with loose stones and rock masses of symmetrical shape are a feature of the landscape. The Horn, which is at the south end of the range, is the topmost peak; from this point the main plateau, though broken by rocky hills, slopes downward some thousand feet to the Gorge, which is four thousand two hundred and seventy feet above the sea. The Gorge is a prominent feature, and is the result of the development by denudation of certain joints in the granite running north-east and south-west. The north side of the Gorge exhibits a granite wall eight hundred feet high and half a mile long.

Buffalo Creek is a still greater achievement standing to the credit of these denuding agencies, for in this case a mass of rock three miles long, from half to one mile wide, and of a varying depth of anything from twenty to two thousand feet, has been bodily removed to form a sheltered and luxuriant valley with a river flowing quietly along its course. The direction of this valley corresponds with that of the north-east and south-west system of joints. This jointing of the granite has been the principal element in determining the present features of the Buffalo Range. Wherever a smooth, clean surface of hard granite is exposed these joints may be noticed. In their first stage the fissures are fine as the scratches of a needle point, but they nevertheless cleave right through the entire granite mass down to its very roots.

These fine joints are not set in straight lines, but branch in a curious manner, and the whole structure of this mountain chain, with its magnificent and varied scenery, its huge tors, monoliths and poised blocks, results from their presence.

These tors are a source of inexhaustible wonder and interest. There is the *Monolith*, the most conspicuous of all the rocks on the range. It is twenty-two feet long, fourteen feet broad, and thirty feet high, and is perched up on end in a seemingly precarious position on a high peak of bare granite. The *Sentinel* stands in a somewhat similar position, seeming to gaze far out over the plains. He is about sixty feet high. The *Egg Rock* is the best example of a poised rock. The base of this well-weathered tor, which weighs from seventy to eighty tons, is so small and its balance so delicate, that it testifies that for some thousands of years no earthquake can have affected this locality. Its egg-shaped block is poised on the very corner of a square mass of rock about twice its own size, and it only touches the supporting rock for a space of about seven feet by a foot, and that at an acute angle. The *Kissing Stones* are two poised rocks that lean together. The larger stone is eighteen feet in length and the pillar it stands on is twenty feet high. The *Torpedo* lies like a monster at rest, with a little grove of gum-trees sheltering his retreat, and a soft blanket of green vegetation to lie upon. The girth of this supine monster is forty-six feet, and from tip to toe he measures forty-five feet. *Mahomet's Coffin*, another egg-shaped rock, is suspended by the two ends only, among a hurly-burly of piled slabs and boulders. The *Sarcophagus* stands like the tomb of a hero, high up on a granite ridge.

The Antipodes Isles.—This spot on the far side of the globe must always be for us full of possibilities of romance, as it is the exact antithesis of our civilized homeland. On the vast bosom of the South Pacific Ocean lie these little groups of uninhabited islands, the Antipodes Isles, lying,



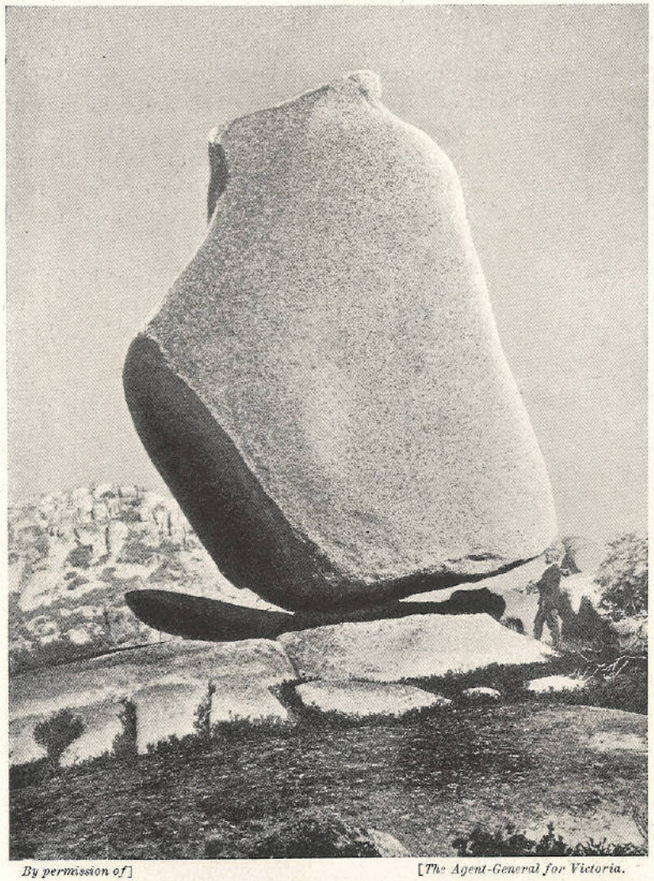
By permission of] *[The Agent-General for Victoria.*

THE TORPEDO, BUFFALO RANGES

This monster stone measures forty-five feet in length, and has a girth of forty-six feet. Notice the conspicuous crack in the granite slab on which it lies. In ages to come that fissure will cleave the granite mass from top to bottom and other huge tors will be in the making.

it is said, just over the spot where an enterprising mole, burrowing straight through from Greenwich, would probably emerge into the light of the sun!

Such rocky islands as have here succeeded in thrusting their heads above the level of the Pacific are dotted about in small groups and companies, known under various names. All are desolate and dreary, the home only of the albatross and the penguin, whose mournful crying rises above the never-ceasing roar of the hungry surf. Some of the larger islands are covered with luxuriant vegetation, the gift, no doubt, of the sea-birds, while others are bare rock.



By permission of [*The Agent-General for Victoria.*

THE SENTINEL, BUFFALO RANGES.

Frost splitting the granite mass, torrential rain washing away the loosened material, and the fury of the hurricane, have sculptured and poised "the Sentinel" to tower sixty feet upon the summit of the ranges.

Many are the tragic tales told of shipwrecked sailors who found a haven on one or other of these islands only to languish in the greatest privation for months, or even a year or two, before being discovered and rescued by a passing whaler or some sailing vessel. Many must have landed here only to die a lingering death from thirst and exposure.

Indeed, relics and inscriptions have been found relating the most heartrending stories of slow torture.

So authentic are these tales, that some years ago the New Zealand Government decided to establish provision depôts on each group. They caused small wooden shelters to be erected in which provisions are stored, with fuel, matches, bedding and clothing. About twice a year a Government steamer leaves the mainland to visit these depôts and set them in order, and relieve any shipwrecked mariners from their weary vigil among the sea-birds. Special permission can be obtained to go on this trip to the Islands, and anything more romantic, and in its way exciting, it would be hard to imagine. These are the last fragments of habitable, if not inhabited, land before the silent spaces of the frozen Antarctic are reached.

The Auckland Isles form the largest and most important group. They have a luxuriant growth of vegetation and many beautiful flowering plants of great interest to naturalists. Here are found both land- and sea-birds, and it is one of the few breeding-grounds of the albatross.

The Campbell group is also very fertile. The Macquarie Isles belong to Tasmania. Here there

Photo by]



[*Muir & Moodie, Dunedin.*

BOUNTY ISLE.

Situated on the border-line of the Antarctic Circle, this island is inhabited by none but the birds, who here breed in countless thousands. Nature, for safety, has narrowed the eggs of these islanders at one end. This prevents them rolling off the bare ledges and crannies of rock on which they are laid



Photo by] [Muir & Moodie, Dunedin.

PENGUIN CAVE, BOUNTY ISLE.

Penguins, gulls, puffins, and even the great white albatross breed here. The penguin, as may be seen from the photograph, is the prevailing species. Provided with every good thing and sheltered in these Isles of the Blest, so that they had no need to fly, these birds now possess only rudimentary wings.

was once a station for procuring the oil of the sea-elephant and king penguin. But that has been abandoned since the Tasmanian Government interfered to prevent the extermination of these creatures.

The Bounty Islands are a collection of rugged rocks, destitute of all vegetation, and they are crowded with sea-birds. These isles are the breeding-place of the "Molly Mawks," a name given in the southern hemisphere to one of the albatrosses (*Diomedea melanophrys*). These birds lay only one egg, white with a few spots; and their apology for a nest is some small hollow or depression in the rock, or a little circle of earth roughly scraped together on the open cliff. The Bounty Islands are crowded with these great albatrosses, and with the fussy, important, comical penguins, besides the ubiquitous "mutton birds" (*Puffinus brevicaudus*). The chief breeding home of the mutton birds is found on the wild little islands off the south-west coast of Stewart Island. The young are a very favourite food of the Maoris. The ungainly young gulls are thickly covered with very long down, and are extremely fat. These islets have never been acquired from the natives, who preserve the birds on them, and export them at certain seasons in large numbers to New Zealand for sale.

The Waimangu Geyser.—Evidences of thermal activity are on every hand in the Hot Lake district. Tarawera, seared and scarred, with latent fire gnawing at his vitals, rises northward of Waimangu. Sulphur and boiling springs are everywhere, and Lake Rotomahana steams with

thermal heat. But it was ten years ago that another phenomenon was added to the wonders of this land of geysers. An immense column of steam was perceived rising up from a new geyser, which, increasing in fury, emitted dense volumes of boiling mud and stones. The Maoris gave to the new geyser the name of "Waimangu," or "Black Water," and "Black Water" is no unworthy addition to the tale of this district's marvels. Its crater is open on one side level with the surrounding soil. It extends over a space of two acres and is two hundred and fifty feet in diameter, where the adventurous can look down into the gloomy and troubled swirl of black boiling mud. An eruption of this geyser has not taken place since 1908, but in the days of its great activity Black Water was not quiescent for longer than thirty-six hours. A flat surface on the open side of the crater in a continual state of unrest, and named "The Devil's Frying-Pan," is evidence of latent energy; and, further, in the same crater is a boiling lake known as Echo Crater Lake, which overflows when a fresh eruption of Waimangu is about to occur. These outbursts are magnificent spectacles, for the volume of mud obtains a height of over eleven hundred feet, and dense clouds of white steam roll upwards many thousands of feet before they are lost in the atmosphere.

The Caves of Western Australia.—This series of most beautiful and interesting caves lies in the limestone cliffs of Western Australia at the extreme south-western corner. Cape Leeuwin is the first point of the great continent of the south to greet the eyes of the European traveller, and between this headland and Cape Naturaliste, a few miles to the north, among the rugged ravines and wild scenery lying behind the tall cliffs that front the sea, these wonderful caves are to be found. The journey thither can be made either from Yallingup or Margaret River.

They belong to that important class of cave that has been hollowed out of calcareous rock by the action of water. The rain-



Photo by] [Ilex.

THE WAIMANGU GEYSER

The eruptions of Waimangu took sometimes the form of black, boiling mud and sometimes of explosions of ashes, earth and stones. They attained an immense height, sometimes as much as 1,500 feet.

water percolates through some vertical fissure and thence threads its way horizontally till it escapes somewhere in the side of the cliff or ravine. In the rain-water is a certain percentage of carbonic acid, and the rock is composed to a large extent of carbonate of lime, which is readily changed to soluble bicarbonate by the action of carbonic acid. Thus the rock is disintegrated along the path of the water, and is worn away and away till the tiny runlet grows to a subterranean stream, and the crack in the rock becomes a series of large caverns and halls.

The lime released by the action of the carbonic acid and held in suspension in the hurrying water, is caught by any sort of projection in its path, and proceeds to build little white pillars and castles and bridges of its own. Where the water falls in a miniature cascade the lime is deposited, and hangs a fringe of white stone icicles; and where the water drops slowly upon the rock floor below a white boss of pure limestone will be formed, growing ever larger, till it becomes a stout pillar, and possibly will eventually join the pendant stalactite from which the water has been dripping.



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VIEW OF THE WAIMANGU CRATER.

The crater of this vast geyser is about two acres in extent. For some time Waimangu has been quiescent, no eruption having taken place since 1908.

Every variety of stalactite and stalagmite (those peaks that grow up from the rock floor) are to be seen in these caves near Yallingup. In one there is an almost perfect opera-box, with lace curtains, arm-rest, pillars, and all complete. Another vast cavern, called the King's Council Chamber, is a grand sight. It is difficult to get sufficient light to see the marvellous traceries and incrustations of white stone, as this cave is of enormous size and fully one hundred feet in height. But one sees that stalactities drop from the domed roof like huge crystal chandeliers, while the hangings that are draped upon the walls seem as if they stir and waver in the draught, as the lights we carry shed their uncertain radiance over them. Great pinnacled seats rise like thrones in the midst of this hall, and one can imagine a royal court being held in a scene of such frozen splendour.

Wallcliffe Cave has a very narrow entrance hidden among bushes and ferns. One must creep, bent almost double, along a narrow passage for about thirty feet, and then one is rewarded by sight of "a circular chamber richly bedecked with gleaming white stalactites, with mammoth bunches of grapes, fleecy wefts apparently as soft as lambs' wool, but solid as marble, and—upspringing from the floor of the chamber as if greedy to clutch the fruit yet frozen in making the grasp—a monstrous hand several feet long" (M. Vivienne).

By permission of]

CRYSTAL FLOOR, YALLINGUP CAVES

A photograph of the great pinnacled stalagmites in the wonderful caves of Western Australia. These caves are very vast and very lofty, attaining a height of as much as one hundred feet.



[*The Agent-General for Western Australia.*



By permission of] [The Agent-General for Western Australia.

THE MILITARY RUG. YALLINGUP CAVES

A splendid example of the jewelled draperies that are woven in stone in these subterranean palaces.

The Warrawerrie, or Blackboy Hollow Cave, is about two miles south of Wallcliffe. From its pit-like entrance there is a descent of fifteen feet by ladder. The floor of this cave is a mass of worn and rugged boulders. In one place is a stalagmite in the likeness of a broken column, that looks as if carved from Italian marble of the purest white. Gauzy draperies that imitate the finest lawn hang from the walls, and until the hand is laid upon their cold, unyielding substance it is almost impossible to realize that they are woven by water of stone, instead of in the looms of the East.

The Cave known as Doodjijup lies about a mile from Blackboy Hollow. Access to this cave is by a rather toilsome ascent, but once inside the traveller is rewarded by the magnificence of the spectacle. There are columns like the crowding pillars of some vast white cathedral and pendants that look like the pipes of its great organ.

A running stream gives its name to the Crystal Cave, where the water appears to flow through a series of marble basins ornamented with the most delicate tracery, while the stalactites that hang above it are so faithfully reflected in the water that it is difficult to discover whether the gleaming white fringe is drooping from above or growing up like frosted flowers from the depths below.

In Calgardup Cave, too, the floor is still damp enough to show that it has been the bed of a subterranean creek. This hall is fully seventy feet across; its walls are adorned with stalactites of every imaginable shape, and these take on beautiful iridescent colours in the uncertain light. Here is that strange formation known as The Pulpit, apparently supported by the flimsiest of marble chains. Here "is the gem of all the caves, the suspended dome, the delicate tracery of whose

splendid and fantastic fretwork hangs in mid-air held by almost gossamer crystalline threads," says M. Vivienne, who has written a picturesque and enthusiastic description of all these caves.

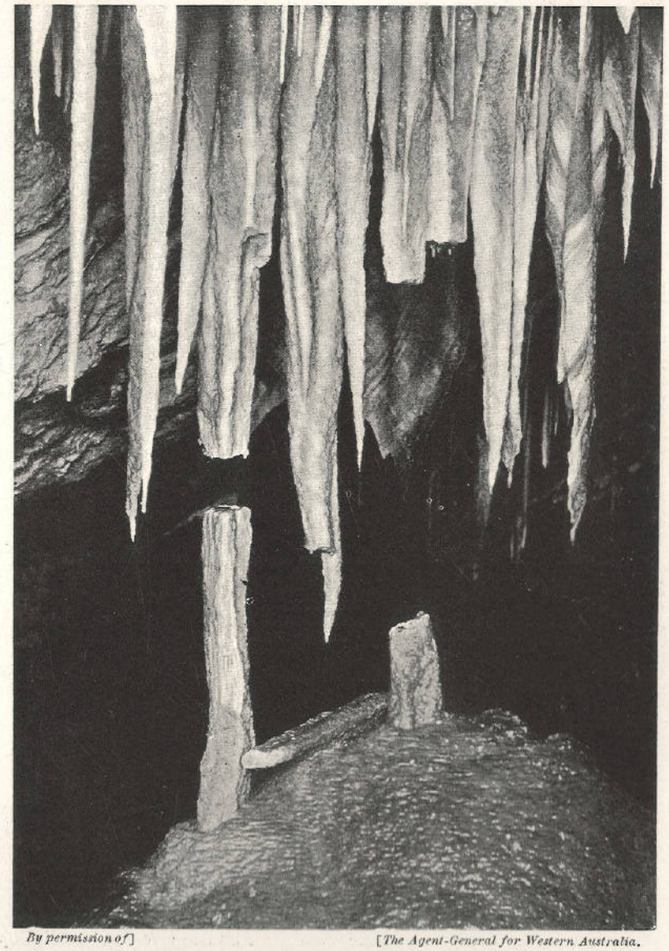
And the accompanying pictures will demonstrate more clearly than words can do the infinite variety of this beautiful form of Nature's artistry.

Wairakei.—The Wairakei Valley is one of the three great wonder-valleys of thermal-land, and lying near the banks of the Waikato. This valley of geysers, with its wooded slopes of manuka forest, tangled vines and fern-groves, leads through ever-changing scenes of gorgeous colouring. Flashing streams and rapids, banks of pink and white, red and yellow silica are framed with luxuriant fern and soft moss, and at intervals in the valley the marvellous geysers shoot from their rocky beds and play their steam-fountains, disappearing only to reappear again with fascinating regularity.

The pool, known by the two names, "The Champagne Pool," or "Pirorirori," which is a Maori name signifying the "Ever-swirling," is a boiling cauldron of deep blue-green waters, set within an oval lake with precipitous banks, one side of which is covered by vegetation, the other variegated with stripes of the coloured clays in which the neighbourhood abounds. One side of the lake opens into an active volcanic area, and it is within a circle near the shore that the boiling pool swirls in its lake setting.

The beautiful colour of the pool is attributed to the clay which is held in suspension in its active crater-basin, the overflow of which forms a hot stream known as Kiriohinekai.

The beautiful geyser of the Dragon's Mouth is one of the most energetic of the Wairakei Valley. It is a fissure opening from a chasm about thirty feet above the level of the creek, through which the water comes boiling up about every nine minutes, throwing beautiful



By permission of] [The Agent-General for Western Australia.

THE BROKEN COLUMN, BLACKBOY HOLLOW CAVE

Stalagmite and stalactite have here wrought slender fluted columns that the skilled sculptor of Ancient Greece might have carved out of faultless Parian marble.

feather-like fountains into the air which last about ten seconds and then disappear. The eruptions reach to a height of about ten feet above the cone, then fall into a series of small cascades. The soil around, contrasted with dark manuka, is in bright reds, and at the base of the geyser is a small boiling pool that circles in a round basin about four feet in diameter. The pool is of an exquisite blue, its surface rippled with coloured bubbles. The colour-scheme is enhanced by the pink coral-like sinter of the lower portion of the terrace, which above is in many shades of browns and reds, black and white.



By permission of [*The Agent-General for Western Australia.*

BLACKBOY HOLLOW CAVE, WESTERN AUSTRALIA.

Stalactites of two different mineral substances are to be seen in this cave. The rain percolating through the rock has carried with it besides the lime another deposit that the rock contains, which has remained in the stalactites and has caused the change of colour.

Lake Manapouri.—Lake Manapouri is one of the most enchanting and the deepest of the New Zealand lakes of the South Island. Its old Maori name of Motu-rau—the Lake of a Hundred Islands—is very appropriate, for it is dotted with innumerable islets. The area of the lake is estimated at fifty square miles, and its depth at two hundred and fifty fathoms at its deepest portion. It is twenty miles in length and opens into two long arms—the South Arm and the Western Arm—and is surrounded on all sides by magnificent mountains, forest-clad and snow-crowned, as are all the mountains of this coast. The head of the lake is exceedingly beautiful, and the Alpine scenery superb. The vast mountains tower skyward six and seven thousand feet above the sea, and for three hundred feet the mountain-birch, fern-trees and rata cover the slopes with dense vegetation, while the islets in the lake are bowers of green. The northern shore gives a wide view of towering mountains with glittering glaciers, from which tumble white waterfalls into deep ravines. The Matterhorn Range and the Cathedral Peaks dominate the blue water-scape with their silver domes and pinnacles. The arms of the lake narrow, and with their towering cliffs resemble the fjords of the west coast. The Western Arm is particularly beautiful, with deep indents, cove and cape beyond cove and cape, all exquisitely wooded. But the whole lake is a combination of lovely scenes and colours; far as the eye can reach the blue waters are set in a faultless frame of splendour, which as yet is unmarred by the habitations of man.



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THE PULPIT, CALGARDUP CAVE.

Built up on chains of the finest marble and overhung with dazzling fringes of stalactites. The Pulpit is considered to be the gem of all the caves of Western Australia



[By permission of] [The Agent-General for New Zealand.

THE CHAMPAGNE POOL, WAIRAKEI

This boiling lakelet takes its name from its beautiful colour, which is attributed to the clay held in suspension by the bubbling waters.

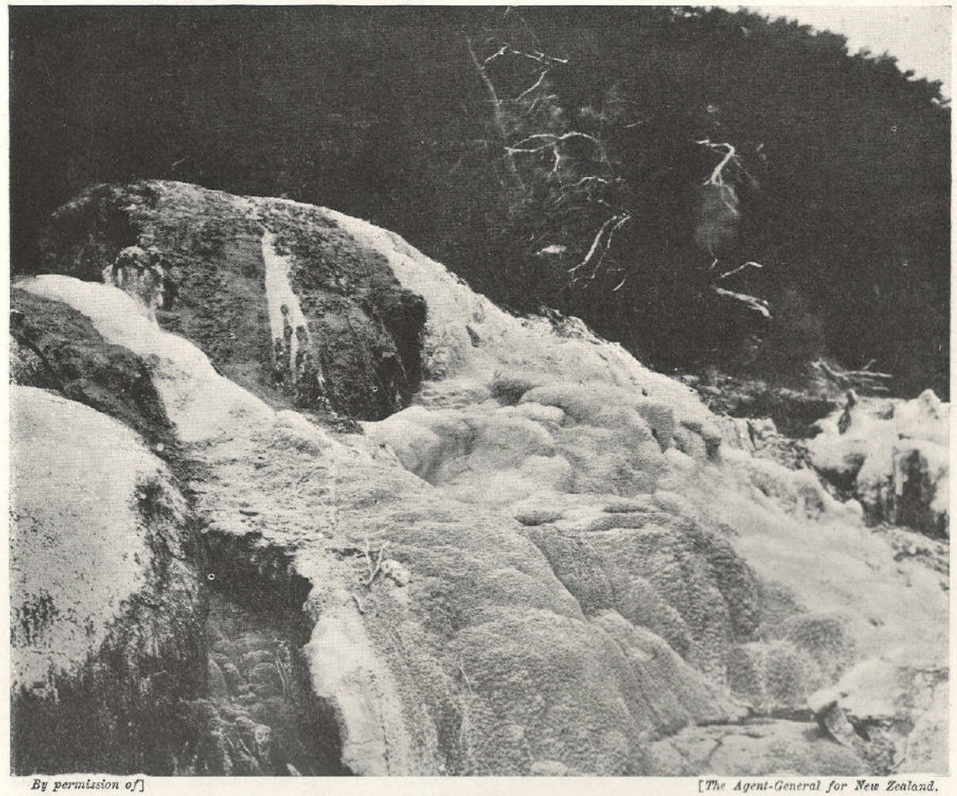
Lake Rotomahana. — The "Warm Lake" Rotomahana, upon whose banks rested the exquisite sinter terraces of pink and white till the convulsion of Mount Tarawera, is the site of an old crater, the basin of which was one of the best-known beautiful sheets of water of the district as the approach to the world-famed terraces, these gleaming sinter deposits adding to the interests of its rush-girt shores. But on the night of the great eruption of Tarawera the original Rotomahana was blown completely from its bed, and scattered far and wide in mud and steam with the dust-fragments of the marvels of its shores. What had been a scene of unique natural beauty was a desolation of strange sights and sounds. The bed of the lake over its whole area was covered with hideous mud-fountains and fumaroles that sent up great volumes of dense white steam. The steep sides of this ghastly cauldron were covered in ash, and the surrounding hills deeply fissured; from these cracks in the rocks innumerable steam jets emitted a mighty roar. And, above, Tarawera was rent in twain.

Around Rotomahana the ground had everywhere testified to the vigorous hydrothermal activity of centuries. Thomas says: "There can be little doubt that at moderate depths from the surface the rocks were [before the eruption] saturated with water at a temperature far above its ordinary boiling-point, and that this water was simply kept from flashing into steam by the pressure of the overlaying rock. If that pressure could have been relieved by the surface layers of the ground the superheated water would have been explosively converted into steam. There were present, therefore, around Rotomahana all the conditions requisite for a hydrothermal explosion except the relief of the pressure due to overlying rocks. The formation of the fissure during the eruption supplied the last necessary condition, and the result was therefore the stupendous hydrothermal explosion of 1886." Six months later the new lake had risen to half the size of the original. The old outlets had been blocked, and the waters pouring into it have extended its area to thirty times its original space; for whereas the original lake covered one hundred and eighty-five acres, the present lake covers five thousand six hundred acres.

But Rotomahana is not hot over the whole surface. Long reaches are cold, others warm, but over the site of the geysers that throb like engines at the crater-bed of the lake the water is boiling, and boiling springs break through where the waters are shallow. The cliffs of the lake steam with geysers, and the roar of the fumaroles is indescribable as the traveller approaches their vicinity; while added to the enchantment of the richly-coloured scene are the gorgeously-coloured pictures painted on the rocks by the pigments of volcanic fires.

Mount Tarawera.—Mount Tarawera, one of the volcanic cones of the great ranges of the North Island of New Zealand, cuts through the heart of the thermal district, and is situated on the eastern shore of the lake of the same name. The highest part of the mountain, before its eruption in 1886, was three thousand six hundred and six feet above the sea-level, and seen at a distance its top had a flat appearance without sign of a crater. The oldest traditions had no data concerning a past activity, and its forest-clad sides testified that for ages the volcano had been extinct. Scientists are agreed that Tarawera, previous to its recent outbreak, had been dormant since before the Maoris inhabited New Zealand.

The whole great Taupo chain includes in its line many magnificent mountains, among which are Edgecombe, Kakaramea, Paeroa, Tongariro, Ngauruhoe, and Ruapehu (nine thousand feet high), that dominate the table-land of the solfatara country for at least one hundred



[By permission of] [The Agent-General for New Zealand.

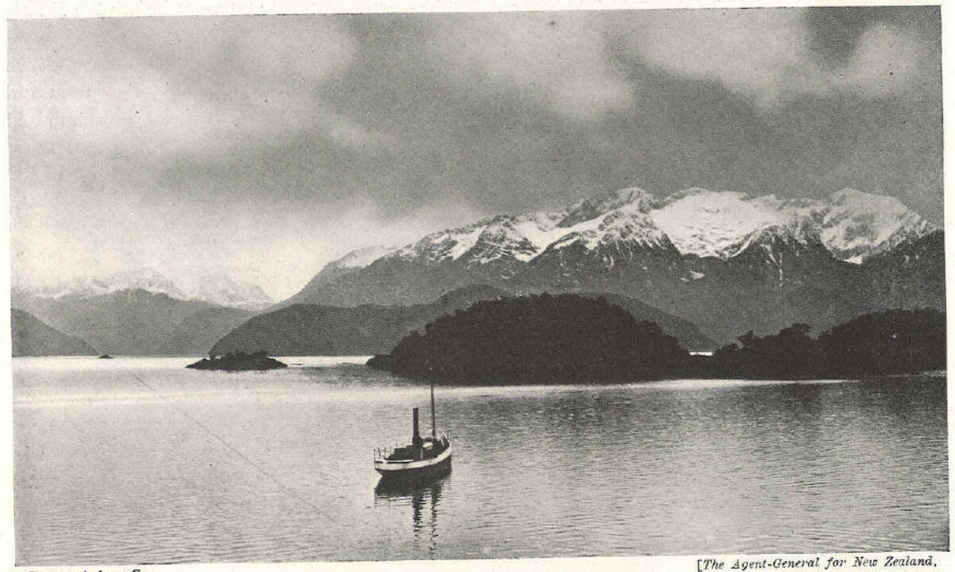
THE DRAGON'S MOUTH WAIRAKEI.

This geyser is renowned for its wonderful colourings. The boiling spring, as it bubbles up, flows over coral-like sinter steppes into a pool of exquisite blue.

and fifty miles. The plateau-like Tarawera is monarch of a marvellous region, no less amazing than beautiful.

The Maoris gave different native names to Tarawera. The name of the North range signified "bursting open," the South, "the burst cliff," which is all the more noticeable as there had been no bursting open within memory. The mountain was sacred as a burial ground of chiefs, and for long its ascent by the white man was opposed by the natives.

Many signs of disturbance preceded the eruption, although no very special significance was attached to these disturbances. Cauldrons and geysers in the locality had been unusually active for some time previously; lakes suddenly rose, and in a crater-lake some miles distant the water entirely disappeared, leaving the crater dry. All through the year preceding the outburst there had been premonitions that something more than of usual force was happening in the subterranean world. The mighty explosion of June 10th, 1886, was so little expected that the inhabitants of



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LAKE MANAPOURI

The melancholy beauty of this lake, with its thickly wooded islands and sloping shores, and the snow-clad summits of the Cathedral Peaks, rising to the north, has given it its name—Manapouri, "Lake of Sorrowing Heart."

the surrounding towns and villages, both native and European, were peacefully sleeping when they were awakened by the first earthquake shocks.

At Wairoa, eight miles from Tarawera, the sight was as magnificent as it was appalling; so also was it at Rotorua, fourteen miles distant. Within an hour from the first slight earthquakes and rumblings the shocks had become frequent and violent, and the roar of the exploding craters deafening and awful. Each report rattled the windows of the houses in Auckland, one hundred and fifty miles off, where flashes of electricity were vividly seen. The explosions were heard at Wellington, two hundred and twenty-eight miles away, and even as far as Christchurch in the south, four hundred and twenty miles distant. Dense clouds of smoke and vapour, outlined by electricity, rose six miles high into the sky, and spread out over the erupting mountain like a huge umbrella, which opened wider and wider, till a vast area was covered. From the main column of fire leaping from the furnace, fire-balls rolled downward into the lake, while along

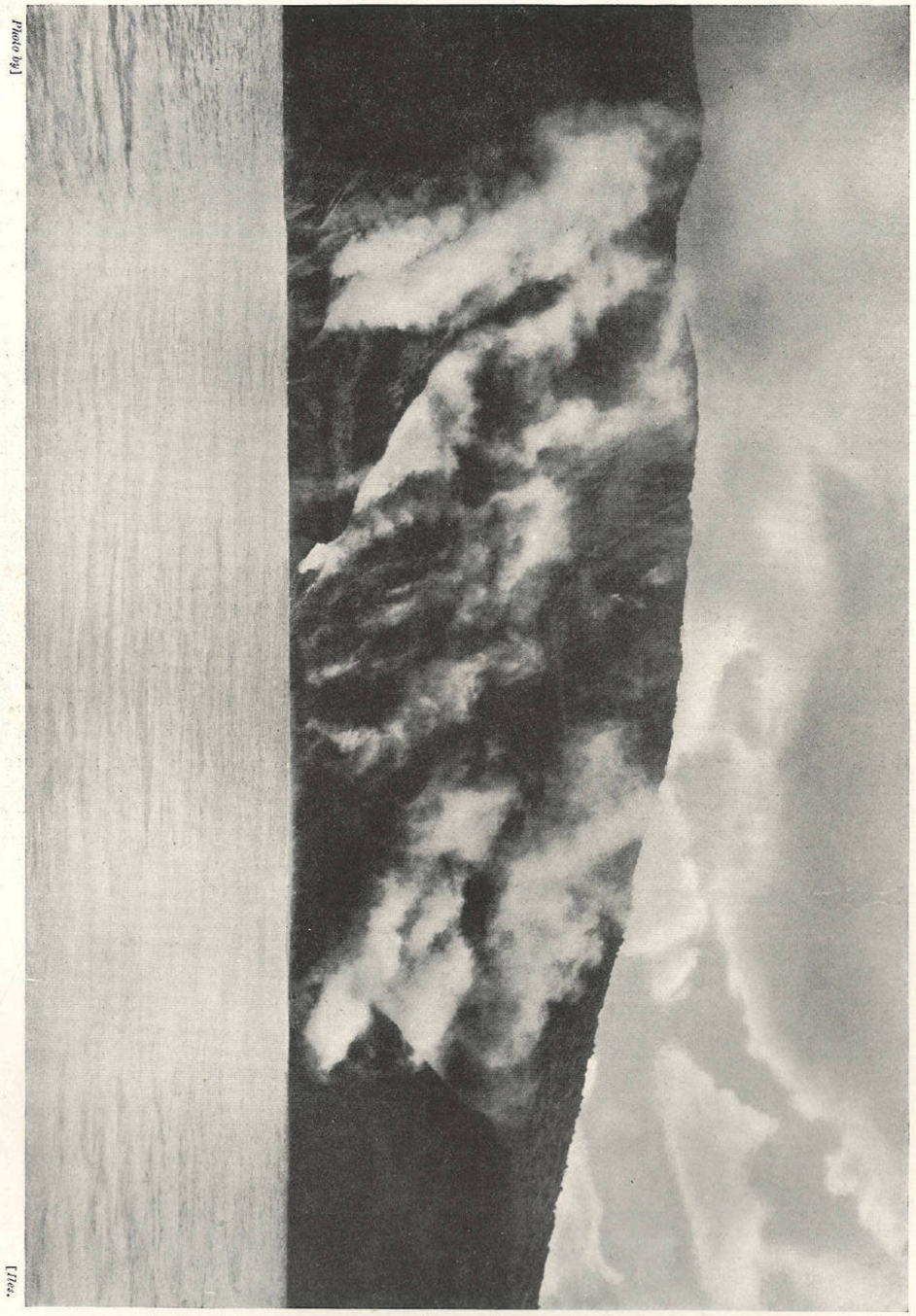


Photo by] [*Illus.*

LAKE ROTOMAHANA.

This was originally the site of an old crater. After the eruption of Mount Tarawera in 1886 a new Lake Rotomahana was created, thirty times larger than the former pool, that now covers a space of 5,600 acres.



By permission of] [*The Agent-General for New Zealand.*

MOUNT TARAWERA

This photograph shows the immense rifts in the side of the mountain caused by the eruption of 1886, when Tarawera awoke from a sleep of ages. At the base of the mountain is Lake Rotomahana.

the top of the range volcanic fires burst forth till the whole nine miles of mountain ridge burned eruptive altars.

By six o'clock in the morning the great destruction was over, although the eruption, with hourly abating energy, continued for some days, and rumblings were heard from the mountain and occasional stones were ejected from the steaming craters all along the range. When first the summit of Tarawera was seen through the columns of vapour, it was found to be higher than previously, its flat top raised in the middle, and the whole range rent with huge fissures, the series of vents extending nine miles, the depth of the craters varying from three hundred feet to eight hundred feet, and in width from one hundred and fifty yards to three hundred yards. The Tarawera Chasm is a mile and a quarter in length, from the edge of the plateau down the side of the mountain to its foot.

The forests had disappeared from the slopes, and the lovely colour of Lake Tarawera was destroyed. But industrious Nature has been busy during the twenty-five years that have elapsed since the eruption, setting the country in order in the region of Tarawera, getting vegetation through the mud-flats, covering ugly gashes with a luxuriant tangle of vines and ferns, reorganizing streams and refilling lakes, and calling back the birds and fish and flowers. But the witch-dance of the countless steam fountains and bubbling cauldrons has been more active since that fiend-night of 1886.

AFRICA.

CHAPTER XII.

By SIR HARRY JOHNSTON, G.C.M.G.

The Pyramids of Giza.—It has been already pointed out in the prefatory chapter to this work that the Pyramids of Egypt were foremost in the list of the Seven Wonders of the World in the minds of intelligent Romans and Greeks at the beginning of the Christian Era. These colossal tombs had first been described intelligently to the European world by Herodotus, the Greek traveller and historian, who was born as a Persian subject on the Greek-colonized coast of Asia Minor, and who made a long stay in Egypt, probably between 460 and 454 B.C. His name for these four-sided erections, the triangular sides of which converge from a square basis to a sharp apex, at an angle of about fifty degrees, was *Pyramis*, probably derived from an Egyptian term, *Piremus*, meaning a vertical height. The plural of this term in Greek was *Pyramides*, from which the English term, Pyramid, was derived, and was, according to Skeat's Dictionary, in use by English writers as early as the beginning of the seventeenth century. An older form of the Egyptian root seems to have been *Ab-mer*.

By those whose knowledge of Egypt is merely vague, it is imagined that there are pyramids all over Egypt, from Alexandria to the vicinity of Khartum, and also that pyramids are amongst



Photo by] [*Bonfils.*

THE PYRAMIDS OF GIZA.

Within sight of Cairo, at Giza, there are the three Pyramids of Khufu or Cheops, his brother Khefren, and Mycerinus, second, third and fourth king respectively of the Fourth Dynasty, who reigned from about 3733 to somewhere about 3600 B.C.

the oldest monuments of Egypt and are peculiar to that country. As a matter of fact, the earliest of the true Pyramids (namely, a four-sided stone building rising from a square base to a sharp apex), is probably not older than the time of the Fourth Dynasty, some six thousand eight hundred years ago; and the beginning of Egyptian civilization may be five thousand years farther back still. The true Pyramids, moreover, are almost entirely restricted in their distribution to the northernmost part of Middle Egypt, on or near the left bank of the Nile, just above the Delta, not far from Cairo. The small and late-built pyramids farther south in Nubia (Meroe) are poor imitations of the colossal achievements erected by the kings of the Fourth, Fifth, Sixth, Seventh, Eighth, Eleventh and Twelfth Dynasties, a period ranging (according to Petrie), from about six thousand eight hundred and fifty to six thousand two hundred years ago.*

The Pyramids in their perfect form—with a square base and smooth sides—seem to have been



Photo by [*Bonfils.*

THE PYRAMIDS FROM BEHIND THE PALMS.

It is generally acknowledged now that the Pyramids were nothing more than the tombs of the monarchs of Egypt who flourished from the First to the Twelfth Dynasty. The king made his "eternal abode" in his lifetime, and Lepsius, a leading savant, is of the opinion that he made additions to it each year.

almost suddenly evolved by the imagination of a great king or architect from the humbler and much smaller *Mastaba*, or stone tomb, in which, on the original flat surface or slab which roofed in the stone grave of a dead person, smaller slabs of masonry were placed. The increase in number of these oblong slabs gradually raised the roof of the tomb into a series of steps, and it only needed to place a single stone on the apex to have a roughly shaped pyramid such as grew to a marked development in the step pyramids of Sakkara, which will be illustrated farther on in this book. The change of the tomb shape from an oblong into a square and the filling up of the "steps" with smooth masonry completed the idea of the true pyramid.

* These figures are according to the latest published statistics (1906) of Professor Flinders Petrie. Other computations, however, as to the age of the Pyramids by other Egyptologists fix their period as being much less remote in time—roughly speaking, five thousand years ago. The Sphinx is more or less contemporaneous with the Great Pyramid of Giza: say, six thousand eight hundred years old.

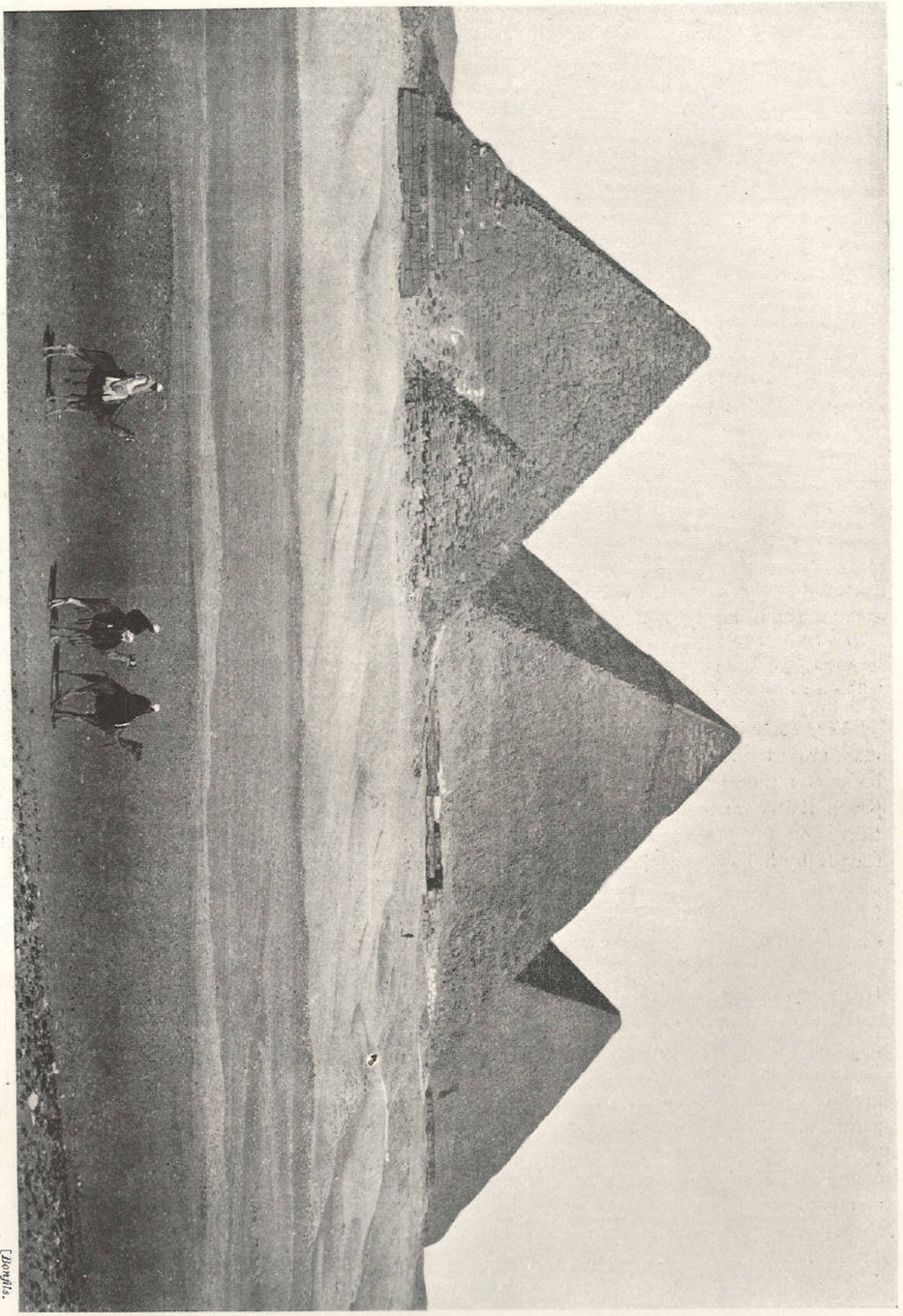


Photo by [*Bonfils.*

THE THREE PYRAMIDS.

According to Lepsius, the longer a king reigned the larger was his Pyramid. When he died his embalmed body was placed in a secret chamber, and then the Pyramid was closed against everyone. It is an interesting fact that each Pyramid had its name, usually an epithet applying to future life, such as "the most enduring place" and "the good haven."



Photo by] *[N. P. Edwards.*

THE GREAT PYRAMID

This is the "eternal resting-place" of Khufu The name he gave to it was *Khut*, which may! be translated as "the Lights."

Very early in the development history of man, especially of the white, or Caucasian, variety of man, arose the idea of burying a dead person in a stone chamber, for the principal reason that the body was thus protected from destruction by hyenas, dogs, or vultures. The ancient negroid people that once inhabited the northern shores of the Mediterranean—it may be, as far back as thirty or forty thousand years ago—were thus protected in little stone chambers, made usually by hollowing a place in the rock or ground, completing the walls of the burial-place with pieces of stone, and laying other pieces over the top. Gradually, the desire to prevent hyenas from dislodging separate fragments of stone induced the relatives of the deceased to apply large single slabs of stone. In this way grew up the Dolmen, which is found so widely distributed as a prehistoric monument over Europe, North Africa and Asia. Stone graves are unknown amongst true negro races that have not been subjected at one time or another to the white man's influence, and wherever they are met with south of the Sahara Desert they are an evidence that that influence has reached the negro in ancient or modern times.

In Berber North Africa a form of tomb analogous to yet different from the pyramid was invented. Here (in Algeria) the grave of important personages at the beginning of the historical period was often of a circular shape, possibly arising from the form of the hut or house; for the idea of burying a person in the home in which they have dwelt when alive was not an uncommon one. Over the top of this circular grave was a round masonry roof, on which again a smaller circle of stones was placed, and this developed into the "circular" pyramids—step circles of stones rising to an apex—which became the tombs of famous Berber kings, and which may be seen to| this day in various parts of Algeria.

The idea of the pyramid was not confined, however, to Egypt, but arose—no doubt, quite

independently—in the early civilizations of Greece, Italy, Assyria, India, China, and even Mexico and Central America. In all these cases, but especially in Egypt, the pyramid was never a family monument but the tomb of one person, or occasionally of husband and wife. For instance, the Great Pyramid of Giza—King Khufu's tomb—has lesser pyramids alongside, which were the tombs of other members of the royal family; though it is possible that besides the remains of King Khufu it may also have contained the sarcophagus of his queen.

As may be seen in one of the photographs, the outer surface of these typical pyramids was of smooth mortared masonry, a casing of fine stone, elaborately finished, well jointed and sharp-edged at each of the four angles. Had this outer stone casing been left undisturbed by man, it is doubtful whether in the climate of Egypt the Pyramids would have looked much out of repair at the present day, after nearly six thousand years of existence, and it would have been extremely difficult, if not impossible, to ascend them to the apex. But from the time when Egypt began to be invaded by "barbarians" from 500 B.C. onwards—especially during the long and devastating reign of the Arabs and Turks—attempts were made to effect an entrance into the Pyramids to discover their secrets and, above all, to search for hidden treasure. The outer casing of well-constructed masonry was hacked away, and the rougher interior structure exposed to view. This is, in the best-made pyramids, composed of horizontal layers of rough-hewn blocks of stone, with or without mortar, but in the later pyramids of the Fifth and Sixth Dynasties the mass of the



Photo by] *[Dow-Covington, Esq.*

THE BASE OF THE GREAT PYRAMID.

The Pyramid is built of nummulitic limestone brought from the quarries of Tûra and Masâra, on the other side of the Nile. The outer casing was of granite and limestone blocks, but only below the level of the ground are there any traces of this now.



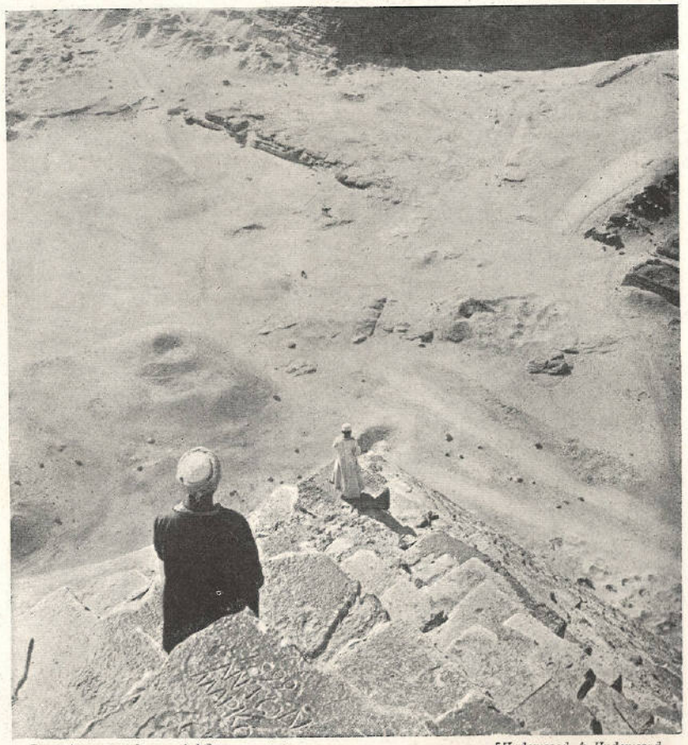
Photo by] [*Bonfils.*

ONE CORNER OF THE GREAT PYRAMID

The general appearance of the Pyramid is that of a rough staircase formed by steps varying from two to five feet in height. The present height of this pyramid is 451 feet, the length of each side is 755 feet, while the solid contents is eighty-five million cubic feet.

structure is little else than loose rubble and mud, and at a still later period the bulk of each pyramid was composed of mud bricks, but, of course, the outer surface and the walls of the chambers and passages were of good masonry.

The actual tomb or sepulchral chamber where the body of the monarch or personage was placed was nearly always below the level of the ground, and was reached by a descending passage, which either opened on the north face of the pyramid* or farther away still emerged from the rocky sides of the ground on which the pyramid was erected. These passages sloped downwards from the entrance to the central tomb at an angle of about twenty-six degrees. Their outermost entrance appears to have been closed by a stone door turning on a pivot. Other passages would branch off from the main one which led to the tomb and communicate with one or more large chambers in the middle of the pyramid, far above the tomb. Not infrequently, however, such subsidiary passages were found to be blocked or concealed, either for a temporary purpose or with the intention of perpetuity. The roofs or ceilings of these chambers were of horizontally-placed stones, above which were gables of great sloping stones converging from the north and south walls and meeting to form the ridge of the roof. In the King's Chamber of the great Giza Pyramid several ceilings of horizontal stones partially filled up the great space between the lofty gables.



From Stereograph copyright] [*Underwood & Underwood.*

Looking down the south-west corner of the Great Pyramid on to the desert below. The great height can be gauged from the size of the camel which is standing in the centre distance

It is possible that in the great Giza Pyramid of Khufu, or Cheops, it may have been intended to place, not only the body of the King himself, but that of his co-regent or partner in the government, or even of his queen. The lowest central chamber or tomb seems, however, never to have been finished, but there is a tradition that a sarcophagus was found in the smaller and second of the two highly-finished chambers above the central tomb, that which is known as the Queen's Chamber. The King's Chamber, together with the smaller second chamber, was almost exactly in the centre of the pyramid, taking the tomb below the surface of the ground to be the bottom. From the entrance on the north face of the pyramid at the point where the masonry surface detached itself from contact with the natural rock or rubble which is now the base, the passage led downwards

* The Pyramids were so placed in their construction that their sides faced north, east, south and west.

to a point where the actual base of the pyramid was reached (as distinct from the perpendicular plinth of its underground sides). Here it divided into two, the descending portion continuing till the central tomb was reached at the very bottom of the whole structure, while the ascending shaft led to the King's and Queen's Chambers in the heart of the pyramid, giving off, however, midway, a horizontal passage leading to a single small chamber, the purpose of which is not very clear. From where this horizontal passage to the third chamber leaves the ascending passage, there is the trace of an abruptly descending shaft (possibly the work of treasure-seekers), which also communicated with the entrance to the bottom tomb.

The stones of which the Great Pyramid was built, according to Herodotus, were quarried in the Arabian Mountains, by which he may have meant Sinai, or even the Nubian Alps, near Suez. No stone was less than thirty feet long. The stones were conveyed to barges on the Nile and thus were carried up the Nile to Giza. From the banks of the river they were dragged—no doubt over rollers of palm trunks—along a specially constructed road sixty feet broad, three-quarters of a mile long, and deeply cut into the rock. The road was paved with smooth stone, and its rocky sides were carved with figures. It took ten years to construct, after which another twenty years were devoted to the building of Khufu's Pyramid. When complete, the Great Pyramid was, according to Herodotus, eight plethra square, equivalent to eight hundred and eight English square feet, and the height was also about eight hundred English feet. But these measurements were authoritatively corrected, firstly, by the members of the French scientific mission to Egypt taken out by Napoleon Bonaparte, and at later dates by Colonel Howard Vyse, Sir Henry James and Professor Piazzi Smyth. According to the last named authority (who conceived exaggerated ideas about the pyramids, and attributed to the builders of these structures mystic intentions which they probably did not possess), each of the four sides of the base is seven

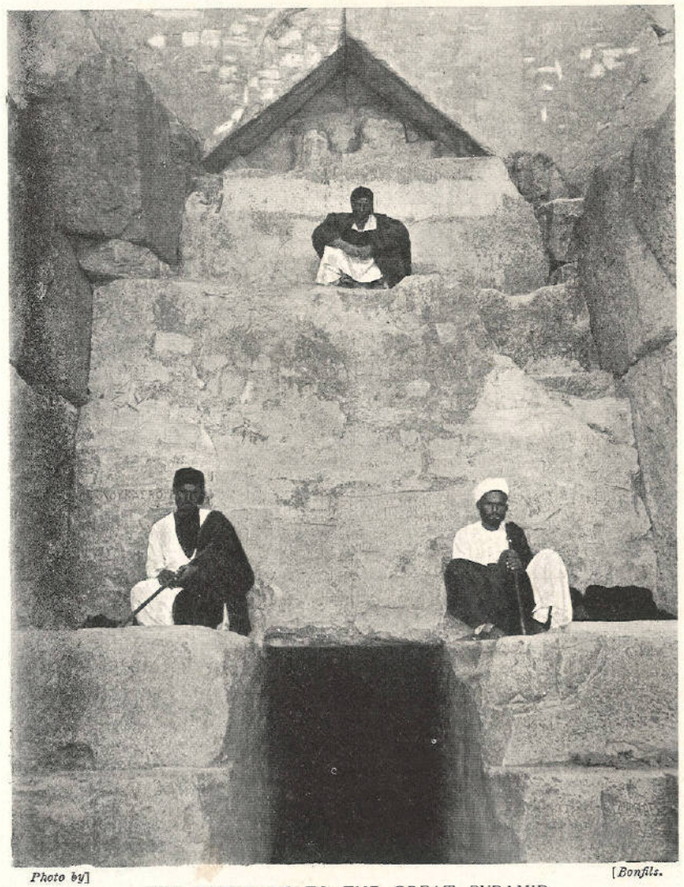


Photo by [*Bonfils.*

THE ENTRANCE TO THE GREAT PYRAMID

The entrance is on the north face about forty-five feet from the ground. After entering a descent is made down a passage 320 feet long, so straight that the sky can be seen even at the extreme end: this leads eventually to the subterranean chamber.



Photo by Bonfils.

THE SPHINX.

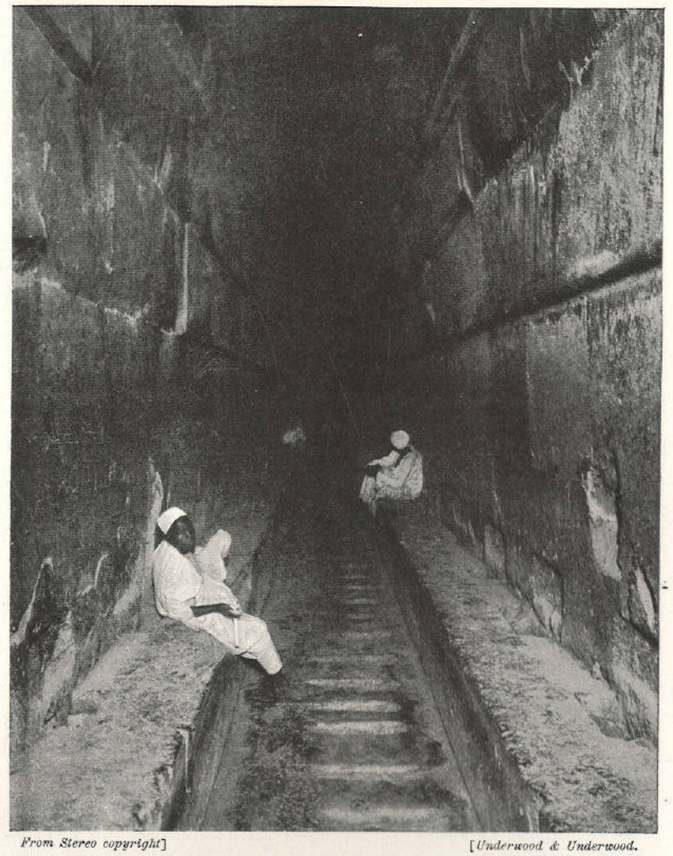
The Sphinx is a colossal figure of a man lion, hewn out of the solid rock, and rising to a height of about 70 feet. Between the 50 feet long masonry paws a temple has been discovered, but this is practically hidden by the ever encroaching sand.

Painted by G. H. Edwards.

hundred and sixty-three feet long (excluding decimals), and the total height, four hundred and eighty-six English feet. The area covered by the base of the pyramid is equivalent to thirteen acres, and until the erection of the Eiffel Tower and the great houses and offices of the United States, Khufu's Pyramid was the tallest building in the world. As it is, if it were set down in the middle of modern New York, it would look almost humble, though it is one hundred and fifty feet loftier than St. Paul's. According to tradition, its building required the labour of one hundred thousand men, and the value and maintenance expenses of these men (regarded as slaves and paid servants), who attended to the quarrying of the stone, the transporting of it by land and river to the scene of operations, and the ultimate building of the pyramid, was once computed by Professor T. H. Lewis as being equivalent to a capitalized value of eight million five hundred thousand pounds. The implements by which the stones were quarried and cut into shape were drills, picks, wedges and copper saws, these last said by earlier Egyptologists to have been furnished with jewelled points of corundum or diamond; but later research does not confirm this. The long copper saws were probably only fed with emery powder. Limestone was chiefly quarried with picks and adzes of copper. The early drills were pointed with flint or corundum.

As to the king who, according to Herodotus, built the Great Pyramid, his native Egyptian name was *Khufu*, a word which in later times was pronounced Khūūf. This was corrupted in later Egyptian and Greek forms into Khēop, or Khembi, and was further changed by the Greek writers on Egypt to Cheops and Suphis. [It is perhaps needless to remark that the principal Greek name is not pronounced like the English word "chop." The Greek χ was a strong aspirate like a German "ch."]

Khufu in tradition was a harsh monarch, though he succeeded in reigning over the people of Middle Egypt for about fifty years. He had a contempt for the accepted forms of religion, closed the temples and abolished the sacrifices to the numerous gods and goddesses. He was probably a great reformer, enthusiastic for public works, but being very egotistic, thought that the noblest public work on

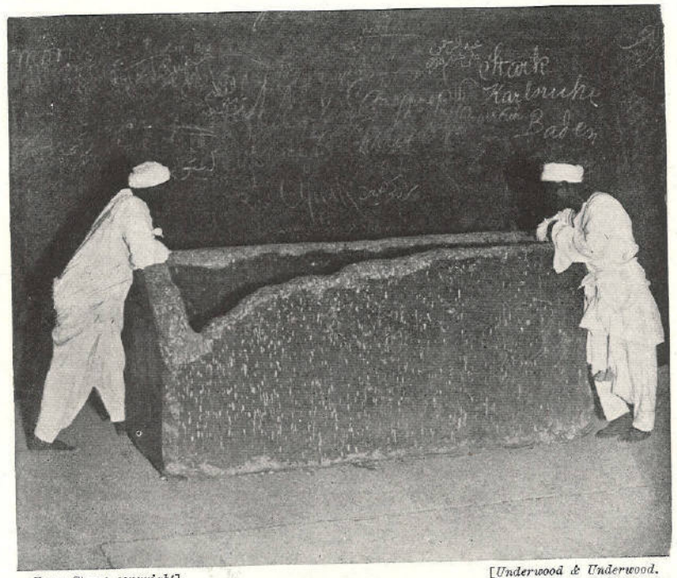


From Stereo copyright] [*Underwood & Underwood.*

Looking down the main passage leading to Khufu's sepulchre within the Great Pyramid.

which he could compel his subjects to labour would be a tomb for himself which might outlast all time. It is said that he became so straitened for funds to meet the expenses of this colossal undertaking that he sold the favours of his daughter Hentsen to the *nouveaux riches* of his day: no doubt an exaggerated description transmitted by one writer to another of something like the modern bazaar in which, in the sacred cause of charity, a lady will consent to kiss a cigar or bouquet, or even possibly the purchaser thereof, in return for a good sum in hard cash. Khufu's daughter, apparently, not only by some such means raised funds for her father's pyramid building, but also built for herself in addition a small pyramid out of the stones given to her by her friends as love-offerings. Khufu was succeeded by Khāfrā who built the second largest of the Giza Pyramids.

Professor Flinders Petrie, Mr. J. H. Breasted and Dr. F. Llewellyn Griffith all suggest that Khufu may have been a great reformer, who attempted to sweep away much time-wasting nonsense connected with the religion of Egypt at that period. He seems to have favoured the study of medicine and to have had very marked artistic tastes. He was born in Middle Egypt, near Beni Hasan, was the founder of the Fourth Dynasty, and made such an impression on the history of his country that he and his successor Khāfrā were commemorated in funeral ceremonies almost to the end of the real Egyptian dynasties—that is to say, for a period of something like three thousand five hundred years.



From Stereo copyright [*Underwood & Underwood.*

The sarcophagus of Khufu in the sepulchre chamber of the Great Pyramid of Giza. It is supposed that this sarcophagus was broken into by treasure-seekers, no doubt during the twelve hundred years of Muhammadan misrule in Egypt.

The Great Pyramid of Giza, as has already been stated, was built by Khufu, the first King of the Fourth Dynasty. The Second Pyramid was raised by his successor and (?) brother, Khaf-ra or Khaf-rē,* who reigned traditionally for fifty-six years, and who may have been quite possibly not the brother but the nephew or sister's son of Khufu. Khaf-ra was possibly succeeded by Dadef-ra, but this personage may have been a co-regent or coadjutor either of Khufu or of Khaf-ra. The eventual successor of Khaf-ra, at any rate, was one of his sons—Men-kau-ra. Men-kau-ra (whose name was corrupted into Menχeres, or Mykerinos† by the Greeks) built the Third of the three Giza Pyramids. By accident or design, the Second Pyramid, attributed to Khaf-ra, was a little smaller than the Great Pyramid of Khufu, and only reached to a height of four hundred and forty-three feet, instead of four hundred and seventy-six feet.

* The *-ra* or *-rē* in all these names mean the Sun or Sun-God.

† Egyptian names—changing as the Egyptian dialect and pronunciation changed—were first misrendered in Greek (and in early Greek y = u in transcribing foreign names), and then further transmogrified by spelling the Greek in Latin letters. Thus Menχeres is also spelt Mencheres, Mykerinos, Mycerinus, etc.

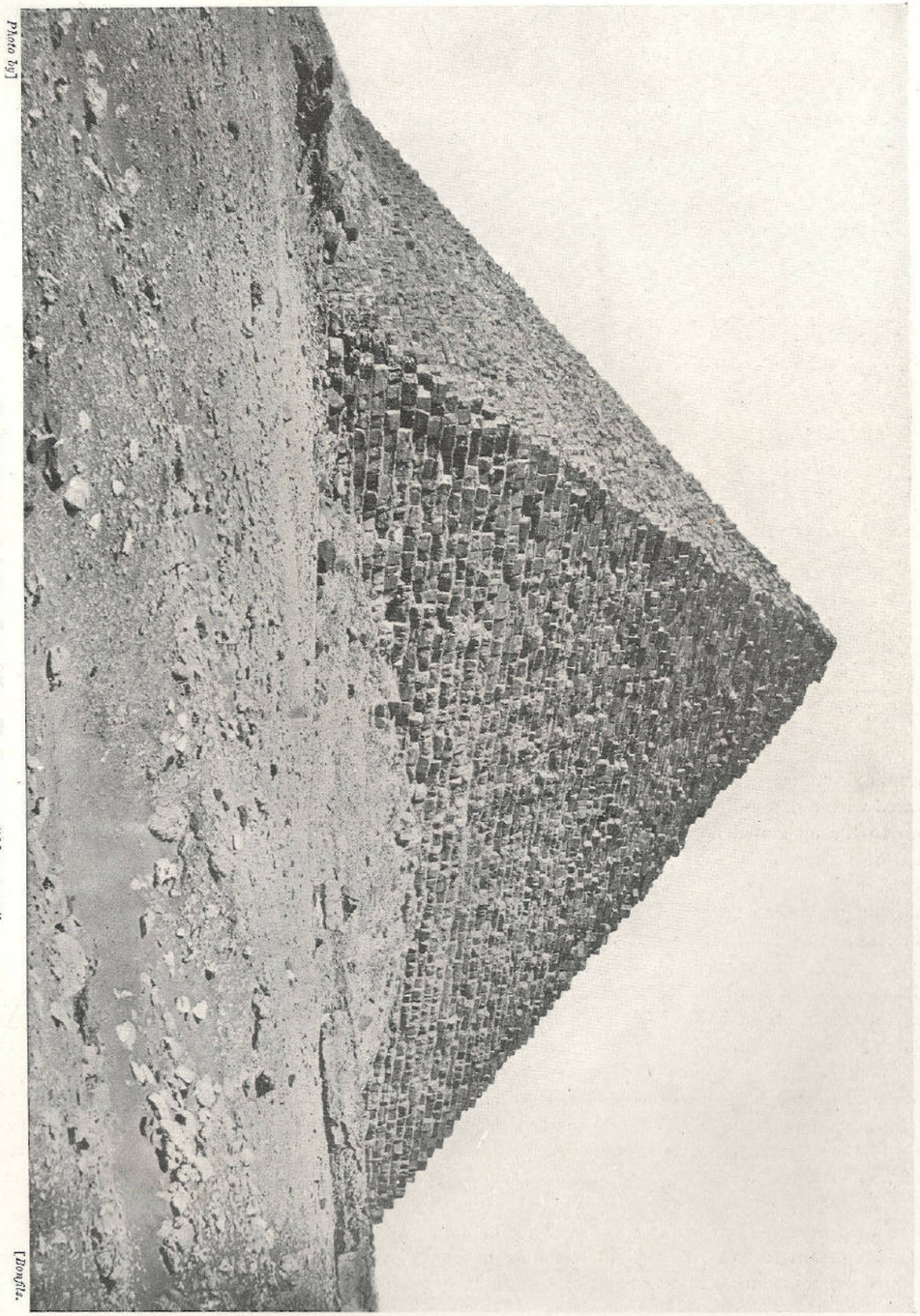


Photo by] [*Donglis.*

The Third Pyramid of Giza, that of King Men-kau-ra or "Mycerinus."



Photo by] *[Bonfils.*

The Second Pyramid of Giza, that of King Khaf-ra or Khaf-rē (Chephren).

And the Third Pyramid of Men-kau-ra was considerably lower, for it rose to no more than two hundred and sixteen feet. Over about three-fourths of its surface, from the ground upwards, it was faced with red granite from Assouan on the verge of Lower Nubia, and for the remaining quarter up to the apex with local limestone. But while the Third Pyramid was being constructed, Men-kau-ra became heir to the monarchy owing to the death of intervening brothers; and when he succeeded his father, it was decided to change the proportions of his Pyramid and render it more worthy of him as a sovereign. He decided not to make his tomb in the upper part of the Pyramid's interior, but constructed a passage descending downwards from the second chamber into a secret crypt. This was given granite walls and an arched or circular roof. Here was placed his sarcophagus, which was constructed from a single block of polished basalt, bluish-black in colour, and carved in the form of a house or small temple, with three doors and three window openings. The mummy-case was of cedar wood and shaped in the form of a human body with a head.

When the Third Pyramid of Giza was opened by General Howard Vyse in the thirties of the nineteenth century, it was found that its interior chambers had already been ransacked; but he discovered the blue-black sarcophagus already mentioned, the mummy-case bearing the name of Men-kau-ra, and a mummy, which, however, was not thought to be that of the king. Both the mummy and the mummy-case are now in the British Museum, but the beautiful basalt sarcophagus was lost at sea on its way to England.

The Sphinx.—Next to the Pyramids as a wonder of the world in Egypt ranks the Sphinx. This colossal figure of a man-lion has a face of somewhat Ethiopian outline, and a style of hair-dressing similar to that in vogue among Gala, Somali and Nubian women at the present day.

But in spite of this feminine style of wearing the hair (not, after all, very unlike the male coiffure of the Hamitic tribes of the Red Sea coast), this earliest of the Sphinxes was certainly male in sex, for according to historical records it possessed a beard until, a few centuries ago, this stone appendage to the chin crumbled away, as also did the helmet that surmounted the head. The Great Sphinx was called "Hu" by the Egyptians of later times, and may have represented the Egyptian god Har-em-akhu (Greek, Harmaχis), or "Horos-on-the-Horizon." Har (Horos) was the son of Hesiri (Osiris) and of Hes (Isis), and was regarded as having avenged his father, who had been destroyed by the bad deity, Set. Har, in Upper Egypt, fused into the later god Amon-ra, and was also sometimes identified with the Moon-god Khonsu, and was manifested in other forms and developments.

The colossal figure of the Sphinx rises about sixty-five feet from the angle between the upright torso and the prone colossal lion-paws. It is supposed to be about one hundred and eighty-eight feet in length, and has been hewn out of a natural prominence in the solid rock, defects or gaps in which have been partially filled in by masonry, while the legs have obviously been added and built in this way. Recent excavations indicate that this monster may have presided over a temple or shrine between its front paws.

The date of the construction of this remarkable monument is still unknown. It is supposed to have preceded in time the earliest of the Pyramids of Giza. A guess at its age is sometimes made—3800 B.C. (say, five thousand seven hundred years ago). Relatively early in its history, however, it tended to be buried by the desert sands, and it was a pious work on the part of the Egyptian monarchs of the later dynasties—passionately anxious to link on their time with the great days of early Egypt—to have the sand round the Sphinx cleared away. It is probable that

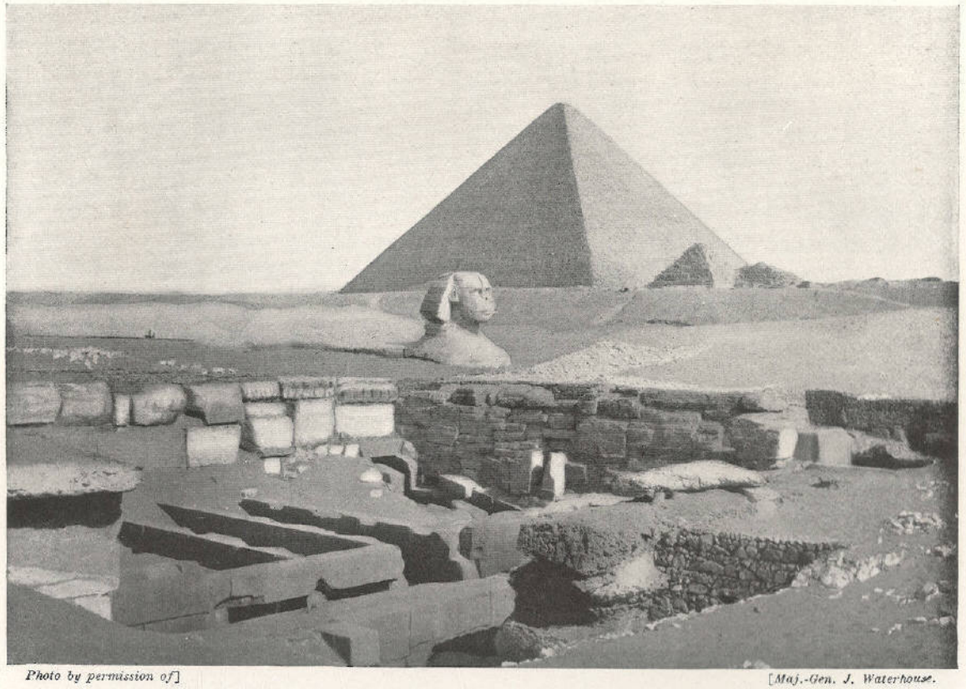


Photo by permission of] *[Maj.-Gen. J. Waterhouse.*

The Great (and oldest) Pyramid of Giza, built for King Khufu (Cheops); also the Great Sphinx; and in the foreground the granite temple wrongly styled the "Temple of the Sphinx."

in the present awakening of Egypt this work of clearing out the sand from all approaches to the Sphinx may be completed and something of the mystery surrounding this prehistoric monument be removed.

In the middle of the back of the Sphinx is an old tomb shaft, which (Professor Flinders Petrie thinks) was made in the original rock before the Sphinx itself was carved out of some suggestive headland; for it is quite possible that the idea of the Sphinx arose from one of those extraordinary, but accidental, resemblances to faces which may be seen in rocky promontories. In one of his works ("A History of Egypt") Petrie suggests that the Sphinx temple may be about coeval with the reign of Khufu and the building of the Great Pyramids, while other evidence and traditions associate it with the reign of his successor, Khaf-ra. The granite temple, often misnamed "The Temple of the Sphinx," has really nothing to do with that monument, though it is possibly of the same age.

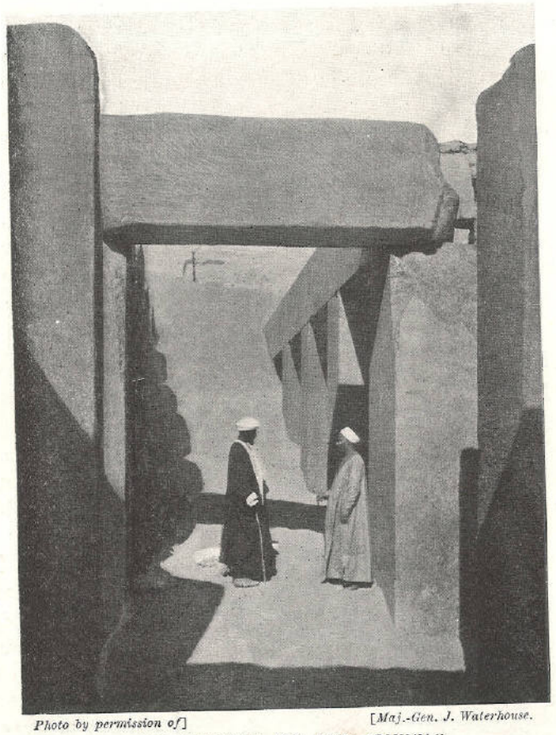


Photo by permission of [*Maj.-Gen. J. Waterhouse.*

THE "TEMPLE OF THE SPHINX."

This mortuary temple, now below the surface of the soil and built of granite, is, as near as we can judge, as old as the Sphinx himself, but has no connection with that monument.

After the glories and achievements of the wonderful IVth Dynasty came a period of several hundred years, in which various dynasties rose and fell and left as their monuments nothing so remarkable as the Sphinx and the Pyramids of Giza on the one hand, or the great temples of Karnak on the other. Monarchs like the celebrated Pepi of the VIth Dynasty, who lived about 3200 B.C., erected a pyramid at Sakkara and the Red Sphinx of Tanis, now in the Louvre at Paris, the face of which is supposed to be a portrait of Pepi; and there was also in that dynasty the celebrated Queen Nitokris (Nit-aqert), commemorated in several monuments. It has been suggested that Queen Nitokris took possession of Men-kau-ra's tomb in the Third Pyramid, putting that king's sarcophagus in a lower vault. The name "Nit-aqert" is supposed to have meant "rosy-cheeked," and according to Greek legends, "Nitokris" ("Rhodopis") was a courtesan or dancing girl, who was the original Cinderella of fairy stories. It was said that when she was bathing in the river an eagle stole one of her little gilt sandals, and, flying away, let it fall into the lap of the King of Egypt, who was holding a court of justice in the open air. He was so taken with the beauty of the little shoe that he sought everywhere for its girl-owner, and, having found her, made her his queen.

Karnak, Thebes.—During the long period of confusion and historical darkness between 3000 and 2700 B.C., the twin city of the Apts, Thebai (Thebes) in Upper Egypt, was rising into prominence. Hitherto the great kings or rulers of Egypt had had their headquarters at Memphis, near the Pyramids and modern Cairo. Later on, the capital was transferred to Heracleopolis (to give it its Greek name), situated near the modern Beni Suef. But Thebes was situated much farther up the Nile, at the point where that river in its windings comes nearest to the coast of the Red Sea

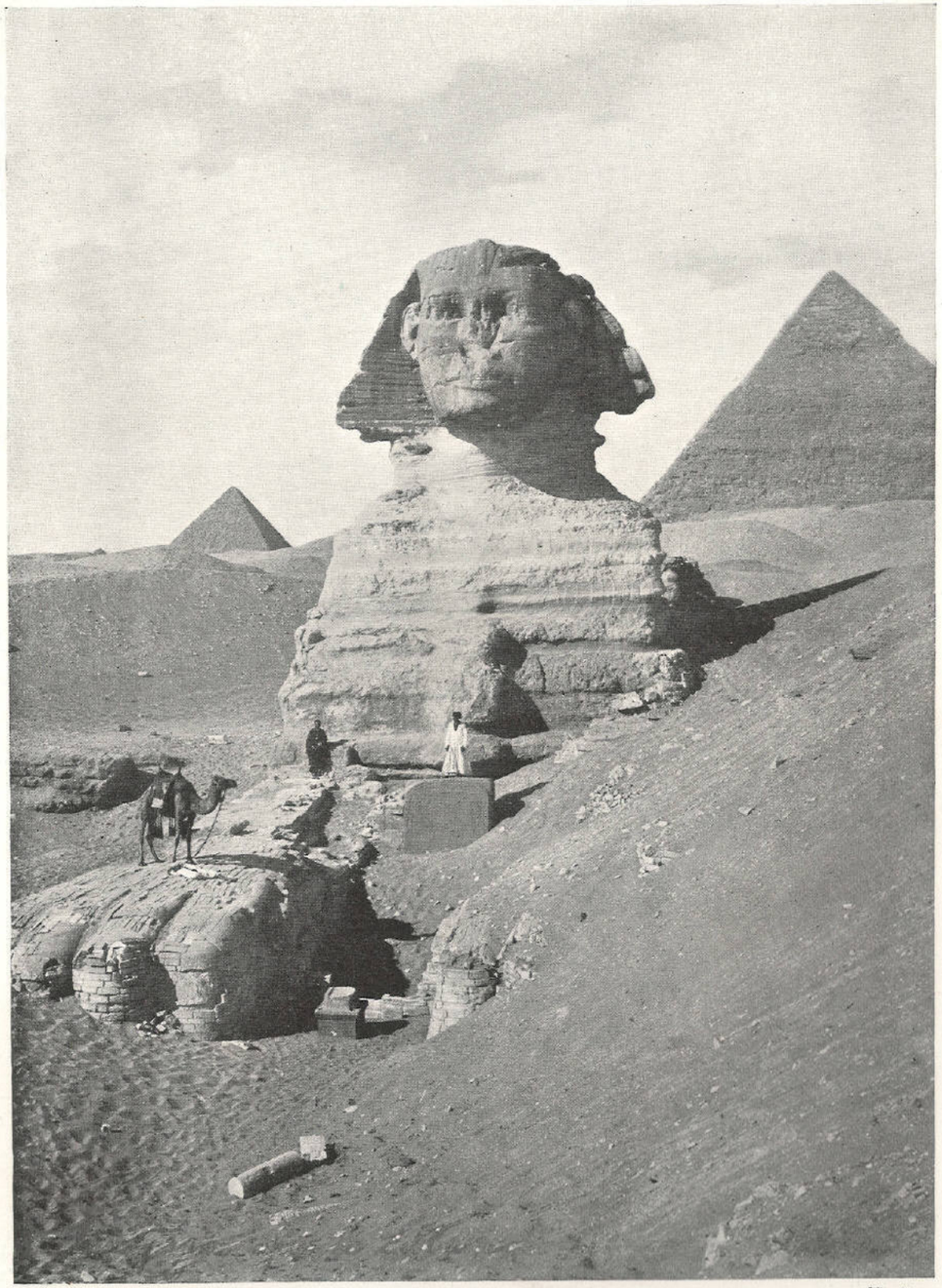


Photo by] [*Bonfils.*

The Great Sphinx of Giza since the recent clearing away of the sand which chokes the base of this monument



Photo from "The African World." [*By permission of Leo Weinthal.*

The avenue of Ram-headed Sphinxes leading up to the Great Temple of Amon-Ra at Karnak. This avenue was made by Ramses II. (The Great).

at Kossêr, and where there is a broad stretch of cultivable land on either side of the Nile. Hereabouts, indeed, grew up in time the town of Qobt, or Koptos, which became so much associated with the commerce of Egypt in the minds of the Phœnician and Greek navigators of the Red Sea that it is supposed to have been the origin of the Greek *Aiguptos* (Egypt). Thebes was higher up than Koptos and near the modern Luxor, on the same side of the river. Indeed, Luxor became in time the harbour of Thebes. The riverside quarter on the *west* side of the Nile was what might be called the "dead" city of Thebes—the cemeteries and the temples which bore reference to the worship of the dead. This was the region known by the Greeks as *Memnonia*. The Egyptian name of "Thebes" seems to have been *Apt*. In a later pronunciation this was Apet, or Apé, which, in the feminine sense often applied to cities, became Tapé. The Greeks, realizing that there were two cities of Apt, pluralized the name as "Thebai," which (in the mania for Latinizing all Greek names) became in our modern speech "Thebes." Apt is supposed by several authorities to have meant in ancient Egyptian, "a harem, or enclosure for women," but it is far more probable that it was Apt the Water-cow or Hippopotamus, a very old goddess of Upper Egypt (see the late Gerald Massey's "Ancient Egypt, the Light of the World"). Thebes is one of the oldest inhabited sites of Egypt. Its history goes back (say) ten thousand years, to palæolithic times. From about 2000 B.C., or earlier, there were the two cities of Apt—Apt-asut (Karnak) and Apt-reset (Luxor).*

It was at Thebes that the great XIIth Dynasty (the "Old Theban") was founded by Senusert (or Usertsen) 1st, more than two thousand years before Christ; and this monarch of Upper and Lower Egypt seems to have commenced the construction of a large temple at Karnak dedicated to a local god, Amon or Amen, "the hidden." But there were other local deities of neighbouring bourgs to be considered, such as Mut and Amunt (perhaps a feminine form of Amon, Amun, or Amen; the Egyptians, like the Arabs, were very uncertain about their vowels). Mut or Atmu was the great mother goddess. There was also Khonsu, the handsome young Moon-God, who, in course of time, became somewhat identified with Horos of Lower Egypt, and was taken to be the son of Amon and

* Karnak is a modern Arabic term meaning "a window," from the window openings in the temples; Luxor is the Arabic Al-uksur or "the Castles" (plural of Ksar, a castle).

Mut (or Amon and Amunt). These conflicting worships were reconciled by the three principal gods of Thebes developing into a trinity of divine beings, in which combination, however, Amon was recognized as the "Father" and as "King of the Gods." Still later in the history of Thebes he was styled Amon-Ra, and identified with Ra, the great Sun-God of Lower Egypt.

The whole history of the later Egyptian monarchies, commencing with the XIIth Dynasty, is bound up with this sacred city of Karnak, adjoining "hundred-gated Thebes." But the early temples and monuments of the Old Theban dynasty fell into ruin or were destroyed during the long period of over five hundred years when Egypt was conquered, or partially conquered, by the Shepherd kings from Arabia, the Haq-su or "Hyksos." But the first Egyptian monarch to resume the erection of places of worship dedicated to Amon-Ra, Mut, and Khonsu at this northern city of Apt, was Amenhotep I., the successor of Aahmes, who about 1625 B.C. had redeemed Egypt from the Hyksos oppression and founded the XVIIIth Dynasty of Egyptian kings. Amenhotep and his successor, Tehutimes I.,* built a splendid temple with many chambers round the original shrine, together with a broad court and pylons or stone gateways (a glorified development of the "Druidical" menhir, or horizontal stone resting on two uprights). Tehutimes I. also erected four obelisks of Assouan granite,

* Tehutimes is also rendered Thothmes by some authorities and Tethmosis by others.



Photo by] [*The Photochrom Co. Ltd.*

The Colonnade of the Great Temple at Karnak.

of which two have fallen. Tehutimes III. added to this temple a hall resting on fifty-six columns, besides many other chambers. Other monarchs of later dynasties built two more large pylons, and Queen Hatshopsitu erected two fine obelisks.

The "Catharine II.," the "Empress-Dowager" of Egypt, the celebrated Hatshopsitu,* who reigned at Thebes between about 1565–1530 B.C., added a great deal to the glories of Thebes and the temples at Karnak, though in some cases she merely completed the work of her father, Tehutimes I.; but in the inscriptions she caused to be engraved on the monuments she attributed the whole structure to herself. She really did, however, cause two obelisks—one of which is still standing amongst the ruins of Karnak—to be erected to the memory of her "father," the god Amon, in order that her own name "may remain and live on this temple for ever and ever; for this single block of granite has been cut without let or obstacle at the desire of My Majesty between the first of the second month of Pirit of the Vth year [of her reign], and the thirtieth of the fourth month of Shomu of the VIth year, which makes seven months from the day when they began to quarry it."—(Sir Gaston Maspero.)

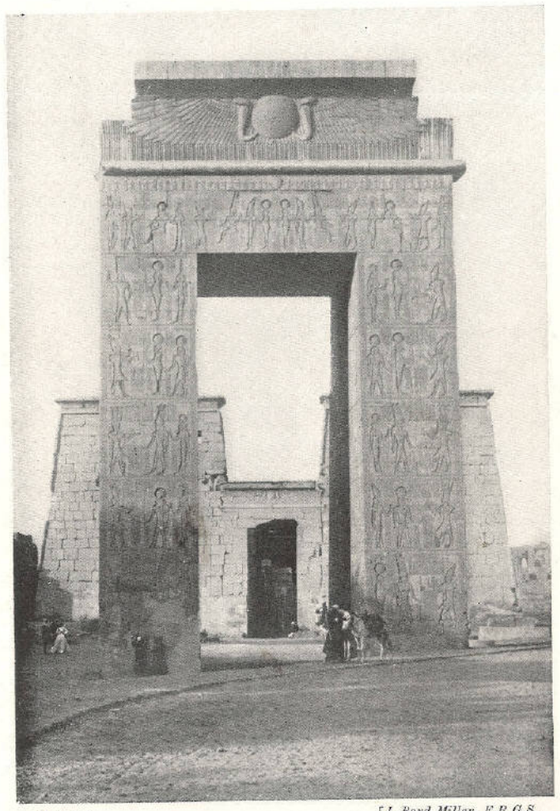


Photo by [*J. Boyd Miller, F.R.G.S.*

The South Entrance to the Great Temple at Karnak. This Propylon was built by Ptolemy III. (Euergetes) as an approach to the temple behind it of Ramses III.

Of the obelisk which is still standing amongst the ruins of Karnak (ninety-seven and a half feet high), it has been remarked that the grace of its outline, the finish of its hieroglyphics and the beauty of the figures which cover it, amply justify the pride which the queen and her younger half-brother and husband, Tehutimes II., felt in contemplating it. The apices of these two monoliths were gilt, so that they could be seen from both banks of the river, "in order that their brilliancy might light up the two lands of Egypt."

Amongst other messages for posterity which Hatshopsitu left inscribed on the wonders of Karnak are these words:

"This is what I teach to mortals who shall live in centuries to come, and whose hearts shall inquire concerning the monument which I have raised to my father, speaking and exclaiming as they contemplate it. As for me, when I sat in the palace and thought upon him who created me [*i.e.*, her father], my heart prompted me to raise to him two obelisks of electrum [granite], whose apices should pierce the firmaments, before the noble gateway which is between the two great pylons of the King Tehutimes I. And my heart led me to address these words to those who shall see my monuments in after-years and who shall speak of my great deeds. Beware of saying, 'I know not, I know not why it was resolved to carve this mountain wholly of gold!' . . . but say only, 'How like Her!' . . . ."†

* Hatshopsitu is also spelt Hatshepsu or Hatshepset.

† Sir G. Maspero and Arthur Weigall.



Photo by [*The Photochrom Co. Ltd.*

THE COLONNADE OF THE GREAT TEMPLE AT KARNAK



Photo by] [R. Whitbread.

The Obelisk of Queen Hatshopsitu in the Temple of Amon-Ra, Karnak.

Queen Hatshopsitu was the daughter of Queen Aahmes, who was believed to be of much better birth than her husband Tehutimes I., that is to say, she was able to claim a nearly unspoilt descent from divine ancestors, or, in other words, kings of early semi-mythical dynasties, who had been deified in the course of centuries. But her sixteen quarters of divinity, so to speak, were not quite perfect. She numbered amongst her immediate ancestors a grandfather or great-grandfather who was not clearly of royal blood; that is to say, descended from the Sun-God Horos (Har.) This defect, however, might be remedied by a miracle, by the Sun-God Har (Amon-Ra ?) becoming incarnate in her mother at the moment of conception. The wish was father to the belief, and Hatshopsitu, when she had had time to look round and take all her circumstances into account, caused it to be inscribed in one of the chapels which she built, that the god Amon-Ra had descended upon her mother Aahmes in a flood of perfume and light and had announced to her the approaching birth of a daughter in whom his godly qualities would be made manifest. This remarkable story is illustrated by a number of pictures showing the whole story of the conception of Hatshopsitu, her birth, attended by good fairies or jinns, and her earthly father, Tehutimes I., accepting his theoretical paternity and presenting to his council of nobles the newly-born daughter who is eventually to reign over Egypt.

Nevertheless, her father caused her to marry her younger half-brother, Tehutimes II., who reigned for a time conjointly with her, though she really directed affairs with as much arbitrariness and vigour as the late Empress-Dowager of China. In fact, she became so greedy of power and disdainful of her sex that she attempted for the rest of her life (after the death of her father, Tehutimes I.), to conceal her sex in all public manifestations. She removed the feminine termination of her name (-itu) and called herself Hatshopsu, and also adopted the title of King Māt-ka-ra. In all public ceremonies she dressed as a man and wore a false beard affixed to her chin. The activities of this remarkable woman extended far to the north and to the south-east. She reorganized the

Delta region of the Nile, which had been much neglected by her predecessors, and reopened the canals where they were silted up. She resumed the working of the mines of Sinai and was inspired by the god Amon-Ra to assemble a fleet at Kossêr on the Red Sea, which sailed laden with rich merchandise to the sacred land of Punt (or Puoni).

Punt was probably what we now know as Somaliland. The fleet, indeed, may have entered the Bay of Tajurrah and have dealt chiefly with French Somaliland. From these regions the vessels brought back the incense trees (*Boswellia ?*) so loved of the Egyptians, who were passionately fond of burning perfumes. Besides *Boswellia thurifera*, which is the East African incense tree, there were substances derived from other aromatic trees and plants which were mixed together under the name of incense. The type of people met with in the land of Punt was very like the modern Somali or the Gala. The men carried boomerangs and daggers, and wore necklaces of beads, and rings of gold or copper round their legs. The Egyptians bought from this friendly race ivory, gold, ebony, perfumes, dogs, leopard-skins, large oxen with great horns — the well-known Gala type of ox—baboons and small monkeys, besides thirty-one incense trees. At the Abyssinian ports which they called at on their return, they obtained a giraffe and some live leopards.

The incense trees were planted near the western bank of the Nile, under the shelter of the rocky hills at Khafit Nibus (Deir al-Bahari), and the temples of this western suburb of Thebes were painted with pictures giving the whole history of this wonderful expedition.

Hatshopsitu only had daughters by her marriage with Tehutimes II., but by a humble concubine of low birth her husband had a boy, also called Tehutimes. After his death, Hatshopsitu adopted this child as her successor (being the sister, or half-sister, of her husband, she was therefore the boy's aunt as well as step-mother!). She betrothed him to her only surviving daughter, Hatshopsitu II., but continued to rule during his long minority, in fact, until her death. After her death Tehutimes III. displayed his rage, and perhaps



Photo by] [Rev. C. J. Walker.

The two remaining Obelisks of King Tehutimes I. at Karnak.

ingratitude, by doing all he could to efface from buildings and records the flamboyant accounts of the great queen's doings, and wherever he could he erased the name of his aunt, stepmother, and mother-in-law, replacing it by that of her father or husband.

Amenhotep III. (1411–1375), a successor of Tehutimes IV., erected the pylons at the east end of the subsequently built great hypostyle hall, the largest temple in the world; but it was reserved to the great kings of the Nineteenth Dynasty, which reigned between 1365 and 1225 B.C., to supply those features which make Karnak one of the Wonders of the World. Harmahib, Ramses I., Seti I. and Ramses II. began and completed the most magnificent hall of columns that was ever seen in Egypt or elsewhere. The columns are one hundred and thirty-four in number and stand in sixteen rows. They support a stone roof which covers a space of three hundred and twenty feet long and one hundred and sixty-four feet broad (a total area of fifty-two thousand four hundred and eighty feet). Each of the twelve central columns is thirty-three feet in circumference and eighty feet high beneath the architrave. The other columns (according to Lepsius), are forty feet high and twenty-seven feet in circumference. "It is impossible," wrote Lepsius in his description of these ruins more than sixty years ago, "to describe the overwhelming impression which is experienced upon entering for the first time into this forest of columns, and wandering from one range into the other, between the lofty figures of gods and kings on every side represented on them, projecting sometimes entirely, sometimes only in part. Every surface is covered with various sculptures, now in relief, now sunk, which were, however, only completed under the successors of the builder; most of them, indeed, by his son Ramses Meri-Amen. In front of this hypostyle hall was placed, at a later period, a great hypæthral court, two hundred and seventy and three hundred and twenty feet in extent, decorated on the sides only with colonnades, and entered by a magnificent pylon.

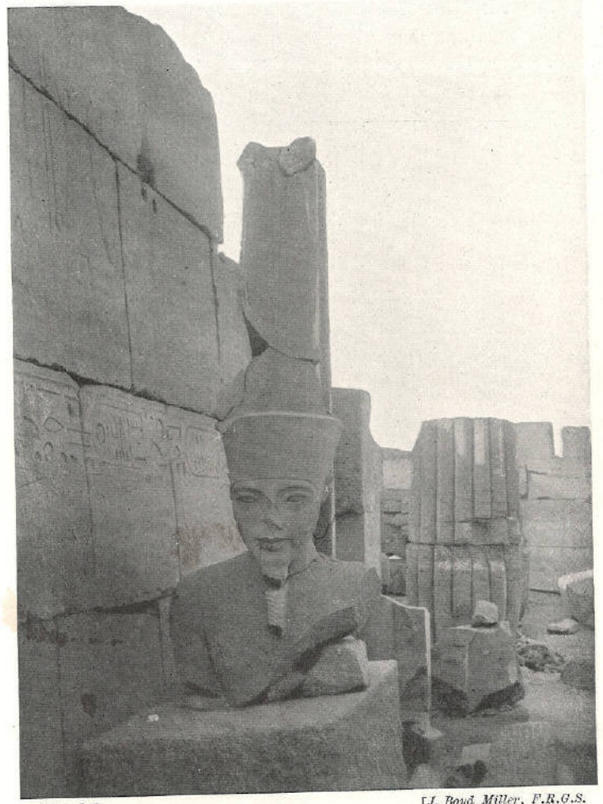


Photo by [*J. Boyd Miller, F.R.G.S.*

The portrait-bust of a Pharaoh (supposed to be of the Old Theban dynasty) in the ruins at Karnak.

"The principal part of the temple terminated here, comprising a length of eleven hundred and seventy feet, not including the row of sphinxes in front of its external pylon, near the peculiar sanctuary which was placed by Ramses II. (Meri-Amen), directly beside the wall farthest back in the temple, and with the same axis, but turned in such a manner that its entrance was on the opposite side. Including these enlargements, the entire length must have amounted to nearly two thousand



Photo by [*Bonfils.*

COLUMNS IN THE TEMPLE OF KING TEHUTIMES III. AT KARNAK.



Photo by] [*Bonfils.*

The Temple of Ramses IV. at Karnak.

feet, reckoning to the most southern gate of the external wall, surrounding the whole space, which was of nearly equal breadth."

Ramses II. (the son of Seti I., and perhaps the great-grandson of Harmahib, the founder of the Nineteenth Dynasty, and planner of the Great Temple, the mighty Hall of Columns) not only added to the Great Temple and embellished it in many ways, but made an approach to it through a great avenue of stone Ram-headed Sphinxes, which now lead up to the imposing Propylon constructed (long afterwards) by a Greek king of Egypt, Ptolemy III. (Euergetes). Ramses II. (The Great), who reigned sixty-seven years, has sometimes been identified with the "Pharaoh of the Oppression," who harassed the Israelites in the Egyptian Delta. In all probability Ramses concerned himself very little with the fortunes of an obscure little tribe of Semitic serfs, one of the many Asiatic peoples who entered the fat land of Egypt in times of scarcity and became a nuisance to the Egyptians.

Ramses the Great extended his conquests from Northern Syria to the confines of Tripoli, and from the Nile Delta to Dongola in the land of the Blacks. He resided less than his predecessors at Thebes, and in order to give more attention to the administration of the Delta and commerce between Egypt and the civilized States of the Greek Islands, he established his capital at Tanis, to the south-west of the modern Port Said, on the banks of what is now Lake Menzala.

Some of the kings of the Twentieth, or last Theban, Dynasty embellished or added to the monuments of Karnak, notably Ramses III., and in a lesser degree Ramses IV. and XII. During the reign of the last Ramses the power of the priests of the now supreme god, Amon-Ra,* had become so great that they were able to displace the Ramsesides and to install as Pharaoh a nominee of their own, Herhor the High Priest (apparently from Tanis, at the mouth of the Nile). This

* There had been a period of scission under the heretic Pharaoh Amenophis IV., last but two of the Eighteenth Dynasty, in which the worship of Amon-Ra was thrown over in favour of Aton, the Syrian Adonis, the "disk of the sun."

king restored or beautified the sacred buildings. So did the absentee Pharaohs of the Twenty-second (Bubastite) Dynasty from Lower Egypt, especially Sheshonk, the invader of Palestine and Syria in the time of Rehoboam, whose exploits are recorded on the walls of Karnak. The Jewish prophet, Nahum, got a chance of a return lunge at Thebes when, in 661 B.C., Egypt was invaded by the Assyrians, and when Karnak (called by Nahum "No-Amon") was stripped of nearly all its wealth and partially ruined. The Ethiopian, or Nubian, kings who had ruled at Thebes between about B.C. 712 and 663, had, before the Assyrian inrush, done their humble best to carry on the architectural work of their mighty "white" predecessors.

We may suppose that some repair of the marvellous buildings of Karnak took place under the last revival of the native Egyptian power—the Psametik Pharaohs, who, beginning from the Delta, extended a somewhat uncertain rule over Upper Egypt between 660 and 525 B.C. But there are very few traces of their work in the existing monuments. The Persian kings or viceroys appeared at Thebes more as robbers and barbarians than as national monarchs identifying themselves with the past glories of Egypt. But it was different with the Greek rulers, Alexander the Great and the Ptolemies, who reigned over a happier, re-civilized Egypt from B.C. 304 to B.C. 23. Ptolemy II. (Philadelphus) restored several of the buildings and built several gateways or pylons. Ptolemy III. (Euergetes) erected the magnificent Propylon which is here illustrated. The Roman Cæsars, however, cared little for Karnak; and when Egypt was ruled from Byzantium, Christianity of a low and fanatical type was the prevailing religion; and except where the Christians deigned to convert some of the Karnak buildings into chapels (such of them as they used are marked with coarse paintings of Christian emblems), it was thought meritorious to allow the habitations of strange gods and devils to fall into ruin. Muhammadan ignorance and fanaticism were far worse for Karnak (and other monuments of the old Egyptian faith and civilization) than the most ignorant type of Byzantine Christianity, for to a loathing and scorn of other faiths and of statues and pictures, the barbarian Arabs and Muhammadan negroids added a thirst for treasure-seeking.

If any consciousness has been retained of earthly things by the deified heroes and the proud Pharaohs of Upper Egypt, they must have uttered a sigh of relief when Napoleon Bonaparte invaded Egypt and so began that train of circumstances which has led to the revival of interest in and reverence for the art and religious beliefs of ancient Egypt, and the occupation of the Nile Valley by the

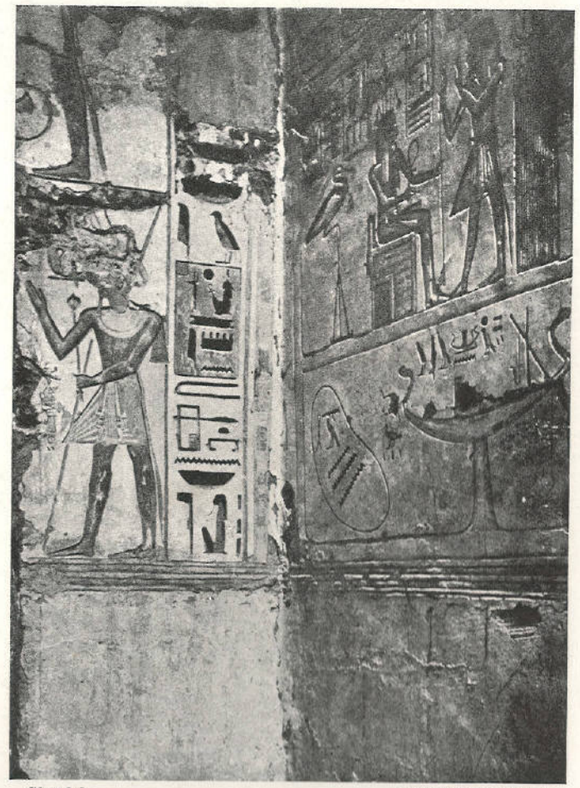
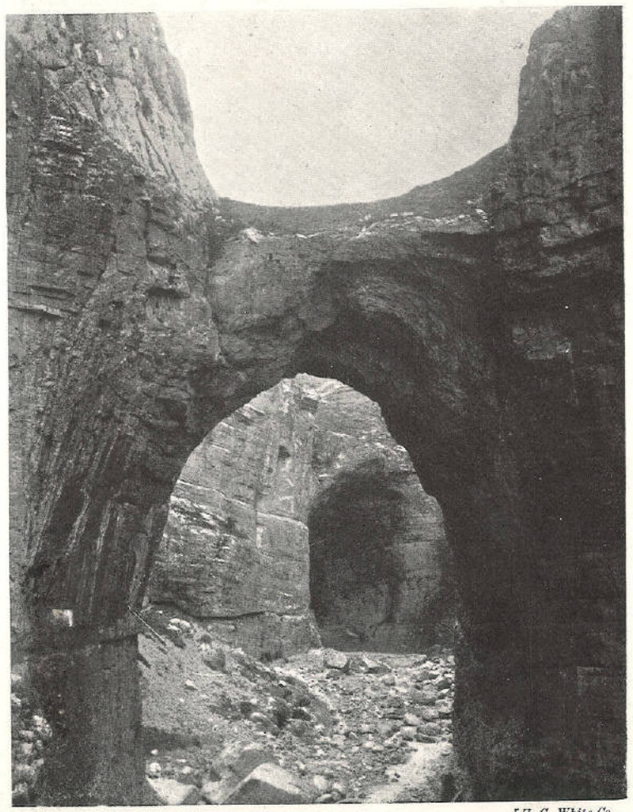


Photo by] [*Wm. Cutlack, F.R.G.S.*

Cartouches, or signatures, and symbolical pictures on the walls of the Temple of Ramses III. at Karnak.

troops of a civilized Power able to assist and to protect the recovery and restoration of these wonders of the world.

Algeria.—Algeria, when it comes to be better known by tourists, will be fairly described as one of the world's wonderlands. It is not easily distinguished geographically from Morocco, but is far more mountainous and elevated than Tunisia, which, in a sense, represents the rubbing-down of the Algerian mountains and is a much flatter, more level region sloping towards the eastern half of the Mediterranean. When the French took possession of Algiers in 1830, they soon realized that this region lying between Morocco and Tunisia—nominally a dependency of Turkey—was really governed, more or less, by three potentates of Turkish descent. On the west there was the Dey of Oran, in the centre the Dey of Algiers, and on the east the Bey of Constantine. (Dey is a Turkish term meaning "Uncle." It was the name given by the Turkish soldiers half familiarly to the elderly individual whom, at one time, they elected as a sort of pasha to settle differences and direct affairs. Bey means a highly-placed military officer—a colonel.) The Dey of Oran was soon settled; but the Bey of Constantine, Hajji Ahmad, who, with the help of the Berber Kabail, had become an independent potentate in 1826, for a considerable period maintained his position as an African prince. Constantine, in the east of Algeria, is a place of extraordinary natural strength, a peninsula of rock nearly surrounded by a natural moat in the shape of the river Rummel. It was the Kirtha and Cirta of Phœnician and early Roman days, and was re-established by Julius Cæsar as Colonia Settianorum. Having been destroyed in a native rising, it was rebuilt by the great Constantine in 313 and was henceforth called after him. Owing to its position, the French were repulsed in their first attempt to seize the place (in 1836), but by means of desperate fighting, great gallantry and the use of superior artillery, they finally reduced it to submission in the year 1837.



Stereograph by] [*H. C. White Co.*

One of the remarkable natural bridges over the Rummel at Constantine, Eastern Algeria.

The Rummel has bored its way through the limestone rocks, leaving here and there natural bridges, some of them several hundred feet at their crests above the gorge below. But these are not safe or sufficient means of communication between the town of Constantine and the open country beyond, and the stone bridge constructed by the Romans broke down in 1857. Consequently,

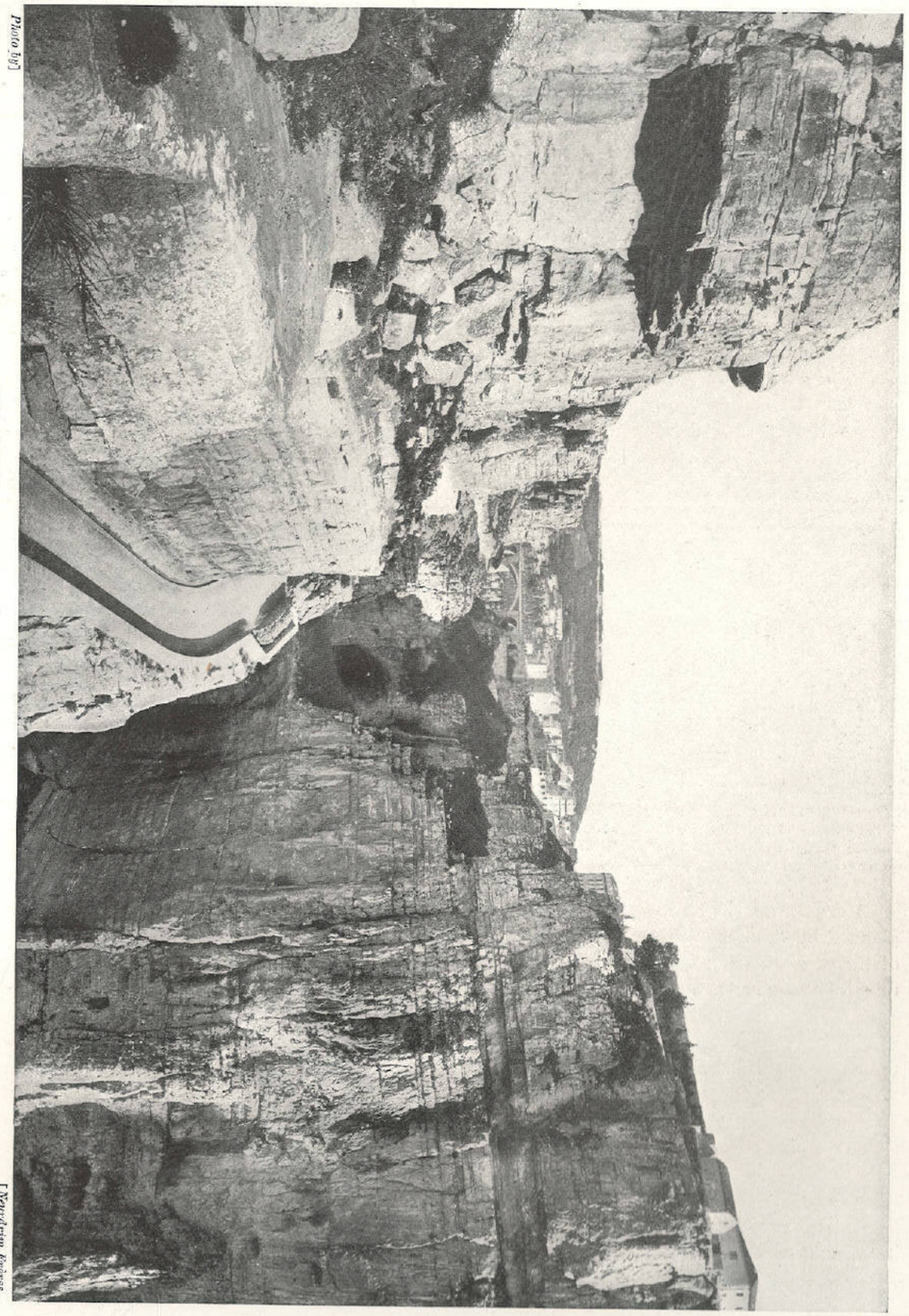
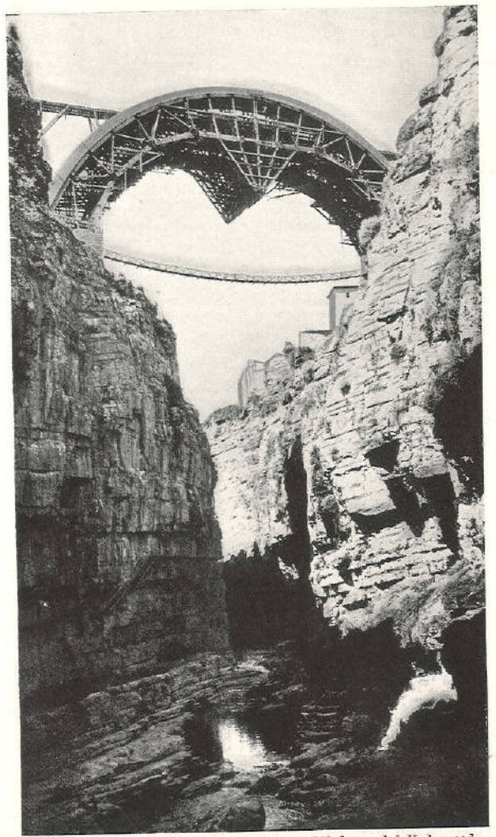


Photo by] THE GORGE OF THE RIVER RUMMEL, EASTERN ALGERIA [*Vandrim Frères.*



From Stereo copyright [*Underwood & Underwood.*

The Gorge of the Rummel, Constantine, Eastern Algeria; showing the bridge, which is about 350 feet above the bed of the river.

the French have recently constructed a bridge over the gorge of the Rummel, which was said to be the highest stone bridge in the world. It is a viaduct about five hundred yards long raised on twenty-seven arches of different sizes, the highest and biggest of these arches (which has a span of more than two hundred and forty feet) being approximately three hundred and fifty feet above the level of the bed of the Rummel (the height of the dome of St. Paul's is three hundred and sixty-five feet). This stone bridge would therefore seem to be the loftiest of any as yet constructed, its nearest rival being that of Solis, in the Engadine, which is a little more than three hundred feet high. The central span of the bridge is of iron.

The Suez Canal.—The Suez Canal is certainly one of the modern wonders of the world. But the idea of a water communication across the neck of land which separates the Mediterranean from the Red Sea was not reserved for the nineteenth century. It entered into the projects of the monarchs of Egypt as soon as they took a special interest in Asiatic conquest and in commerce between the Red Sea and the Mediterranean. The Isthmus, indeed, must have been at frequent intervals under water within the human period, alternately making Africa an island (though probably when cut off from Syria, Africa was joined to Sicily and Spain), and then constituting itself a broad path between Asia and Egypt, over which not only man, but many of the African mammals passed to and fro.

A canal from the Nile to the Red Sea, *viâ* Mansura to the Bitter Lakes, is believed to have been planned by Ramses the Great, but the project was not completed. During the Persian occupation of Egypt Darius I. resumed work on this scheme, but the canal was not finally achieved till the reign of Ptolemy II., Philadelphus, in about 266 B.C. The town near its terminus, almost opposite the site of modern Suez, was named Arsinöe, or sometimes Cleopatris. But the commerce between the Mediterranean and the Red Sea did not take very kindly to this artificial water-route between the Nile of the Delta and the Gulf of Suez: except during the most prosperous days of the undivided Roman Empire the merchants preferred to send their goods from Alexandria (which had replaced Tanis as the Deltaic port of entry) round to the Rosetta mouth of the Nile, and thence up-stream to Kus, or to Koptos. From one or other of these points their commerce crossed the desert on asses, bullocks, and by the newly-introduced camels to Aidhab, or to Berenice, on the Red Sea, whence ships conveyed the goods to and fro between the Arabian and Indian ports.

But the great Emperor Trajan cleared out and enlarged the canal of the Ptolemies and called it "Augustus amnis"—the august river. This canal probably connected the Damietta branch of the Nile with the Bitter Lakes, by way of Bubastis; in fact, followed somewhat the course of

the present Sweet Water canal which was constructed fifty years ago by de Lesseps to bring Nile water to waterless Suez. From the navigable Bitter Lakes another cutting conveyed the shallow-draught boats of Roman days to the head of the Gulf of Suez, then called Sinus Clysma (afterwards corrupted by the Arabs into Bahr Kulzum); for the name of Arsinöe, or Cleopatris, had given place to Clysma. But Trajan's canal does not seem to have been greatly used. No doubt it had a tendency to silt up in the annual Nile floods. Still the Nile-Bitter Lakes canal was restored to efficiency under the first Arabic Caliphs who ruled over Egypt. Harun al Rashid is said to have projected a canal right across the Isthmus of Suez more or less along the line now followed: a navigable channel from sea to sea which would obviate the difficult entry into the Nile from Alexandria or the crossing of the bars at the Rosetta (Er-Rashid) and Damietta (Dimiad) mouths. But he was dissuaded when it was pointed out to him that the Byzantine navy would certainly take advantage of this direct sea route to the Red Sea and India, and, in fact, might be tempted by the existence of such a canal to put forth all its strength, seize Egypt, and so cut the Muhammadan world in two.

As it happened, even the Nile-Bitter Lakes-Kulzum canal fell into disrepair and disuse by about 900 A.D. Kulzum and its opposite suburb, "Bir Suweiz"—a brackish well protected by fortifications—fell into ruins. But when the Sultan of Turkey became Lord of Egypt after 1518, a new seaport town arose styled Suweiz (from the well), and became the headquarters, repairing-and-building station for the Ottoman fleet on the Red Sea. By the beginning of the eighteenth century Suez had become the starting-point for a sea voyage to India—in the ships of Muhammadans, *bien entendu*. Transhipment was effected at Jeddah, the port of Mecca.

Napoleon Bonaparte, who laid the foundations of Modern Egypt, visited Suez in 1798, and at once conceived the project of a canal between this place and the Mediterranean by way of the Nile. But the British occupation of Suez in 1800 arrested for ever Napoleon's schemes. At the same time his seizure of Egypt, having been deliberately planned as a means of making a flank approach

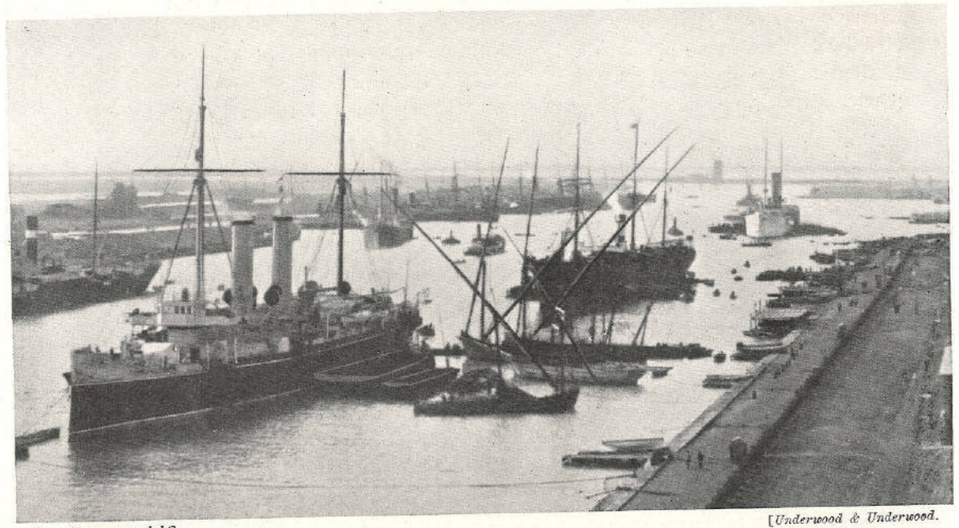


Photo by [*N. P. Edwards.*

The narrowest part of the Suez Canal.

to India, drew the attention of the British Government to the supreme importance of Egypt as the key of India (in those pre-railway days), and as a land which so narrowly separated the waters of the Mediterranean from those of the (hitherto neglected) Red Sea, that by some means or other it must be pierced by a canal of communication, if possible under British control.

But for the time being British designs on Egypt (rendered the more eager in the early years of the nineteenth century since the bringing of troops from India to the Red Sea and the Nile to cut off the French had caused them to realize how Egypt and India reacted each on the other) were frustrated by the rapidly rising power of Muhammad Ali. A British descent on Egypt, in 1806, was in fact repulsed by this Turkish pasha. After the Napoleonic wars were over, the study of Egypt as a half-way land to India, Southern Asia and Eastern Africa was resumed by brilliant Frenchmen and plodding Britons; both in turn armed by concessions and assistance on the part of Muhammad Ali. Between the years 1839 and 1845, Lieutenant Waghorn, a British Engineer officer, had organized a service of boats and steamers up the Nile from Alexandria to a point as near as possible to Suez, the "overland" portion of the journey across the desert being performed



From Stereo copyright] [*Underwood & Underwood.*

The Suez Canal near its entrance at Port Said. The quays of Port Said are on the right-hand side.

by carriages and camels, and on horseback. Later, a railway—the first constructed in Egypt—took the place of this caravan journey across the sands.

The enormous attraction, however, which this steamer journey from England *viâ* Gibraltar (or from Marseilles) to Alexandria, followed by the overland route thence to Suez and the steamer journey from Suez to Bombay, possessed over the three-months'-long, inexpressibly weary and often dangerous Cape voyage, soon impressed the British Government. The Britannicizing of Suez led almost immediately to the seizure and garrisoning of Aden (1839) as a port of call between Suez and India and a protection to steamers against possible (then still existing) Turkish pirate vessels.

But while the British rapidly built railways across Lower Egypt to connect Alexandria with the Gulf of Suez, a Frenchman—Ferdinand de Lesseps—revived the bolder scheme of a Trans-Isthmian Canal, a sea-level channel from the Mediterranean to Suez by way of the Salt Lakes, which might be navigable by ships of the largest size and deepest draught then built. Lesseps' plan was not only denounced by English statesmen as an impracticable one, but it was also bitterly opposed because it might give France too great a hold over Egypt. However, in spite of obstacles



Photo by permission of] [*The Cape Government Railways*

CAPETOWN, WITH TABLE MOUNTAIN (3,540 Feet) IN THE BACKGROUND.



Photo by] [The Photochrom Co. Ltd.

ON THE SITE OF CARTHAGE.

The "rock garden" which is being formed naturally among the vestiges of Roman and Byzantine Carthage.

—financial and diplomatic—this tenacious Frenchman carried his scheme through to absolute success. The canal was commenced in 1859 and completed in 1869 at a cost of nineteen million pounds. In 1869 it was opened to the traffic of the world by the Empress of the French, accompanied by the Khedive Ismail of Egypt and the late King Edward VII. (then Prince of Wales).

The Suez Canal was named after the now almost side-tracked, moribund Suez, because, fifty years ago, there was no other town of any note along the projected water-route across the Isthmus. Port Said, on the north-eastern corner of Lake Menzala, is built on soil created by the Canal construction and is becoming a healthy and not uncomely city, with a population already of nearly fifty thousand. After leaving Port Said, the Canal passes through the eastern part of Lake Menzala, then follows a narrow cutting between sand-hills till it reaches little Lake Timsa (the "Crocodile Lake," wherein crocodiles—extinct for a hundred years or more—at one time swarmed). On Lake Timsa is situated Ismailia, the midway station of the Canal.

After Lake Timsa, another narrow cutting, and then with relief the steamer passengers see the wide horizons of the Great and Little Bitter Lakes opening before them. This is practically one sheet of water through which steamers can pass easily with great breadth of channel. Then follows the last section of the Canal cutting, and vessels emerge at Port Taufik (beyond Suez), in a gulf of the Red Sea. The Suez Canal is eighty-seven miles long, of which sixty-six miles are artificial canal, the remainder being the deeper water of the lakes.

Owing to the suggestion of the late Mr. Frederick Greenwood and the prompt action of Lord Beaconsfield, Great Britain became, in 1875, the purchaser of the Khedive's large share-holding in the Canal, a circumstance which, in addition to the great preponderance of her shipping as user of the Canal, gave her a strong claim for consideration in the management of that institution, which had remained entirely French down to 1886. By that time great complaints were being uttered

by British ship-owners as to the inordinate delays inflicted on shipping in passing through the Canal. Indeed, after the British occupation of Egypt in 1882 it was seriously proposed that Great Britain should construct a rival canal, either from Alexandria to Mansura, Ismailia and Suez, or "a second canal parallel to the old one on the Syrian side," or even more fantastically, a canal through the Syrian coastlands to the Upper Jordan, which would have spread the Mediterranean water over the whole Lower Jordan and Dead Sea valley (which lies in a rift below sea-level) and have left only a short cutting to be made into the Gulf of Akaba. But more conciliatory measures were adopted. A British Director was appointed to the Board of Control (which still remains in Paris), and the existing Canal was widened. Steamers now pass through in twelve hours and can travel night and day. A large number of the Canal employés are Maltese.

Table Mountain, Capetown.—The commencement of the conquest of India under Lord Clive, in 1757-60, inevitably directed the attention of British statesmen not only to Egypt—whither James Bruce was despatched in 1770 by Lord Halifax to discover the source of the Nile—but also to the Cape of Good Hope, the necessary calling-place of British vessels on their ocean route to and from India. In fact, two things were rendered imperative by the enlargement and retention of the vast Indian Empire: the holding of South Africa and the occupation of Egypt. In both cases the French Government precipitated British action. The French, before their revolution, were attempting to replace the weak Dutch Company government at the Cape of Good Hope by a French settlement. Realizing this, the British Government attempted in 1781 to seize the Cape of Good Hope, but French victories at sea thwarted their purpose. In 1795 a more carefully planned armament was sent, and the Cape became ours, only to be relinquished reluctantly for three years after the temporary peace of Amiens. Already in the closing years of the eighteenth century a few Portuguese had



Photo by] [The Photochrom Co. Ltd.

In the garden in front of the Museum of the White Fathers, Carthage.

noted with apprehension British interest in the Nile and Abyssinia, and when in 1795 a British force was landed at Capetown, the great Portuguese colonial official and explorer, Dr. José de Lacerda, uttered from his camp on the Zambezi the memorable prediction that Great Britain would some day extend—or attempt to extend—her sway from Capetown to Egypt; in fact, he foreshadowed very distinctly the Cape-to-Cairo idea, which was afterwards revived in 1876 by the late Sir Edwin Arnold, and again by the present writer in 1888, and by Cecil Rhodes in 1892.

Capetown, as the splendid illustration here given amply shows, is one of the world's great predestined capitals. It is a very notable city so far as position and magnificent natural surroundings are concerned. Moreover, since the great progress in the affairs of South Africa, which commenced about the year 1890, the citizens and the local government of Capetown have realized the magnificence of their position and their opportunities, and much of the architecture of the town is of a character to enhance, and not to belittle, the supreme beauty of the place.

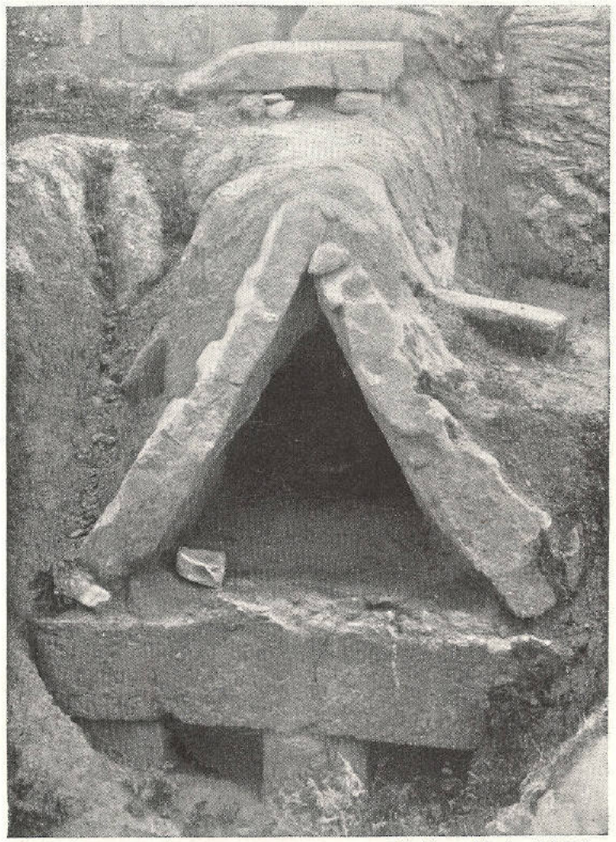


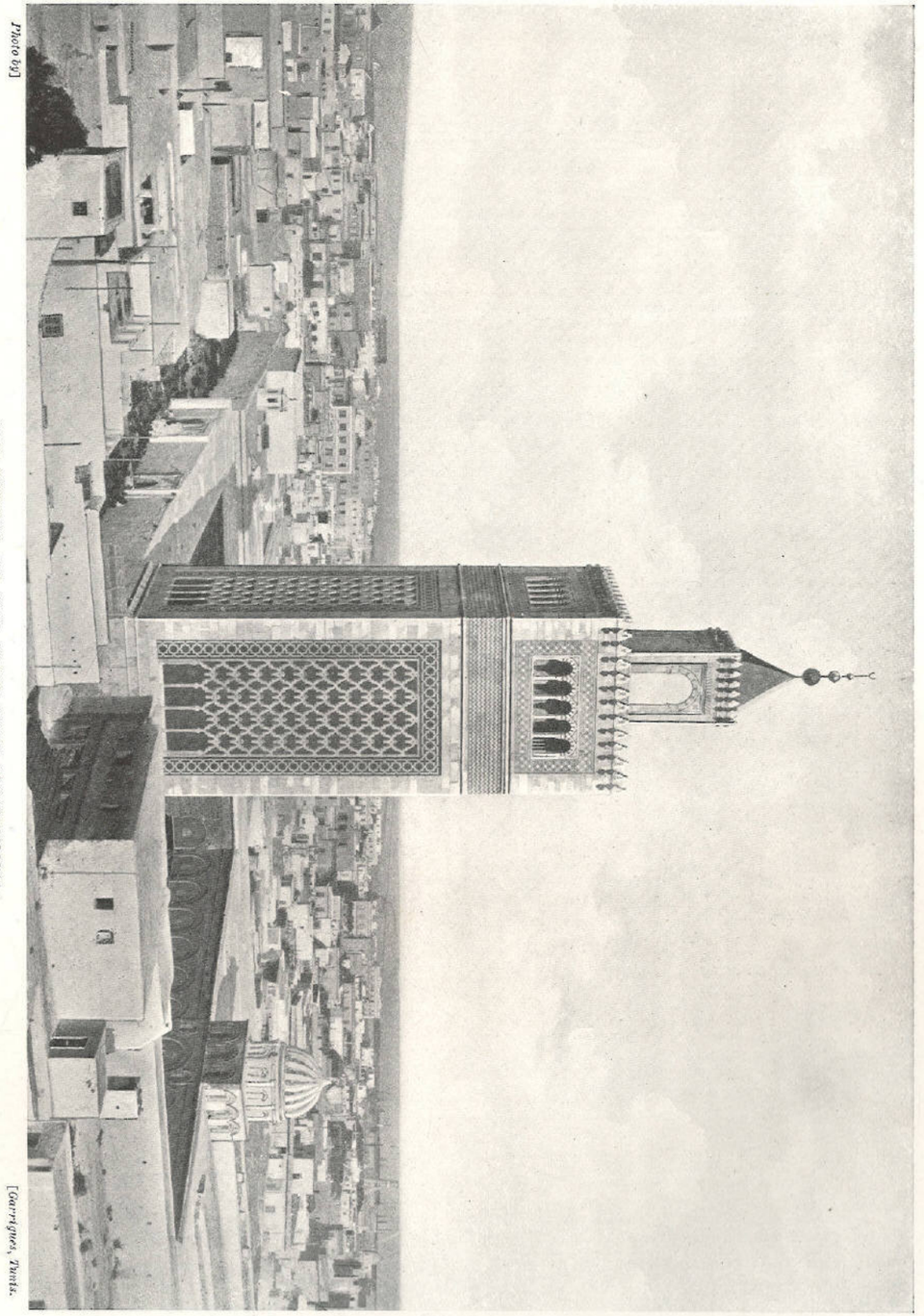
Photo by permission of [*Sir Harry Johnston, G.C.M.G.*

A triangular Phœnician Tomb, Carthage.

Of course, its most notable feature is Table Mountain (3,540 feet high), over the flat top of which the white fleecy clouds sometimes lie so closely as to simulate a woolly tablecloth. Table Mountain is in that direction the last prolongation of that region of lofty plateaus and mountain ranges which makes a kind of sub-continent of South Africa, and which breaks off abruptly above the waves of the Southern Ocean in the regions of Cape Colony.

Capetown — Kaapstad — was founded in 1652 by Dutch settlers sent out by the Netherlands East India Company under Jan van Riebeek. The country in the vicinity of Table Mountain was in those days occupied by tribes of Hottentots, who kept herds of long-horned cattle. The Hottentots themselves had travelled down the south-west coast of Africa several centuries before from the neighbourhood of Walfish Bay and Damaraland. At a still more distant date they seem to have been the result of some immigration of a cattle and sheep-keeping, herdsmen tribe from the vicinity of the Victoria Nyanza, a tribe resulting from some ancient mixture between the superior Hamitic, semi-white stock of North-East Africa and a Bushman race of East Africa. There are still lingering people of this mixed stock in the northern part of Unyamwezi land, speaking click languages akin to Bushmen and Hottentot. The ancestors of the Hottentots appear to have crossed Africa round

Photo by] THE MOSQUE OF THE OLIVE TREE (AZ-ZEITOUNA). [*Garrigues, Tunis.*





CAIRO.

A general view of "Old Cairo" (Masr-al-'Atika), with the Pyramids of Giza in the distance; also the green island of Roda, whereon, according to tradition, Moses was found among the bulrushes by Pharaoh's daughter.

[Photo by] [The Photochrom Co. Ltd.

the southern limits of the Congo watershed and Northern Zambezia, and to have reached the Atlantic coast near the mouth of the Kunene. From this direction they advanced slowly towards the Orange River and the Cape peninsula, driving the Bushmen before them or absorbing Bushman clans into their midst. There were, however, still lingering Bushmen ("Bosjesmen") in the background of Capetown when the Dutch first settled there; but the united action of the colonists and the more or less friendly Hottentots soon drove them farther into the wilderness and the inaccessible parts of Table Mountain. Capetown has a population of nearly two hundred and fifty thousand at the present day, of which about one hundred and thirty thousand are whites of European descent. It has an imperial garrison of troops, and close by, at Simon's Town, is one of the great naval stations of the British Empire.

Carthage.—If Capetown be the most southern of famous African cities, Carthage is—or was—the most northern. Carthage, of imperishable fame, has actually a railway station of its own at the present day with the magic name inscribed on it, but this is of little more importance or magnitude than a roadside halt in the country sections of our own Metropolitan Railway. Carthage was founded about the year 822 B.C. by the Phœnicians.

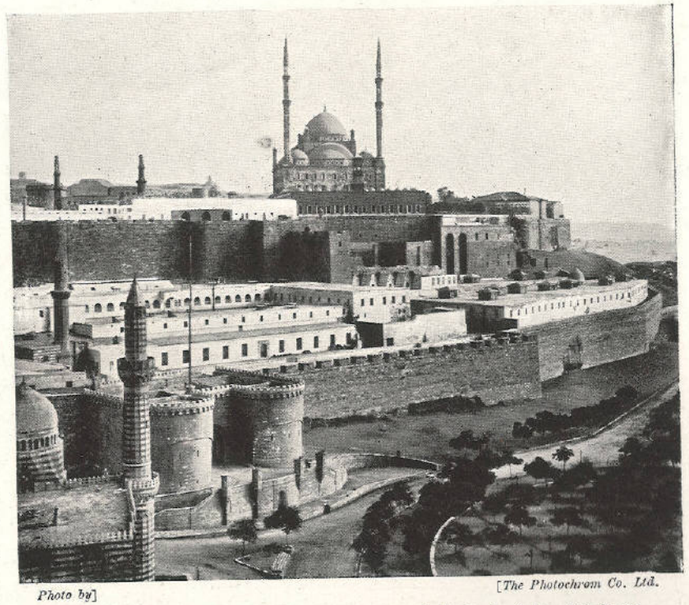


Photo by] [The Photochrom Co. Ltd.

The Citadel of Cairo: built, or at any rate mainly built, by Sultan Saladin in 1166 A.D., and captured by the British in 1882.

Its Syrian name was probably Kart-hadjah, "the New City." It was not by any means their oldest colony on the north coast of Africa, for they had established Utica about three hundred years earlier. But Carthage soon rose into prominence owing to its splendid position on the sides of this deep gulf, not far from the outlet of the only important river in Tunis, the Majerda (Bagradas). was afterwards rebuilt by of a dream and partly out rose to a degree of wealth, its most flourishing days as the capital of a Syrian dominion over the north coast of Africa. In spite of many vicissitudes under the rude Vandals, it still continued to exist as a great city at the time of the first Arab invasion of Tunisia in the seventh century A.D., but was reduced to absolute ruin by Hassan ibn An-numan in 698. The first Arab conquerors of North Africa did not persecute the Christians, but allowed them to remain round Carthage and to elect their own bishops. But this toleration ceased when the Muhammadan rulers of Tunis became more fanatical (owing to the attacks of Christian powers) in the eleventh century. Still, Carthage remained to attract the eye as a city, even if it were a city in ruins, until after King Louis IX. of France had landed here in the

Destroyed completely by the Romans in the year 145 B.C., it them at the instigation of Julius Cæsar in 16 B.C., as the result of remorse, and in the four first centuries of the Christian era

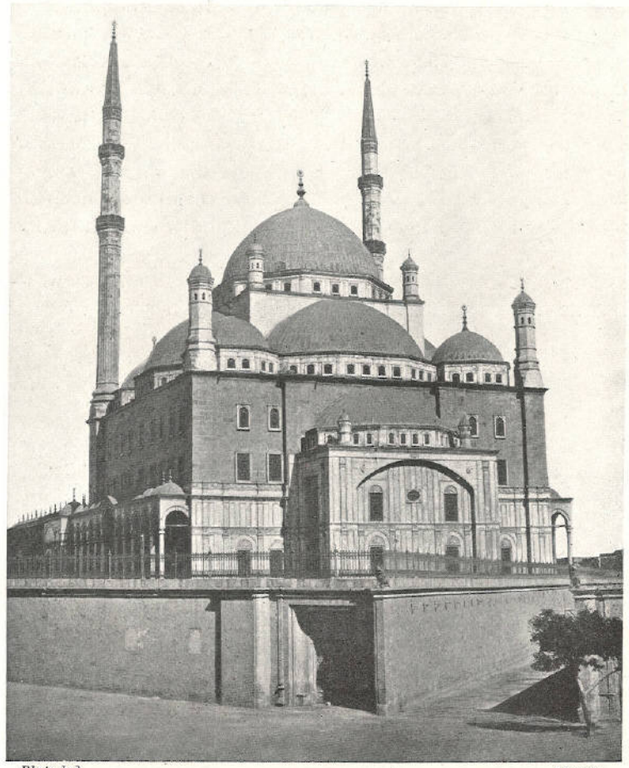


Photo by] [*Bonfils.*

The Mosque of Muhammad Ali surmounting the Citadel, Cairo: finished about 1857.

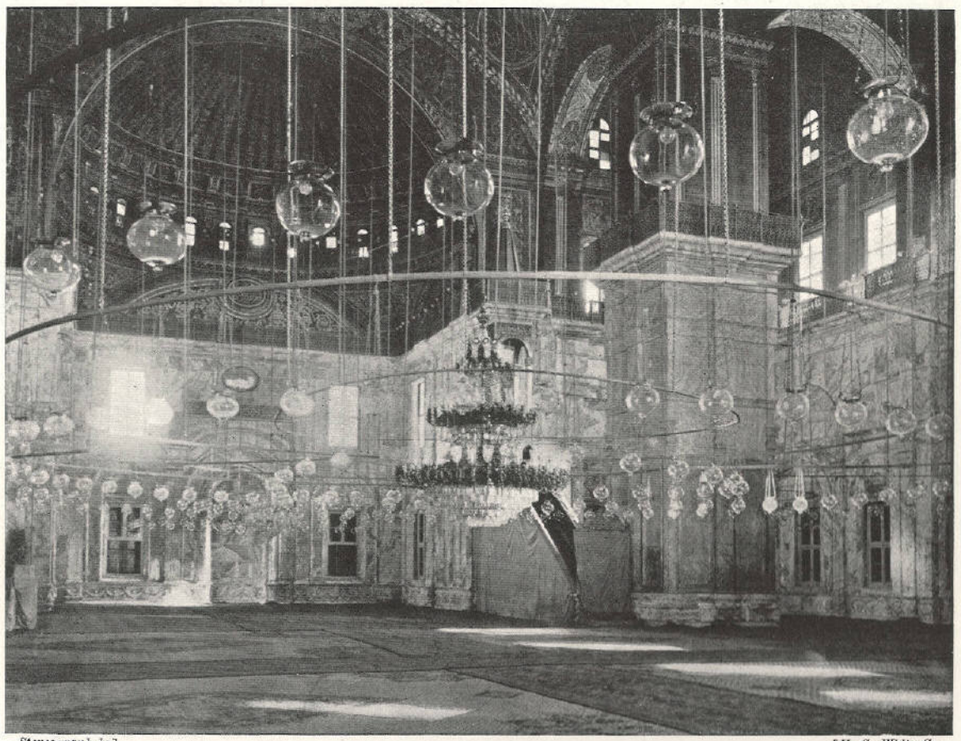
year 1270, on an insensate crusade against the Muhammadan power. King Louis was defeated, not by the Berber rulers of Tunis, but by the plague, of which he and a number of his captains and soldiers died. By agreement with the enemy the French forces, after his death, were allowed to depart peaceably in the autumn of 1270; but when they had finally abandoned Carthage the ruins were razed to the ground by the Arabs and Berbers in order that they might never again shelter a Christian force.

Interest in Carthage revived in the eighteenth century owing to the wonderful researches conducted by that truly remarkable James Bruce, who afterwards discovered the source of the Blue Nile. The French revived their sentimental interest in the place after their complete conquest of Algeria, and obtained from the Bey of Tunis the cession of the supposed portion of the site which had been the camp and the death-place of Louis IX. (St. Louis) in 1270. This site was then (1841) handed over to the care of a religious settlement which grew into the White Fathers of North Africa. A pretentious and ugly chapel of villainous taste was built here as a shrine. Subsequently, the late Cardinal Lavigerie, Archbishop of Carthage, built a cathedral here. Cardinal Lavigerie also encouraged archæological research, and the Superior of the monastery and those working under him, more especially of late years the Reverend Father Delattre, have in a most careful and praiseworthy manner found and preserved wonderful relics of Phœnician, Carthaginian, Roman and Byzantine times. Such of these as are not exhibited in an admirable Museum are placed in a very picturesque garden near the Museum. The French government of Tunis also interests itself in the exploration of the site of Carthage, but the most notable discoveries are those of Père Delattre. Some day, no doubt, a new Carthage will arise worthy of the old traditions of splendour.

Phœnician Tombs at Carthage.—So far the excavations on the site of Carthage have not penetrated low enough to unveil much of the oldest Punic stratum of the city. But a good many inscriptions in the Punic character have been found and placed in the Museum, both at Carthage and at the Tunisian State Museum at the Bardo, near Tunis. Further, in one of the outlying quarters of Carthage, named "Douimès" by the Arabs, a number of triangular "proto-Punic" or early Phœnician graves have been laid bare. One of these, similar to the one in the photograph, was discovered during the visit of Queen Alexandra (then Princess of Wales) to the excavations of Carthage in 1899.

Tunis.—Twelve miles away across a shallow lake (through which the French have made a navigable channel) lies the beautiful Moorish town of Tunis, less picturesque, perhaps, at the present day than it was when the present writer first saw it in 1879. At that period the shallow lake beyond Goletta was populated all along its desert banks by troops of pink flamingoes, large pelicans and herons, and in the winter-time, storks, geese, duck and wild swans. Tunis the White—the "Burnūs of the Prophet"—rose from the southern shores of this muddy lake. Away to the north-east were the picturesque outlines of the extinct volcano of the Two Horns (Bu Karnein) and the table mountain of the lead mines—Jebel Resass. The Tunis of 1910 has developed immense accretions outside the gates and walls of the old city—a whole new European town, with buildings like those of Marseilles and Nice. But the Arab town remains almost unspoilt with its flat-roofed white houses, its noble minarets and kubbas, or small white domes. The view represented in the accompanying illustration is taken from a house-top near the Great Mosque, Az-zeitouna ("The Olive Tree"), of which the new minaret replacing the one which fell in 1888 rises into the sky. This, the largest and most celebrated mosque of Tunis, has an immense library of ancient Arabic (and perhaps Greek) manuscript books. During the Spanish occupation of Tunis in the sixteenth century it was turned into a Christian church. No Christian is allowed now to penetrate this or any other mosque in the city of Tunis.

Cairo.—The Cairo of to-day—Old as well as New—is a city, or a combination of cities, the name of which dates from the year 968 A.D., when it was founded, as "the City of Victory"—Al-Kahira—by the general of the Fatimite Caliphs of Egypt. But it was little more than the refounding



Stereograph by] [*H. C. White Co.*

INTERIOR OF MOSQUE OF MUHAMMAD ALI, CAIRO.

Showing wonderful glass lamps

of a great centre of human habitation within an area eighteen miles by ten which had seen many cities arise and crumble in the past. To the south (fourteen miles away, on the west bank of the Nile) had been Memphis; and to the north-east Heliopolis—ancient Egyptian capitals; almost on the site of Cairo stood the town of Babylon, founded by Mesopotamian immigrants during the Persian rule over Egypt, and remaining a town down to Roman times. Babylon was succeeded by Al-Fostat, the "tent" city of the Muhammadan conquerer, Amr-bin-'el-Asi. The "Old Cairo" of to-day represents the actual site of Babylon and Al-Fostat. Al-Katai, a dead city, containing the mosque of Ibn Tulun, is an outlying bourg of its successor, Al-Kahira, and another ancient and abandoned village is Al-Askar. Bulaq is the river-side suburb. When the Napoleonic wars were over, Cairo



Photo by] [*Bonfils.*

The fountain for ablutions in the Mosque of Muhammad Ali, Cairo.

became the capital of Muhammad Ali, that Turkish sergeant of artillery who founded a monarchy, and whose descendant is the present Khedive of Egypt.

The Citadel of Cairo.—The Citadel of Cairo (built by Saladin in 1166 on a spur of the Mokattam hills and constructed of stones from the Pyramids) is associated with many of the exploits of Muhammad Ali, amongst which one of the most terrible was the slaughter of the Mamluks in 1811. Only one is said to have escaped the sudden and treacherous attack, and he did so by boldly leaping his horse over the ramparts on to the pavement far below. The horse was killed, but the man lived and escaped—such, at least, is the legend. The British captured the Citadel of Cairo in 1882, and have occupied it ever since.

The Mosque of Muhammad Ali.—This mosque is not a particularly tasteful or beautiful building in comparison with the noble mosques of Saracenic art in the older parts of Cairo, but it is



Painted by G. H. Edwards. *Photo by Underwood & Underwood.*

THE ISLAND OF PHILÆ.

Philæ is situated at the head of the first cataract of the Nile. Since the building of the Assouan Dam the Island is submerged between December and April, but during the rest of the year its buildings remain untouched by the waters of the Nile.

reckoned a minor wonder of the world from its size and the magnificence of the glass lamps and chandeliers within and the lavish use of marble and Oriental alabaster which adorns it inside and out.

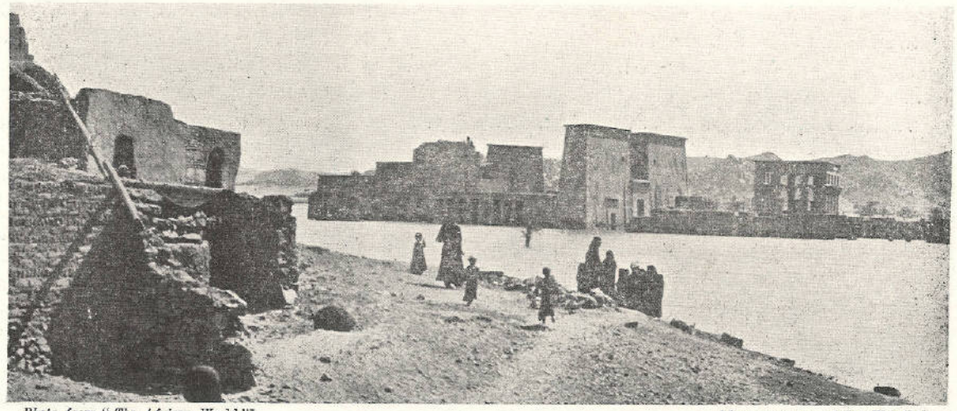


Photo from "The African World." *[By permission of Leo Weinthal.*

PHILÆ ISLAND.

A view of Philæ Island (above the First Cataract) partially submerged, showing the Great Temple of Isis and its Great Pylon, and in the distance the Hypæthral Temple built by Augustus Cæsar.

CHAPTER XIII.

The Island of Philæ and its Temples, near the First Cataract.—From the shores of the Mediterranean, in latitude 32°, to the First Cataract just above Assouan, in latitude 24°, the Nile is navigable without a check for boats of relatively light draught; but just above the Island of Elephantine, the Nile narrows and rushes down in a tumultuous flood between black rocks. The importance of this First Cataract of the Nile was recognized as early as the first historical dynasties, partly because of the granite quarries in the neighbourhood; and Meren-ra, a Pharaoh of the Sixth Dynasty, despatched an Egyptian named Una to be Governor of the South and to dig five canals at the First Cataract to facilitate the transport of boats to the upper river. Una, who had previously raised a negro regiment in Nubia to combat the Beduin Arabs who were attacking Egypt at the Isthmus of Suez, invoked the aid of the negro chiefs of the tribes above the First Cataract to have timber cut in sufficient quantities to build boats in order to transport red granite from the quarries above the First Cataract for the building of pyramids and other monuments in Lower Egypt. It has been computed that nearly a thousand acacia and albizzia trees would have been required for these purposes. Other evidence goes to show that the banks of the Nile between Assouan and Khartum have been greatly deforested through the action of man, and especially the influence, direct and indirect, of Ancient Egypt. The Island of Elephantine, just below the First Cataract, had from a still earlier period in the Sixth Dynasty been a most important meeting-place between the white Egyptians and the darker-skinned tribes of Lower Nubia and the absolute negroes of Upper Nubia. It is probable that the Ancient Egyptian name of Assouan meant market. The name given to Elephantine Island, whereon a celebrated Nilometer is situated, was Abu in the Ancient Egyptian tongue, meaning "elephant," possibly because it was seized in prehistoric times by an Egyptian clan who had adopted the elephant as a symbol or totem. But it is clear from the roughly-scratched drawings on the rocks bordering the Nubian Nile, that elephants

must have been very common in this region before the riverside forests were destroyed. As early as the first historical dynasty—some four thousand years before Christ*—the limits of Egyptian power or influence must have extended as far south as the Island of Philæ and have had as their headquarters in this direction the fortified Island of Elephantine. This region was called by the Egyptians the "Door of the South," and was the starting point of overland caravans which travelled southwards into Negroland; moreover, when the First Cataract had been conquered and made navigable, Egyptian boats must have passed up the Nile beyond the rapids of Bab el Kalabsheh to the Second Cataract just beyond Wadi Halfa, the real and final frontier of Egypt

Though Elephantine may have been the stronghold of Egyptian power at the First Cataract, Philæ Island was the sacred place, the centre of religious interest on the threshold of Nubia. It was here, according to legend, that the god-man Hesiri (Osiris)—the deified leader of the Egyptians who brought civilization to the Valley of the Nile—was buried. Yet although Philæ must have been an important centre of religious worship in very early times, there is among its visible or discovered monuments nothing dating back later than to the days of the Twenty-fifth Dynasty, about six hundred and seventy years before Christ.

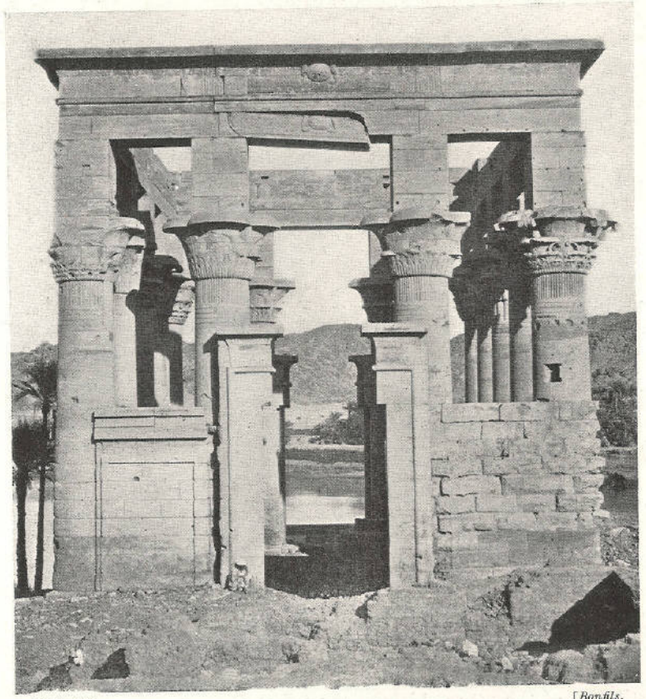


Photo by] PHARAOH'S BED. [*Bonfils.*

The Hypæthrum (or Kiosk) known as Pharaoh's Bed, to the south-east of the Temple of Isis at Philæ, before the rising of the dammed-up waters of the Nile.

Perhaps further researches may bring to light evidences of older temples to account for the importance attached by the Ancient Egyptians to the site of Osiris's burial place. On the wonderful "orange and roseate-tinted boulders of granite," which are piled up in confused masses in the bed of the river north of Philæ (writes Mr. John Ward, in his interesting work, "Pyramids and Progress")—and also on the adjacent island of Knossos—are gigantic cartouches cut deeply into the rock belonging to Pharaohs of the Eleventh Dynasty, and there is also a record on the rocks of the visit (in about 1420 B.C.) of Tehutimes IV. The Island of Philæ is about five hundred square yards in area, and is situated at the head of the First Cataract, about two miles above the modern dam or reservoir. This great engineering work, by banking up the Nile above the First Cataract, has drowned not a few Egyptian monuments, and annually turns this little granite island of temples and colonnades into two or three islets between December and April; though for the rest of the year all Philæ is above the waters and apparently uninjured. But the palms which appear in the accompanying pictures (taken before the rising of the water),

* Flinders Petrie would make it a thousand years earlier.

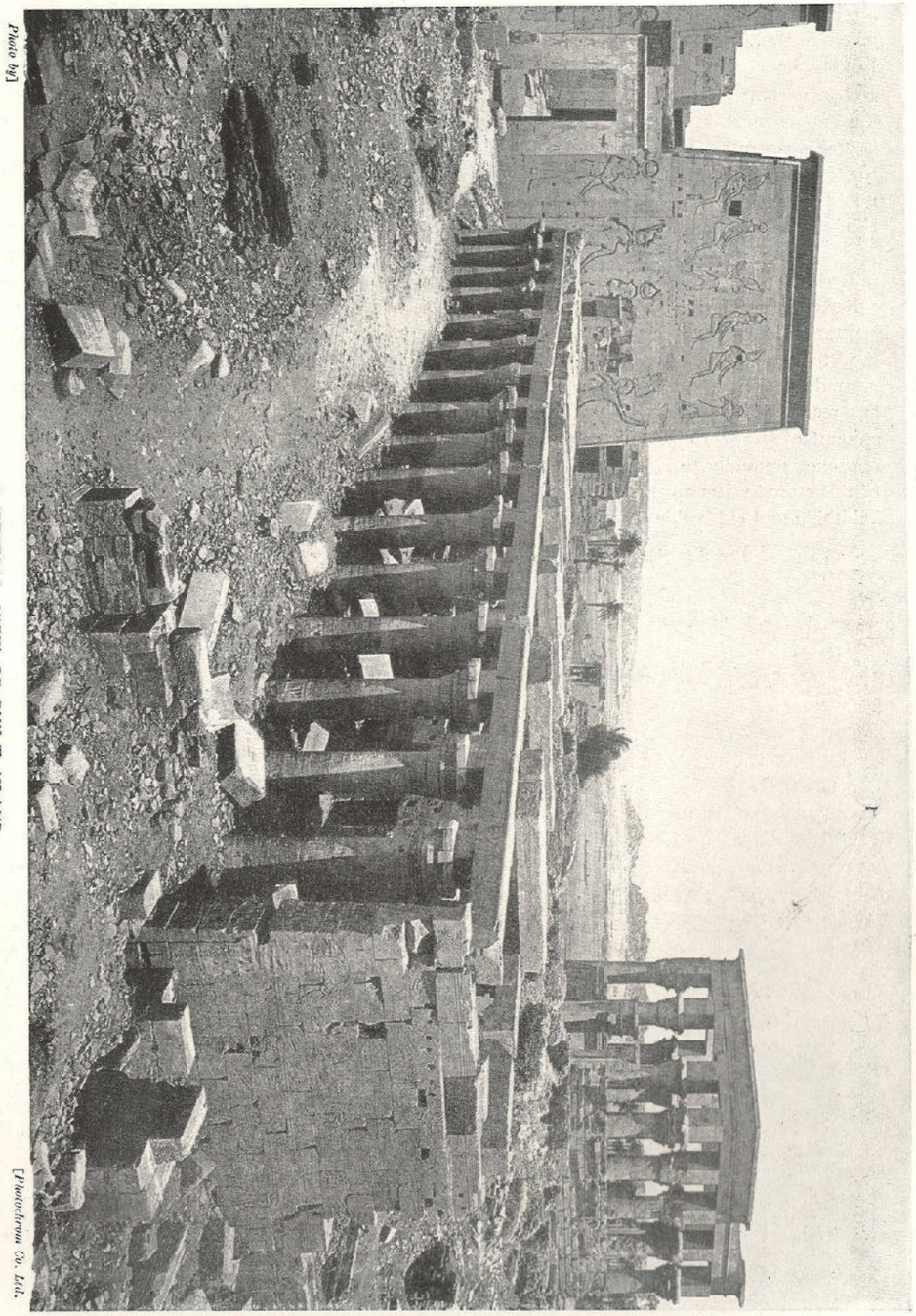


Photo by] A GENERAL VIEW OF PHILÆ ISLAND. [*Photochrom Co. Ltd.*

This photograph was taken from the south before the rising of the Nile, and shows the Colonnade, the Great Pylon of the Temple of Isis, and the Roman Temple known as Pharaoh's Bed.

are mostly killed. When first it was proposed to construct the barrage above the First Cataract, much sentimental nonsense was talked and written by critics of the British administration of Egyptian affairs as to the effect on Philæ and on the other vestiges of Ancient Egyptian art in Lower Nubia, which would be produced by the rise in level of the Nile waters during half the year. Had the buildings on this island and most of the others between Philæ and the Second Cataract been of immense antiquity, there might have been some reason in this appeal of Archæology to Industrialism to stay its hand and to deprive some five millions of agricultural Egyptians of a water supply which might enormously increase the cultivable area of Upper and Middle Egypt. But, as a matter of fact, the revealed antiquities of Philæ and most of those in lower Nubia, are comparatively modern. The earliest discovered work on Philæ is an altar raised by Taparka, a negroid king of the Twenty-fifth (Ethiopian) Dynasty. There are also fragments of buildings dating back to Aahmes II.—say 550 B.C. The oldest of the existing temples was erected by one of the last Pharaohs of Egypt, Nektaneb II., about the year 350 B.C. With these exceptions, all the wonders of Philæ date from the Ptolemies and the Cæsars (down to Diocletian*), and the most striking of these are not materially injured by their annual standing in Nile water for three or four months. This being the case, it has recently been decided by the Egyptian Government to raise the barrage and increase the amount of stored-up Nile water during the winter and spring. This will mean the gift of millions of money annually to Egypt and a resultant large increase of population arising from the applying of this stored water to the irrigation of a far larger area of desert land, which will thus be rendered habitable and cultivable by many more peasants.

* Whose Triumphal Arch will be completely covered by the water when the Nile dam is raised.

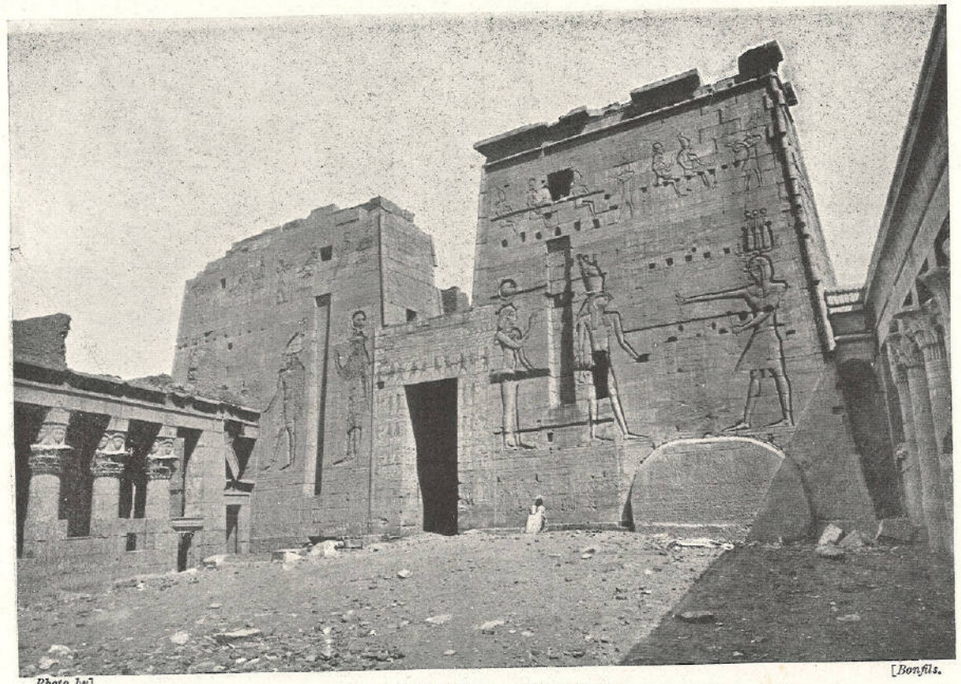


Photo by] [*Bonfils.*

THE TEMPLE OF ISIS PHILÆ.

The Second Pylon and Forecourt of the Temple, showing the stele cut on a natural block of granite, and a colonnade of the Birth House



Photo from "The African World."] [*By permission of Leo Weinthal.*

PHILÆ IN THE FLOOD SEASON.

A view of the Hypæthrum and the Temple of Isis, at Philæ, standing in the dammed-up Nile waters during the season of artificial flood (December-May) This view is looking from the east, westwards.

The most striking monument of Philæ is certainly the beautiful little riverside temple, so ridiculously misnamed "Pharaoh's Bed," or, more vulgarly, the "Kiosk." This hypæthral temple was commenced by Augustus Cæsar and finished by Trajan, so that it is one of the most modern of "pagan" temples in Egypt. The most characteristic features in a view of Philæ Island from the south are the Great Pylon and the West Colonnade of the Temple of Isis. The Great Pylon leading to the forecourt was commenced by King Nektaneb II., and finished by the Ptolemies. The West Colonnade was mainly the work of the Cæsars—Augustus, Tiberius and Claudius—as Pharaohs.

The Forecourt and Second Pylon of this temple probably date from the time of Ptolemy VI. (Philometor), with additions down to Ptolemy XIII. (Neos Dionysos). The eastern side of the Second Pylon is built over a block of naturally-placed granite, the outer face of which has been planed smooth and used as a stele for a picture of Ptolemy VI. and his queen standing before the gods Osiris, Isis and Horos; and the writing below recounts how a portion of the country on either bank of the Nile about Assouan had been dedicated to Isis. The boldly incised figures on this half of the Pylon represent Ptolemy XIII. worshipping Horos and Hathor, and above, on a smaller scale, the same monarch offering himself to Horos, Isis and Osiris. On the western half of the Pylon Ptolemy XIII. in different sizes is seen performing similar acts of reverence before the gods Horos and Unnefer and the goddess Isis. (Unnefer was another name for Osiris, the "good" god.) The building which abuts on this western half of the Pylon is a portion of the Birth House. This temple may, like other adjuncts of the Temple of Isis, date from the reign of Nektaneb II., but its details are chiefly associated with the sixth, seventh and thirteenth Ptolemies and with Tiberius Cæsar. It is mainly concerned with the worship of the Osiris, Isis and Horos trinity (or these principles under other names—Unnefer, Hathor and Harpocrates, etc.), and the name "Birth House" is given to it because it illustrates the birth of Horos-Harpocrates. [Harpocrates was more especially the

aspect of Horos as a child.] The rectangular Hypostyle Hall has ten columns with beautifully-carved capitals and a roof in good preservation, which, however, only covers half the hall. This Hall has records of the second, third and ninth Ptolemies, besides Coptic paintings of Christ and inscriptions of Coptic bishops of the sixth century. The walls and columns are covered with inscriptions and bas-reliefs, some of which, however, were cut away by the fanatical Coptic Christians during the hundred and fifty years which elapsed between the extinction of the worship of Isis (under Justinian) and the irruption of Islam.

Although Horos, in divers aspects, seems to have been the oldest of the gods worshipped at Philæ, pre-eminence was gradually given to Isis, the goddess-mother; and the worship of Isis at Philæ spread so much amongst the Fuzzy-wuzzy tribes of the Eastern Sudan—the Blemmues (Blemmyes) of the Greek-Egyptian writers and the Bisharin of to-day—that even when they warred with the Romans they generally arranged truces in order to be able to visit the Temple of Isis at



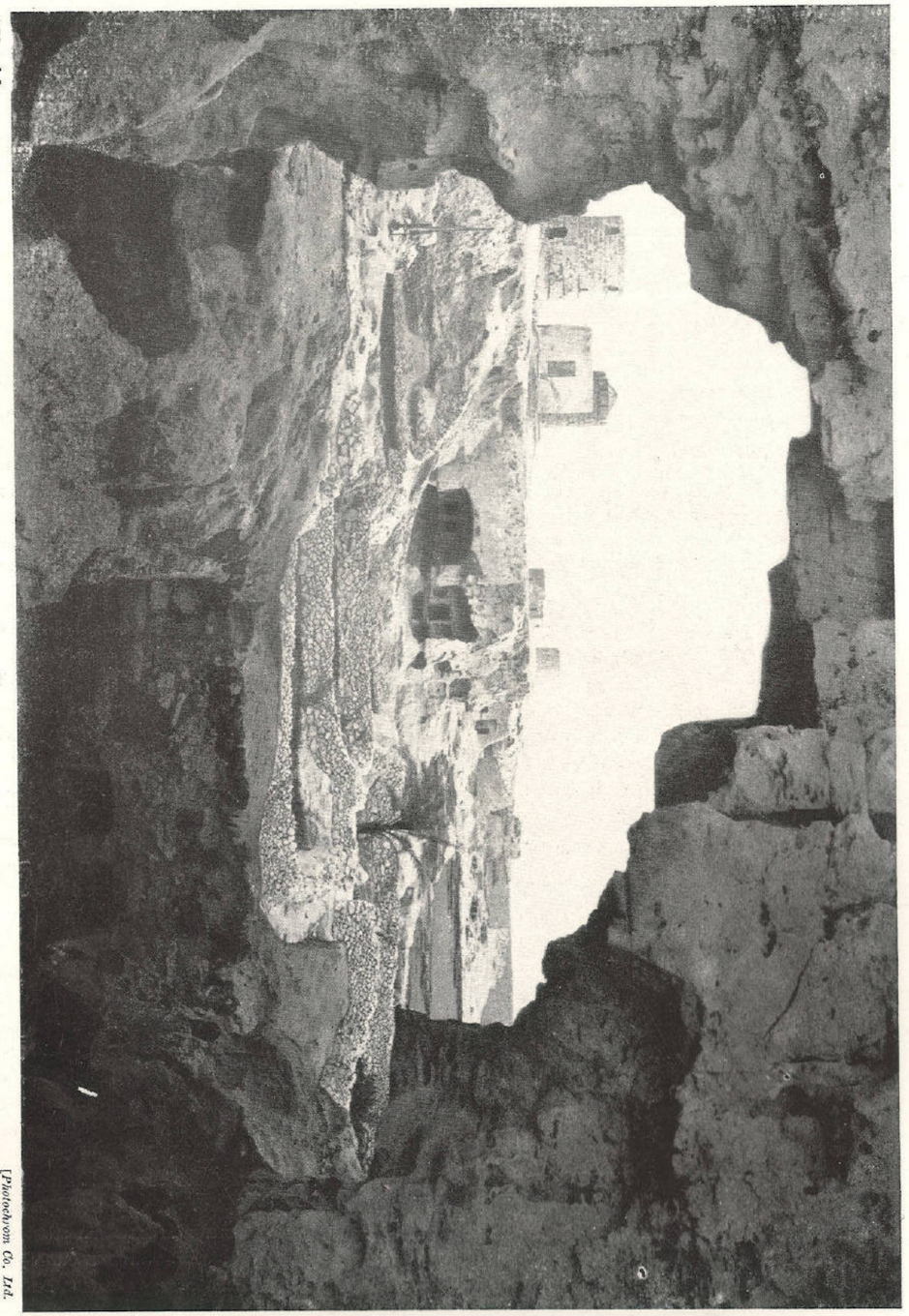
Photo by] *[Bonfils.*

THE HYPOSTYLE HALL OF THE TEMPLE OF ISIS AT PHILÆ.

Philæ. This attraction was only done away with by the forcible introduction of Christianity into Philæ in the sixth century A.D., and at a much later period by the conversion of all these regions to the faith of Islam. The Temple of Isis here illustrated was for a time used in portions for Christian worship, till, in the twelfth century, the Sultan Saladin sent his brother with a force into Lower Nubia to drive out the Christians and establish Mohamedanism.

The Catacombs of Alexandria.—In the opening chapter of this work, the present writer drew attention to the Catacombs of Alexandria as having been reputed a world-wonder during the Middle Ages and down to the eighteenth century. The accompanying picture gives an excellent illustration of the entrance into these vast underground dwellings. The greater part of Egypt proper is of cretaceous rock of late Secondary formation; the same limestone reappears in parts of Tripoli and Southern Tunis. In all these regions it lends itself with peculiar facility to carving, and from a remote antiquity this region has provided shelter and habitation for mankind, either in the natural caverns hollowed out by the dissolving action of water, or by the ease with which chambers could be scooped out of the solid rock, the outer surface of which conveniently hardens under the action

Photo by]



[Photochrom Co. Ltd.

THE CATACOMBS OF ALEXANDRIA.

In their origin the Catacombs of Alexandria were probably huge caverns created by the action of underground springs. Later they became burial-places for the dead.

of the air. These Catacombs of Alexandria were no doubt in their origin vast caves created by the action of underground springs, but from an early period they were turned into underground dwellings and refuges in time of war, and in later ages, especially in Ptolemaic and Roman times, they became burial-places for the dead. Strabo, writing about the time of Christ, describes the vast Necropolis, or City of the Dead, which had been excavated in the rock outside the walls of Alexandria. The excavations followed a very symmetrical plan, and comprised seven chambers cut out of the limestone, with a broad central passage and six subsidiary passages, besides a seventh which led into this small terminal chamber.

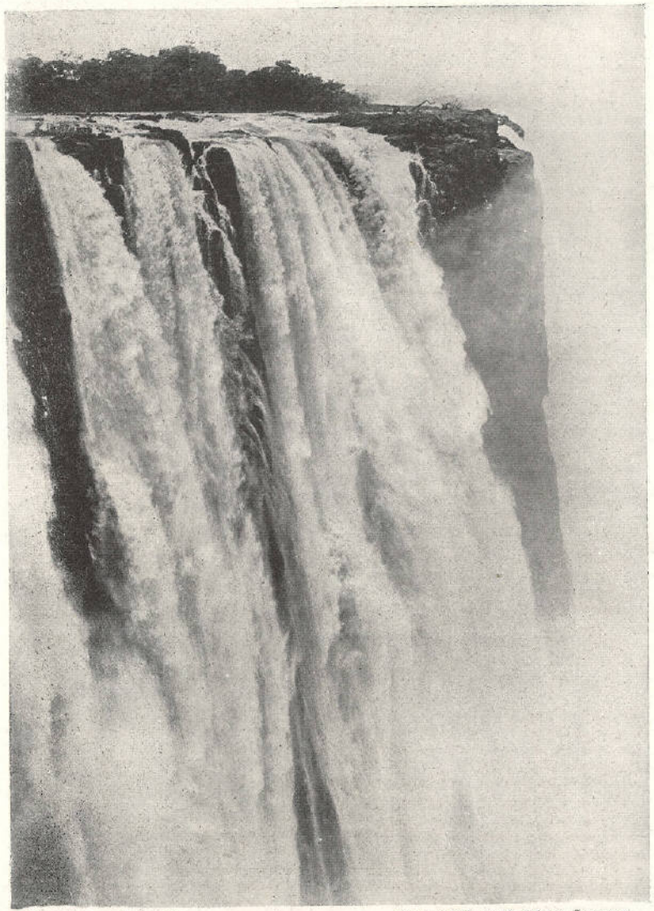


Photo by permission of [*The British South Africa Company.*

VICTORIA FALLS, ZAMBEZI.

A portion of the main fall of the Victoria Falls, Zambezi; the first fall is seen coming in on the right.

There were probably three tiers of coffin-spaces on each of the three sides of the seven chambers, the fourth opening into the passage-way. In the catacombs used by the Christians the walls were painted with many pictures of the emblems of the Christian faith and with portraits of the dead buried in the coffins. Now they are abandoned, or, at most, are used here and there for keeping cattle.

The Victoria Falls.—The Zambezi River is the fourth longest watercourse in Africa, the other three greater streams being the Nile, the Congo, and the Niger. The Zambezi takes its origin on the granite plateaus of South-West Central Africa on the very verge of the southern basin of the Congo, on a line of water-parting so indeterminate that it is probably due to the strength or absence of winds at certain seasons that the lakes and marshes of this region send their overplus of water towards the Kasai-Congo, or towards the Zambezi. It is possible that at one time the River Zambezi created an immense freshwater sea in Southern Africa of which the last remaining nucleus is Lake Ngami. Meantime, there was another river also rising on the Congo water-parting, the Kafue, which flowed southwards and eastwards and received the waters from ancient and modern lakes in South-East Africa, which it carried into the Indian Ocean. But the great South African sea or lake eventually broke through the granite and basalt barrier on the east, and the Zambezi thenceforth joined itself to the Kafue and drained South Central Africa towards the Indian Ocean.

The principal upper stream of the Zambezi is considered to be the Liba. This joins, after a course of some two hundred miles, with the Kabompo, which has almost equal claims to be considered the main stream. The Liba then receives important affluents from the far west, rising on the confines of the Portuguese province of Angola and the mountain land of Bihé. Under the name of the Liambai the Zambezi flows through the fertile but swampy Barotse valley, which appeared to Livingstone—the great discoverer of the Zambezi—to be the bed of an old lake.

At Gonye Falls, the original outlet of this lake, the river becomes straitened in breadth, and from here to Sesheke its navigability is hindered by rapids and by perfectly impassable falls. Beyond Sesheke the Zambezi-Liambai unites with the Chobe (Kwando). About a hundred miles east of its confluence with the Chobe, the Zambezi—then flowing nearly due south and over a mile broad—has its bed suddenly cleft by a chasm about four hundred feet deep—a huge zigzag crack in the intrusive basalt rock, which would have been regarded as an impossible feature in geography if it were not an actuality. The whole river—over a mile broad—plunges down into this narrow chasm, throwing up immense columns of steam-like spray. On the extreme edge or lip of this chasm there are four or five raised lumps of rock which have become islands densely covered with trees. To a certain extent they break the uniform descent of the whole breadth of the river. Beginning on the south bank,



Photo by permission of [*The British South Africa Company.*

VICTORIA FALLS.

The main falls of the Zambezi, where the river, plunging into the long, narrow chasm, is about to issue (on the left) through a very narrow outlet between high walls of rock.

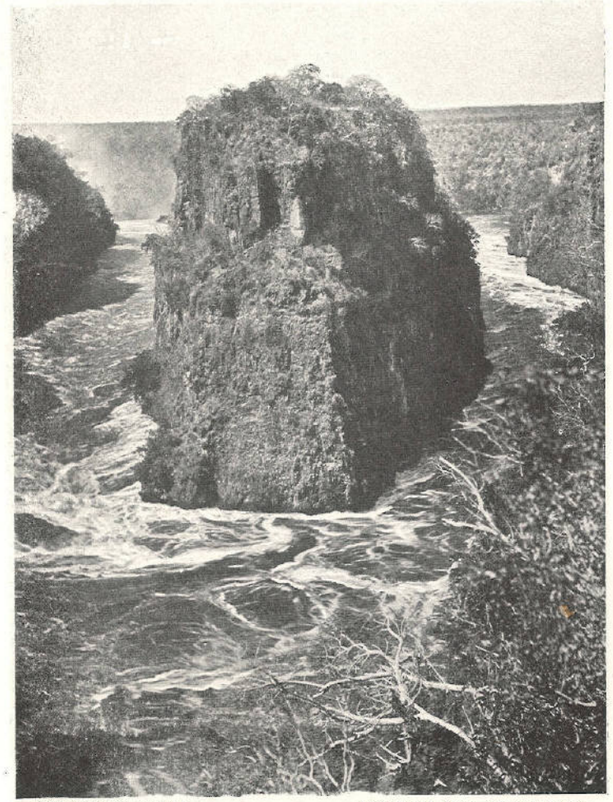


Photo by permission of [*The British South Africa Company.*

VICTORIA FALLS.

An island of rock in the main channel of the Zambezi, just below the Victoria Falls, the smoke of which may be seen on the left top corner.

there is first a fall of thirty-six yards in breadth, uniform in depth of descent to the rest of the Victoria Falls. Then Boaruka, a small island, intervenes, and there is only a thin veil of water descending over the rock in front of it. Next comes a great fall with a breadth of five hundred and seventy-three yards; a projecting rock separates this from a second great fall of three hundred and twenty-five yards broad; and farther east stands Garden Island; then comes a good deal of the bare rock of the river bed uncovered by descent of water, and beyond that a score of narrow falls which at the time of flood constitute an enormous cascade nearly half a mile in breadth.

Those falls, however, which are between the islands are the finest, and there is little apparent difference in their volume at any period of the year. Their vast body of water separates into spurts of comet-like form, and encloses in its descent a considerable volume of air, which, forced into the cleft to a great depth, rebounds and rushes up in a mass of vapour, thus forming the three to six columns of steam of smoke-like appearance which are visible to a distance of twenty miles and which gave their original native name to the Victoria Falls—Mosi oatunya—"smoke is sounding or roaring."

After the Zambezi has descended into this narrow gulf, which is nearly twice the depth of Niagara, its wonder does not cease. Garden Island, almost in the centre of the falls, divides the cascade into two main branches at the bottom of the gulf, which flow round a vapour-hidden mass of rock, and after reuniting in a boiling whirlpool find an outlet nearly at right-angles to the fissure of the falls. This outlet is nearer to the eastern end of the chasm than to the western extremity and is no more than thirty yards wide. Within these narrow limits the Zambezi, which is over a mile wide when it plunges down the falls, rushes and surges southwards through the extremely narrow channel for one hundred and thirty yards, then abruptly turns and enters a second chasm somewhat deeper and nearly parallel with the first. Abandoning at the bottom of the eastern half of this chasm a growth of large trees, it turns off sharply to the west, and by another zigzag eastwards forms a promontory about a thousand yards long by four hundred yards broad at the base. Again another three zigzags through deep and narrow gorges and the trough begins to widen into a less abysmal gulf which gradually broadens and straightens as the river flows eastward in an easier descent. In

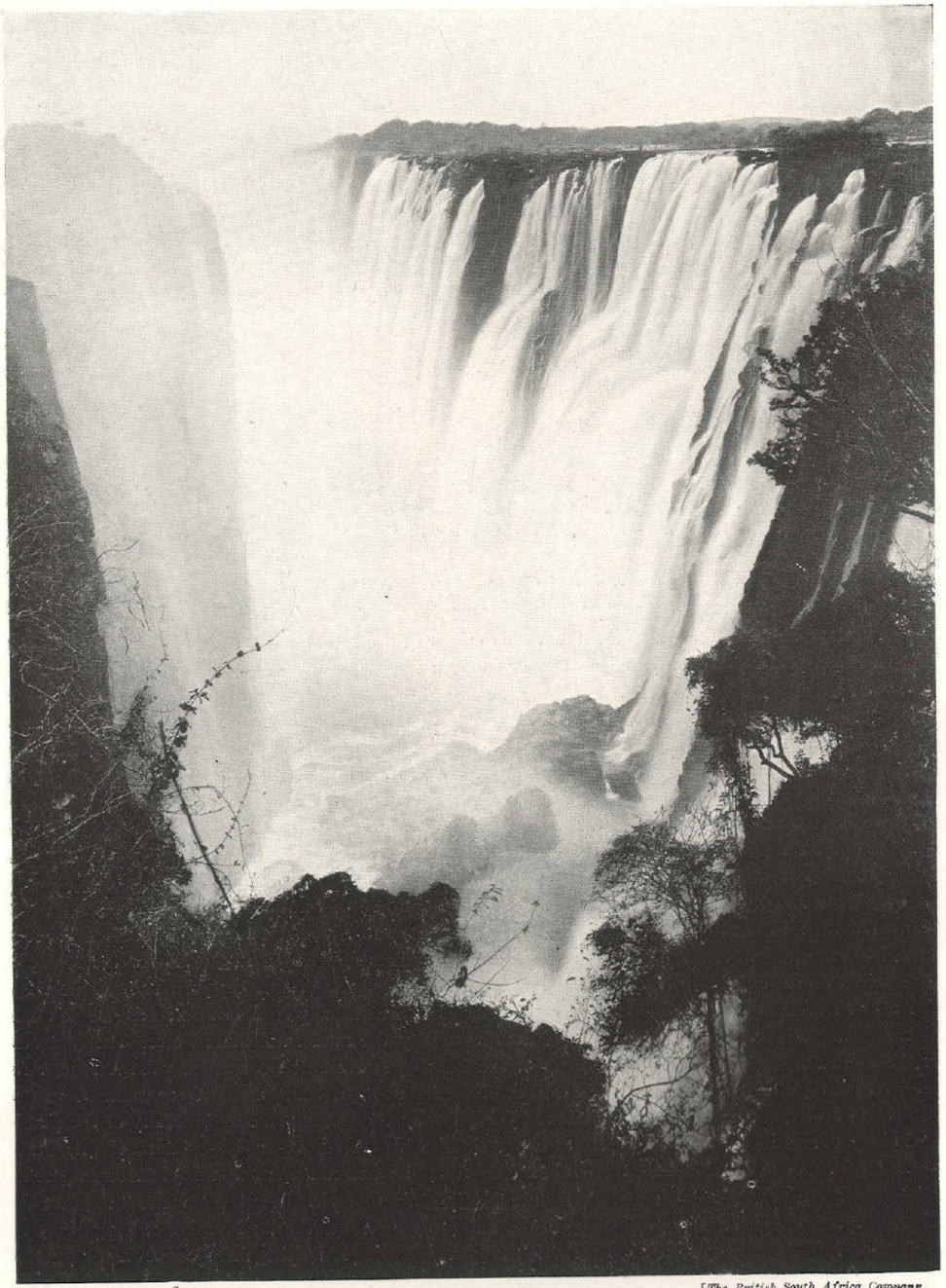
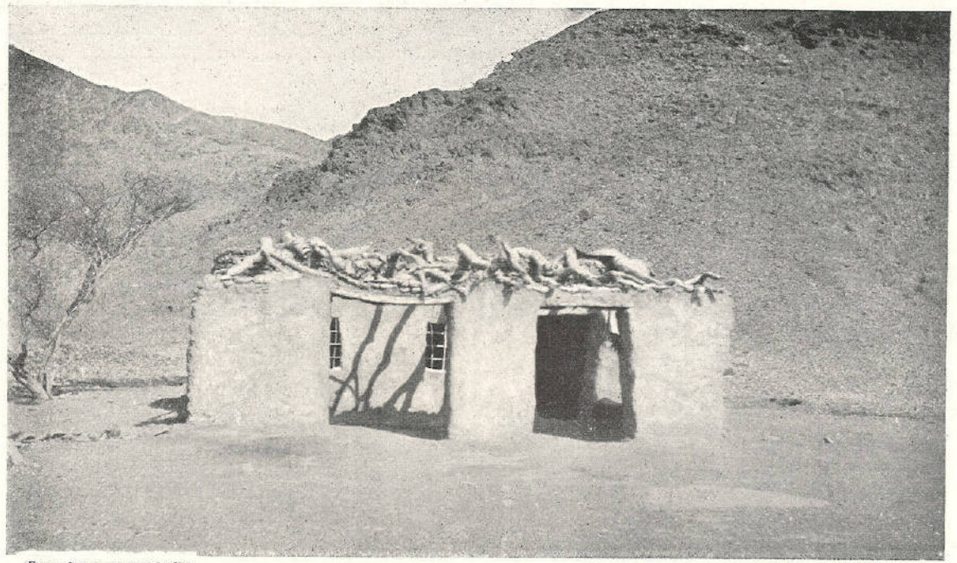


Photo by permission of [*The British South Africa Company.*

VICTORIA FALLS.

The "lip" of the Victoria Falls seen from the western side.



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AN ARAB SHEIKH'S TOMB, WADI ALLAGI.

The house-like tomb of an Arab sheikh in the Dareheib district of Eastern Egypt (near the Nubian Alps).

the abrupt turnings of the sharply-cut trough the zigzag promontories of rock are flat and smooth and reduced to quite a narrow ledge at their extremities.

In the Mining Districts of Dareheib, Eastern Egypt.—In the eastern desert of Egypt, between the Nile and the Red Sea, especially in the Nubian Alps, which rise above the Red Sea to heights of six thousand feet and less, there are traces of considerable mineral wealth. The Egyptians knew nothing of petroleum, which is now being sought for eagerly in this direction with some prospect of success, but they mined for gold, for emeralds and corundum. At places like Dareheib, where the smooth surface of the rock tempted them, they incised inscriptions describing often in magniloquent terms the power and wealth of the Pharaohs who sent out these mining expeditions, usually composed, as far as labour was concerned, of prisoners of war or slaves.

The Wadi Allagi, or Allake, in this district, is the dry bed of what was once a great river with many tributaries draining the western versant of the Nubian Alps. Nowadays it rarely has even a pool of standing water, though about once in seven years or so a cloud-burst over the Nubian Alps sends down a flood towards the Nile which sweeps away men and beasts. The people who live about Dareheib and elsewhere in this Nubian Desert are scarcely Arabs so much as people akin to the Hamitic race of North-East Africa, represented by the modern Bisharin, etc. The dialects of the more northern of these descendants of the Blemmyes are much corrupted with Arabic, but the general type of language is Hamitic, and, curiously enough, bears a slight resemblance in its suffixes to Hottentot, a fact already noticed by Lepsius a good many years ago. Many of the place and tribal names in this eastern desert of Egypt finish with the suffix -ab, or -b (Dareheib, Amerab —the Beni Amer tribe—Melikab, Hamdab, etc.). A similar masculine suffix exists in Hottentot.

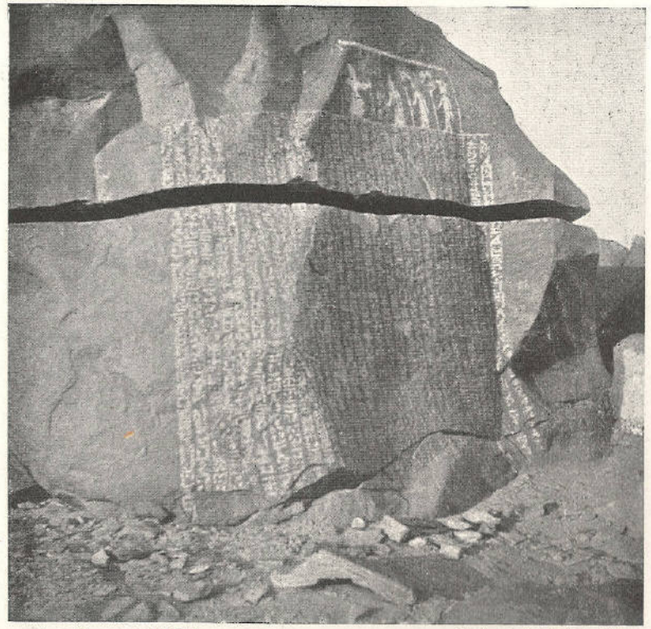
In the Oasis of Siwah.—It has been mentioned once or twice how the "white" element in the Ancient Egyptians was probably due in the main to the colonization or invasion of Egypt by the Berber or Libyan tribes of North Africa. "Libyan," perhaps, is the most convenient term to describe this remarkable type of white man which in the countries north of the Mediterranean is known as Iberian. The Libyan, or Berber race, has been the dominant type in Mauretania for

thousands of years, but it has been suggested that this race originally dwelt in Syria, crossed the Nile Valley (sending colonies as far south as Abyssinia) and thenceforth colonized the whole rest of Northern Africa, including much of the Sahara Desert. The Libyans speak a form of language (extending even at the present day from the oasis of Siwah, in the western part of Egypt, to the Atlantic Coast of Morocco, and to the Upper Niger at Timbuktu) which is fundamentally related not only to the Ancient Egyptian, but to the Hamitic speech of the Galas, Ethiopians, and Somali, and even to the Semitic language family of Syria, Mesopotamia and Arabia. The ancestors of the Egyptians who founded the monarchy and the civilization of the Pharaohs seem to have been Hamites allied to the Gala and Somali who entered the lowlands of Abyssinia from Arabia and thence made their way to the valley of the Nile. Here they mingled with the preceding Libyans, and also, later on, with the Nubians and negroes. For many centuries the Pharaohs of Egypt, however, warred with the Libyans of the west, who occasionally predominated in Egyptian affairs.

At some ancient period these Libyans, or Berbers, developed a remarkable architecture in sun-dried mud with a wooden framework. Their use of stone never reached the science of the Egyptians and was seldom more than the piling up of unhewn stones without mortar. But with stones, mud and sticks they have from time immemorial built themselves vast castles throughout the oases of North Africa, castles which are not only intended for refuge and defence, but mainly for the storage of grain.

The Statue of Ramses II.—On the site of Memphis and near the old Step Pyramid of Saqqara, already referred to, there lies prone a gigantic statue of Ramses II.—Ramses the Great—of whom a description has already been given in this work in connection with the Temple of Karnak. This colossal statue near Saqqara was originally nearly forty-five feet high, and probably stood erect at the entrance to the long-since-destroyed temple of Ptah (the Vulcan of Egyptian theology). The statue is carved out of white chert (limestone), and is considered one of the finest specimens of Egyptian art.

During the centuries of Muhammadan rule in Egypt, this noble symbol of Egyptian sovereignty has lost the greater part of its legs, which have been broken off by Turks and Egyptians to burn for lime. Muhammad Ali, or a succeeding Pasha of Egypt, is said to have presented this colossus to the British nation; but if so, no attempt was ever made to remove it to the British Museum. And if



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DAREHEIB.

Ancient Egyptian inscriptions on the natural cliff face at Dareheib, near the Nubian Alps, testifying to the working of the mines in this neighbourhood by the Pharaohs.

the story be true, it is most improbable that the British nation would now perpetrate such a breach of good taste as to take the statue away from its native land. But what we might do as a graceful act towards the New Egypt which is rising up under our guidance is to find the money to set this statue on its (restored) feet, and replace it on the site of the vanished temple of the god Ptah—the patron of engineers and artisans, the deification of the Metal Age. This would be a respectful tribute on our part to the genius of Ancient Egypt once the Light of the World.

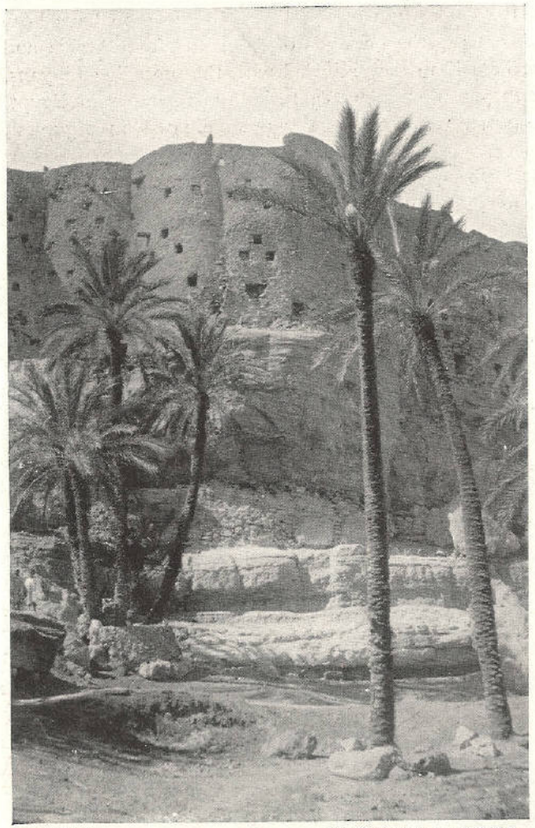


Photo by [*Sir Harry Johnston, G.C.M.G.*

THE OASIS OF SIWAH.

A Libyan village on the confines of Egypt (Oasis of Siwah). These great clay castles are found right across North Africa from the confines of the Libyan Desert to Morocco. In Siwah was the great temple of Jupiter-Ammon visited by Alexander the Great.

The Obelisk at Heliopolis.—Amongst the capitals of Ancient Egypt was the city of On, or An, named by the Greeks Heliopolis, and situated four or five miles to the north-east of modern Cairo. As its Greek name indicates, it was the City of the Sun, and possessed a great Sun-temple which was really a university of learning, a Greenwich Observatory, and a cathedral in one. Here the mysteries of astronomy were patiently studied, and hither after the fifth century B.C. came Greek philosophers to steep themselves in the lore of the Egyptians. All that remains of Heliopolis to-day is a single obelisk of red granite about seventy feet high, which in a simply written inscription bears the name of Usertsen (or Senusert) I., a Pharaoh of the Twelfth Dynasty.

Sandstorms near Khartum.—One of the most terrible marvels of Nature to those in its proximity is the *simoom*, or dust-storm of the desert. This is especially characteristic of the Sahara, Libyan, Nubian, and Central Arabian deserts; but the same phenomenon is met with in the desert regions of Australia, of Mongolia, and of North America. Usually before the rain comes, in most of the hot regions of the world there blows a hurricane of terrible force, and where this occurs in or near a desert, over a surface of sand or friable soil, the wind gathers up this dust into clouds several thousand feet in height and sweeps it over the sky, blotting out the sun or stars, and covering everything on the ground with a varying amount of dust or sand, sometimes to the extent of burying caravans of men and camels, towns and plantations, and even civilized states, such as occurred some fifteen hundred years ago in Turkestan and Mongolia. The only recourse of those who see such a sandstorm advancing on them is to turn their backs to it, squat down and bow their heads, sheltering the face as much as possible with the arms. Sometimes the sandstorm assumes the form of one or more vast pillars of whirling, revolving sand, called *zobaa* in the Egyptian Sudan, and believed by the Arabs to be "jinn"—genii, devils—moving rapidly on an errand of destruction.

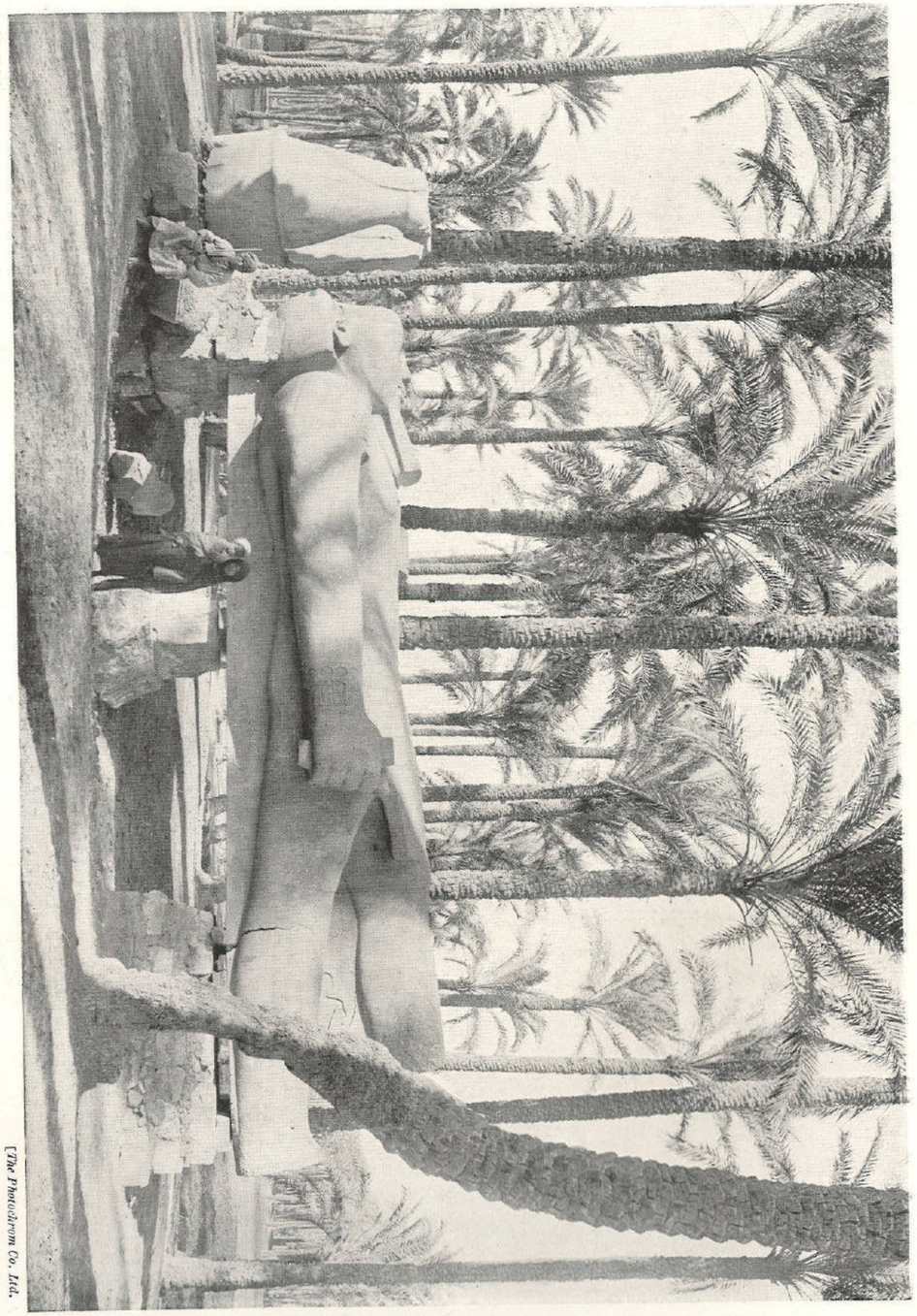


Photo by [*The Photochrom Co. Ltd.*

STATUE OF RAMSES II.

This prone statue lies at Saqqara-Memphis on the west side of the Nile and south of the Giza Pyramids, about fourteen miles from Cairo. It is said to be the property of the British Nation.



Photo by [*The Photochrom Co. Ltd.*

THE OBELISK, HELIOPOLIS.

This monument is the only relic of the ancient city of Heliopolis, which was situated about five miles north east of Cairo. It is of red granite, seventy feet high, and is supposed to have been erected by Usertsen I. of the Twelfth Dynasty

The Hot Springs of Brandvlei, near Worcester, South Africa.—After so much of the dust, bare rock and mystery of Egypt, it is a relief to the mind to turn to a cool, well-forested, sheltered land, which in some respects is quite a new country, with little about it in the way of ancient history—so far as written records are concerned. If this be the definition of history, South Africa—more especially Cape Colony—must be regarded as a relatively new country; for its entry into relations with civilized man begins with the reaching of the Cape of Good Hope by the Portuguese navigator, Bartolomeu Diaz, in 1486 (though there is now some evidence to show that the Phœnicians, at the behest of Neku, a Pharaoh of the Twenty-sixth Dynasty, sailed round the southern extremity of Africa and back to the Mediterranean about 600 B.C.).

The south-westernmost portion of Cape Colony, as mentioned earlier in this work, is a region with a climate, a rainfall, and a flora peculiar to itself. The almost parallel mountain ranges push themselves in a triangle of earth-wrinkles close up to Capetown, where they terminate in Table Mountain. When the Government of Cape Colony first sought to reach the far interior by means of railways, the traversing of these coast ranges was a matter of considerable engineering difficulty. But by a series of zigzags the main line to the north is carried over the Olifants Mountains and makes an important junction at Worcester with the much more recently constructed line which passes thence to Mossel Bay, Port Elizabeth, etc. The town of Worcester has a population of about eight thousand, and is situated in a fertile, well-wooded district where a great deal of vine cultivation is carried on at the present day.

The country round about Worcester is particularly well wooded (for South Africa), and is abundantly watered by numerous streams descending from the mountains. A feature of considerable interest and possible utility in the neighbourhood is the hot-water springs of

Brandvlei, about ten miles from Worcester, near the Breede River. This steaming hot water, which comes up from the earth in a boiling condition, encourages a very luxuriant vegetation of almost tropical African character in the vicinity of the pool, and in the late autumn (the Cape spring) thousands of white arum lilies shine out amongst the undergrowth. It will be observed that the branches overhanging the water are hung with the pendulous nests of weaver-birds, the brilliantly coloured, scarlet or orange-and-black tenants of which add to the charm of the scene, together with the flowers and the richly foliaged trees. The water, however, is too hot to bathe in, *in situ*, and dogs who plunge in heedlessly are scalded and killed.

An Anthill, Ikoko, Congoland.—Amongst the oldest of existing insect types, so far as the zoological record goes, is the Termite or "White Ant." It is not an ant at all, but an insect of much older type, and more related in grouping to the cockroaches, grasshoppers, etc. But in the course of ages it has, like the far-more-recently-evolved bees and ants, developed a social condition

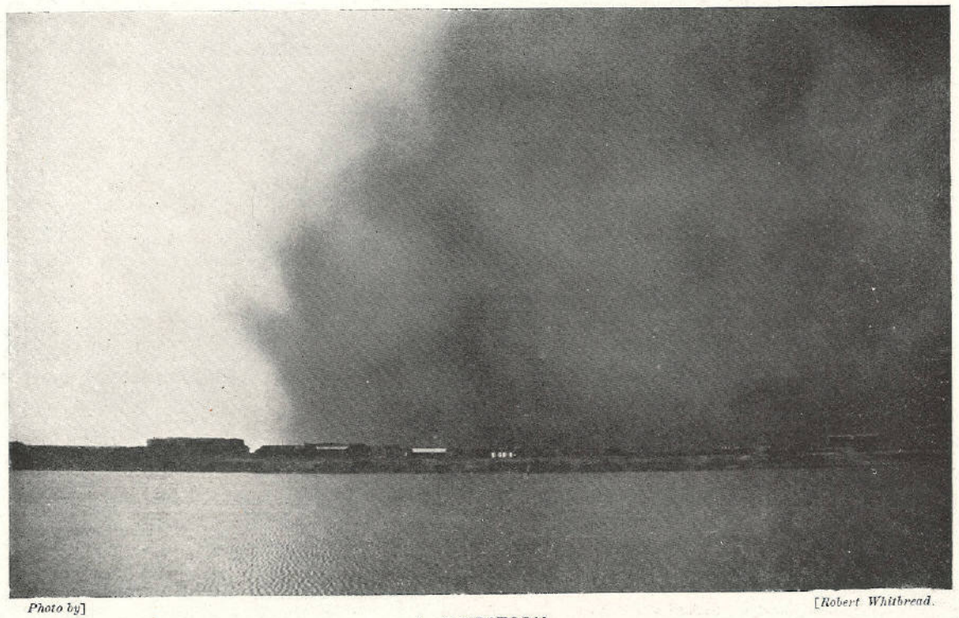


Photo by [*Robert Whitbread.*

A SANDSTORM.

An instantaneous photograph of an approaching sandstorm near Kartum, Egyptian Sudan.

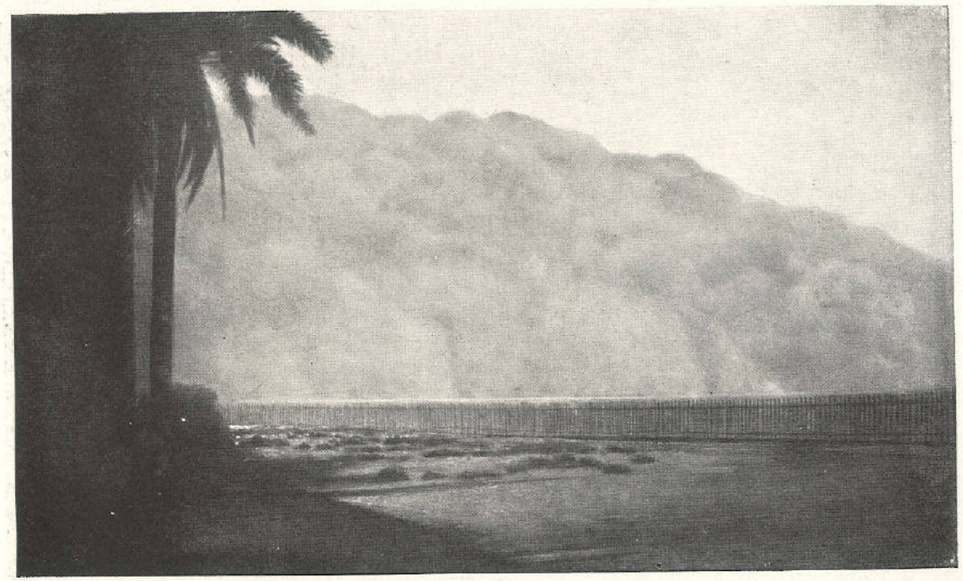
of life bearing a considerable superficial resemblance to the organization of those ants and bees that live in colonies.

Termites are found at the present day nearly all over the warmer regions of the world, from the countries bordering the Mediterranean Basin to South Africa, Australia and South America. In earlier periods before the Glacial ages set in at the close of the Tertiary epoch, termites were probably found in Great Britain. Their existence in tropical countries at the present day attracts the attention of the unlearned and incurious by the relatively immense dwelling-places which they construct, usually out of clay and masticated wood. Perhaps in no part of the world are these "ant-hills" more noteworthy as features of the scenery than in Tropical Africa. They reach their climax of fantastic development in the drier part of Eastern Equatorial Africa between Galaland and British East Africa. Here—for example, in the regions round Lake Baringo—they may rise to an altitude of nearly thirty feet, but are remarkably attenuated, like huge fingers pointing skyward.

In Senegambia and the regions of the Upper Niger they have many spires, but form a block as large as a small house, and often resemble a model of some fantastic cathedral. The illustration here given shows an ant-hill of moderate size in the central Congo region, within which the termites have enclosed palm-fronds.

These insects live ordinarily on dead wood, or vegetable substances, such as paper or matting. They have a great dislike to a bright light and to the heat of the sun. Consequently, they work away from their homes chiefly at night time and cover their path as they go by an arched film of clay. This they build as they go along towards the object they wish to devour, and then pass to and fro under the clay roofing. It is a common sight in Tropical Africa to see the trunk of a tree marked with these meandering lines of red clay, which, it will be seen, are directed towards some portion of the tree that is dead wood.

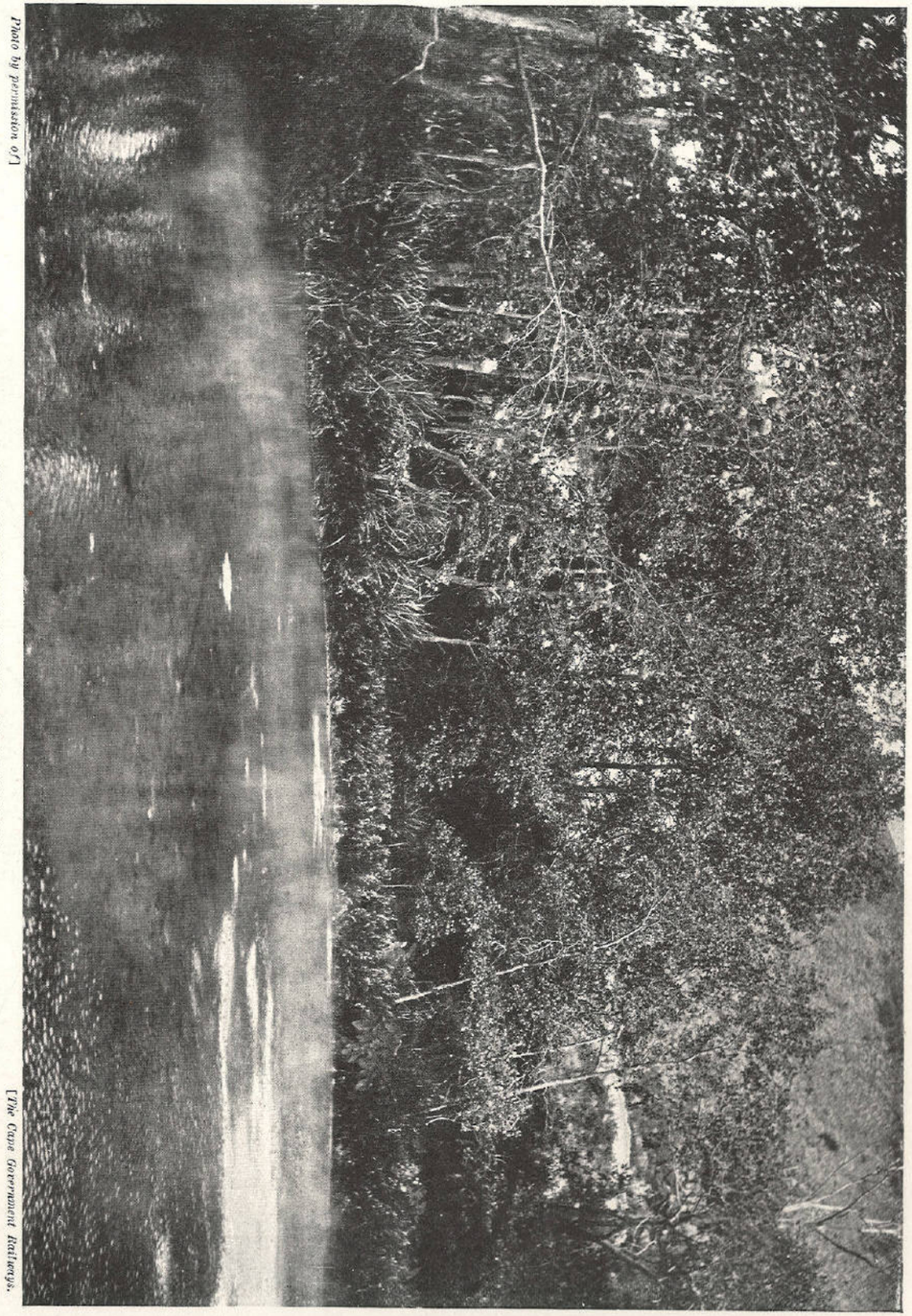
"White ants" have an elaborate social organization. The males and the perfect female develop



A SANDSTORM.

Another view of the approach of one of these storms of the desert that leave in their wake nothing but an arid waste

wings, but the workers and soldiers—undeveloped females—have no wings. At seasons of the year, generally connected with the falling of rain after a drought, the winged males and the winged female issue from the ant-hills to fly about in the sunshine and to fall a victim to innumerable enemies—including man; for termites, like locusts, are esteemed a very great delicacy—equivalent to a sweetmeat—amongst nearly all negro tribes. [In negro "fairy" stories they take the place of sweetmeats!] Soon after their issuing out into the world, however, the great object of these winged insects is to get rid of their wings, for what purpose it is not very clear. The wings are not strongly attached to the body and are easily removed by the use of the creature's legs. Many an African housewife is exasperated after a rainstorm to find these wings strewn all over such open portions of her house as the flying ants have been able to reach. Each community only rears one perfect female at a time, an insect with a very long body. As soon as she is impregnated, the queen termite is built up in a cell, and her abdomen grows to enormous proportions on account of the immense number of eggs it contains. The neuters, or undeveloped females, consist of the humble worker



THE HOT-WATER SPRINGS OF BRANDVLEI

The springs that well up amidst luxuriant vegetation are situated near the Breede River, about ten miles from Worcester.

[Photo by permission of] [The Cape Government Railways.

and the ferocious soldier. This last is armed with a large pair of forceps at the end of his huge head, and can inflict (in the larger species) a very disagreeable bite.

But apparently white ants can live on amicable terms with other creatures, such as snakes and earthworms. A termite hill is constantly used by snakes as their place of refuge, where they lay and hatch their eggs. But there are also blind, snake-like lizards and amphibians which frequent these great mounds, or live in them, and which undoubtedly feed on the termites, being, however, impervious to the attacks of the soldiers owing to their armoured skin. Not only, however, do white ants serve as the food for many birds, but they have positively called into existence special types of ant-eating mammals, such as the egg-laying Echidna of New Guinea and Australia, the great and small toothless ant-eaters of South America, the armoured Manises or Pangolins of Tropical Africa and Southern Asia, and the Aard Vark (Earth Hog, *Orycteropus*), restricted at the present day to Tropical Africa, but once a native of Greece and Asia Minor.

The Sixty-five-feet-high Portrait Statues of Ramses II. at Abu Simbel.—The great Temple of Abu Simbel is situated on the west bank of the Nile in Lower Nubia, about forty miles north of Wadi Halfa, at a place where a great mass of sandstone rock comes down abruptly to the water-side. It is thought that at one time there may have been a slight rapid, or obstruction of Nile navigation, at this point, which drew attention on the part of travellers to these bold and smooth rock surfaces, offering an irresistible temptation, as in many other parts of Egypt, for writing purposes. Having once mastered the principle of conveying ideas by pictures and signs, the ancient Egyptians seem to have found as great a pleasure in scratching, cutting, or scribbling names and announcements on smooth surfaces of rock (and no doubt tree-trunks) as any later Cockney tripper or globe-trotter. The halting at this spot on the Nubian Nile provoked the erection of shrines and of temples, and finally the great Ramses II. erected a splendid temple at what was then probably called Abshek, and finished it about the year 1359 B.C.



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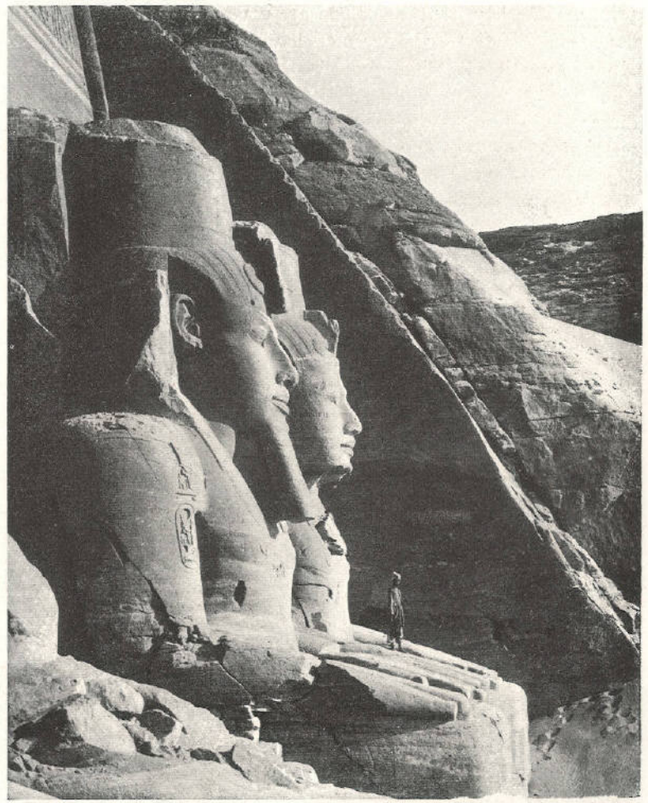
AN ANT-HILL AT IKOKO, CENTRAL BASIN OF THE CONGO

This strange erection of red clay is the work of the Termite insect (erroneously called "White Ant").

The earlier temples had (it is thought) been dedicated to the cow-goddess Hathor, who was the presiding deity of the neighbourhood. But the great temple built by Ramses II. was ascribed

to "The Sun on the Horizon"—"Har-em-akhu" (the Greek "Harmachis"). A statue of this hawk-headed deity stands above the entrance to the temple, and regarding it Mr. Arthur Weigall writes:—"At early morning the sun's rays strike full upon it, so that the figure appears to be stepping forward to greet the sunrise. Along the cornice of the entrance a row of baboons has been sculptured seated in attitudes of worship, as in the belief of the Egyptians these baboons always greeted the uprising of the sun with loud cries. As the temple faces towards the east it is only at sunrise that the light penetrates into the sanctuary: thus the whole temple is designed for the one hour of sunrise."

Mr. Weigall justly remarks that although one may have wearied of the word-painting of the literary traveller in Egypt, one may in this instance adopt his enthusiastic language and describe the hour of sunrise here as one of profound and stirring grandeur.



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THE TEMPLE OF ABU SIMBEL, NUBIA.

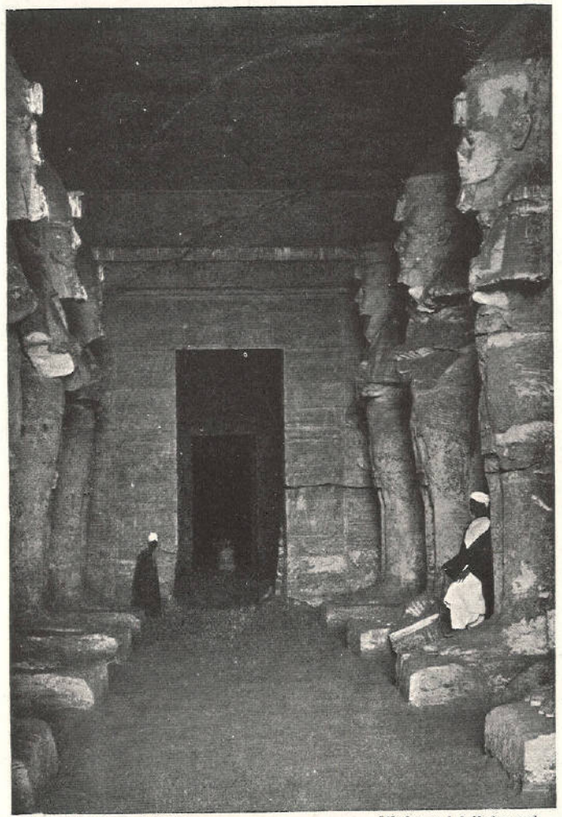
The sixty-five-feet-high portrait statues of Ramses II. before the rock-hewn Temple of Abu Simbel, Nubia. The Pharaoh is sitting in the ceremonious posture demanded of the divine ruler of the two Egypts, with hands reposing on his knees. He wears the tall double crown symbolic of his double realm of Upper and Lower Egypt.

Mr. John Ward (*Pyramids and Progress*) gives an excellent description of the effect of the rising sun in lighting up the interior of this vast rock temple:—"Early in the morning we were awakened to see the interior of the temple illumined by the rays of the rising sun. We penetrated in almost total darkness two hundred feet within the temple to the holy of holies. Suddenly the whole darkness fled. The brilliant rays of the rising sun burst through the wide portal. For a few minutes the whole interior was lit up; the avenue of statues on each side became visible, the roof and lintel disclosed their painted decorations. Ramses in his chariot, with his tame lion underneath it, galloping in fierce charge against the hated Hittites, and on the opposite side the same tyrant crushing the dark sons of Kush. Then as we wondered at the sudden revelation of the mysteries of the dark interior, the sun rose higher, and we were once more in darkness."

The main feature of the great temple, however, is the four colossal seated figures hewn out of the rock. One of these colossi has lost its head and torso, but the others remain singularly unmarred by time or the malice of man, and display faces of real beauty which have been sculptured (on an enormous scale) with remarkable skill. In between each colossus there is a smaller female figure, and between the legs of the colossi a still smaller representation of a male or female, princess or

prince. The legs of these colossi are covered with inscriptions, several of which are in Greek and date from the sixth century B.C., having been written by Greek mercenary soldiers in the pay of King Psametik II. There are also inscriptions in the Phœnician language.

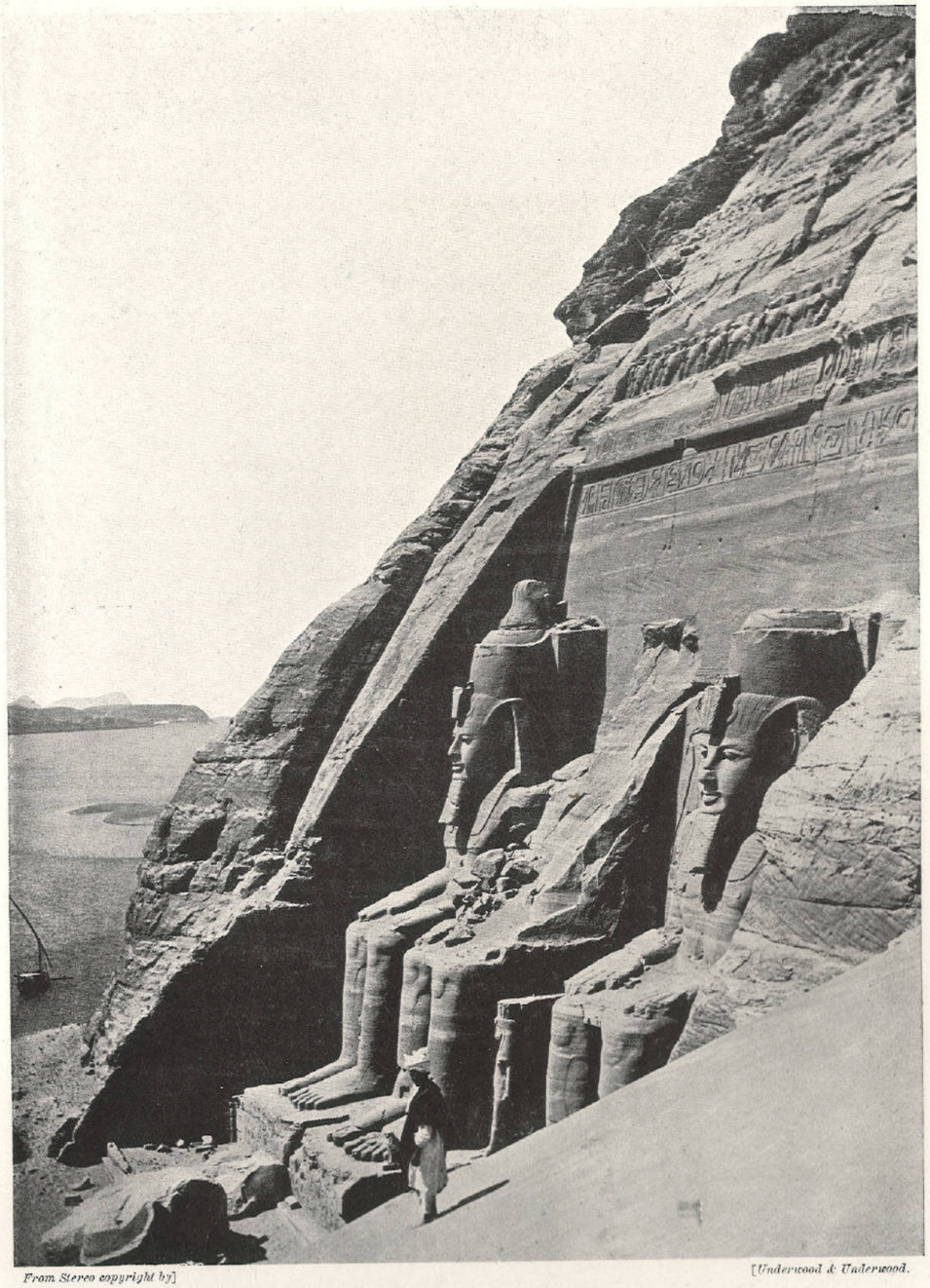
Diamonds and Diamond Mining.—The Egyptians were at one time believed to have found diamonds in the mountains of Eastern Nubia, and to have used them to point their drills and the teeth of their saws. But it is now practically certain that for these purposes they employed flint, corundum, emery powder and obsidian. Nevertheless, the antiquity of the diamond is considerable, and European knowledge of it goes back to Roman writers at the very beginning of the Christian era. Many centuries before it had been valued in India as a jewel and a substance harder than any other. But it was also believed that the wearing of diamonds was a remedy against insanity and a neutralizer of poison. As early as two thousand years ago the diamond was being employed in Western Asia and Greece as a point for gem engraving, but the "diamond" mentioned in Exodus as one of the stones in the breast-plate of the High Priest is, states Dr. H. A. Miers, a mistranslation of the word *yahalom*. The diamond no longer holds the monopoly for hardness, the maximum rating of 10. It has a rival in a black mineral, tantalum, which belongs to the same group of substances in vanadium, arsenic, and bismuth. Diamonds were first discovered by intelligent human beings in the great Dekkan prolongation of India—a part of the old Gondwana land which once was united with Tropical Africa, Brazil and Australia. The diamonds of Golconda, however, have almost ceased to be, except, of course, in the splendid collections of jewels belonging to the Indian princes and the regalia of European monarchs. The next region to Central India for the discovery and working of diamonds was Brazil in the eighteenth and nineteenth centuries, and Brazilian diamonds are probably the finest in the world. Diamonds, again, were discovered north of Brazil in British Guiana some twenty years or more ago. Next in its turn amongst Nature's surprises came South Africa, which has produced more diamonds than any other part of the world. Subsequently, and quite recently, diamonds of a Brazilian character have been discovered in Liberia (West Africa). They have also been found in Borneo and Australia, so that this crystallization of carbon seems



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THE TEMPLE OF ABU SIMBEL

Interior of the rock-hewn Temple of Abu Simbel, showing the Holy of Holies with the statues of the gods in the rear. The statue pillars represent Ramses II. in the form of Osiris, and the features of the King may be recognized, especially in the next to the last on the right.



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THE TEMPLE OF ABU SIMBEL

The eastern facade of the great Temple of Abu Simbel, Nubia, built in the reign of Ramses II., showing three of the four great colossi at the entrance, and a portion of the row of sculptured baboons in the frieze at the top. These dog-headed monkeys were especially connected with sun worship, and hence we find them here facing the rising sun with fore-paws raised in adoration



Photo by] *[N. P. Edwards.*

IN A DIAMOND MINE, KIMBERLEY.

A tunnel at a thousand feet below the level of the surface in the great mine of Kimberley, South Africa, which belongs to the De Beers Company.

to be remarkably characteristic of the now broken-up continent of Gondwana, which extended over the equatorial and southern tropics from Australia, past India, Ceylon, Madagascar and Africa, to Brazil. It is true that there was also, seemingly, a centre of diamond manufacture in the northern regions of the world—circumpolar, one might almost say: and that small diamonds have been found in Siberia, Russia, Lapland and North America.

The diamond mining at Kimberley, which began with mere hand-digging amongst the pipes of blue clay in that desolate region, soon descended far into the bowels of the earth into what are probably ancient craters of volcanoes filled up with this "blue ground." Some of these tunnels reach to a depth of a thousand feet below the surface. They are well lit by electricity, and the general conditions of work in the Kimberley mines for both white and black are on a high level of comfort and sanitation.

Strange Peaks in the Drakensberg Mountains.—Allusion has been already made once or twice to the assistance which the ancient Egyptians derived (in their carvings of the natural rock into sphinxes and Pharaohs) from the accidental resemblance to human features found not infrequently in these promontories. In the Drakensberg Mountains of South Africa (wherein the highest altitudes of South Africa, over eleven thousand feet, are reached) there are fantastic crags and columns of weather-moulded rock which from certain points of view bear resemblances more or less striking to the heads of beasts or men. Here and there is one like a lion. In the illustration given, there is supposed to be a remarkable resemblance to the late Paul Kruger in the topmost crag of all. There is certainly a well-marked human face, with deep-set eyes, a long nose and a beard, but the present writer cannot agree that the likeness to the late Paul Kruger is particularly striking. If it had been discovered a little later in history it would probably have been called Cecil Rhodes.

The Drakensberg Mountains (Kwathlamba of the Basuto and Kafir) are of igneous origin and date from the remote Permian age. They rise from out of a sandstone formation of somewhat later date (Jurassic), and form the boundary (more or less) between Basutoland, Natal, and the South-West Transvaal, but are mostly associated with the country of the Basuto. This African Switzerland is of itself a wonderland in South Africa. It has a mean elevation of about six thousand feet, and in area is a little smaller than Belgium. In every direction may be seen luxuriant valleys through which rivers thread their silvery courses, frequently plunging over chasms in magnificent cascades, one of which—Maletsunyane—is over six hundred feet in an unbroken leap. Above these fertile valleys, prairies, and ravines, rich in tree-ferns, rise the mountains, tier above tier, till the eye rests at last on the almost-eternal snows of the highest crests. The Alpine flora is very beautiful and is related to that of Table Mountain; but a good deal of the once-abundant forest has disappeared during the last fifty years before the ravages of the natives' bush fires. Similarly the wild animals have been nearly all destroyed by the Basuto since guns became common amongst them.

But the present race of vigorous Bantu people was not the original inhabitants of the Drakensberg. This mountain region sheltered for ages in its caves and kloofs the little yellow Bushmen, whose paintings of wild animals on the walls of rock shelters and caverns testify mutely to their former presence in the land. The Basuto formerly dwelt in the more open, less mountainous plateau country to the north (Orange Free State). From this they were driven out by the raiding Zulu under Umsilikazi in the early nineteenth century. The Trek Boers came on the heels of Umsilikazi's bands and saved the remnant of the Basuto clans from destruction. The Basuto exterminated what remained of the Bushmen and took possession of their mountain home, realizing its wonderful defensive possibilities, not only against the Kafir-Zulu, but against the white man: for the wily chief of the Basuto—Moshesh—soon realized that the white man in the form of Boer or Briton might in time come to envy the mountain land he had assigned unwillingly to Basuto settlement. First the Boers, then the British, and later the Cape Colonials, attempted, indeed, during the fifties, sixties, and eighties of the last century, to subjugate the Basuto and dominate their country. But the sturdy resistance they met with induced them to desist. In a way the whole allotment of South Africa between the black race and the white has been mismanaged. The

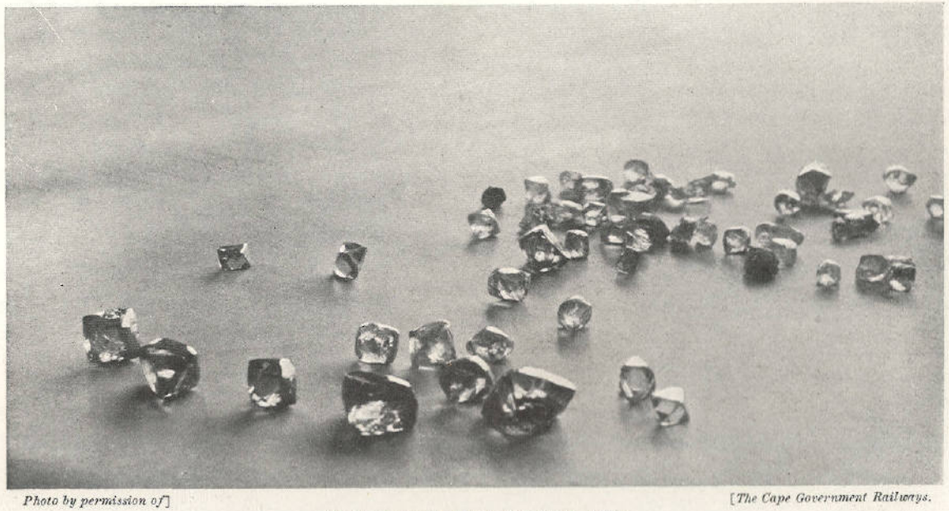


Photo by permission of] *[The Cape Government Railways.*

Rough diamonds, Kimberley, South Africa.

Basuto and similar clans should have been—in the middle of the nineteenth century—assigned sufficient tracks of cultivable and grazing land in the more open country of the Orange Free State and Eastern Cape Colony; and the Drakensberg mountains and much of what is now Basutoland should have been constituted into a sort of White citadel in the heart of South Africa: the centre of British Administration and an ideal home for the white race. But although such conceptions as this passed through the minds of far-sighted men like the late Sir George Grey, the home statesmen of the middle nineteenth century disliked the planning and carrying into effect of any far-reaching scheme for the ruling and colonizing of South Africa: anything which might pledge Great Britain to expensive or hazardous military expeditions at a great distance from the sea coast.

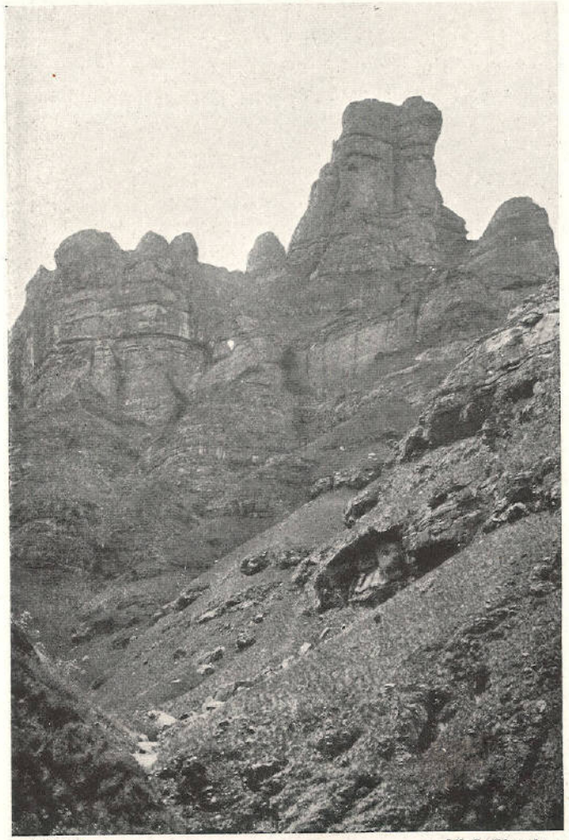


Photo by] [*N. P. Edwards.*

THE DRAKENSBERG MOUNTAINS, SOUTH AFRICA.

Strange peaks in the Drakensberg Mountains on the borders of Natal and the Transvaal. In the middle of the topmost block is seen enshrined a natural caricature of President Paul Kruger's head.

The Zimbabwe Ruins.—The great unsolved mystery of South Africa is the origin of such buildings as those of Zimbabwe and the type of race which executed them. The news of the existence of these remarkable stone forts and pillars, and the gold-mining operations with which they were associated, was first conveyed to Europe by the Portuguese soldier-explorers of the sixteenth century. The Portuguese were conducted to places like Zimbabwe by Arabs from the coast. They found all this interior country of South-East Africa, from the Central Zambezi down to the Limpopo, under the rule, more or less, of a very powerful negro emperor, "Monomotapa," as they called him (a corruption of *Mwene mutapa*, "Lord of the Mine"). But the mining operations carried on by the negroes of that day in their commerce with the Arabs were of a very primitive, surface character, and all these former centres of a great mining industry seem to have been then in a condition of ruin. If they were inhabited, it was in huts of clay and thatch (or thatch alone), stuck about amongst the gaunt evidences of the architectural skill of some vanished race.

The first accounts of these ruins remained buried in little-known Portuguese books, but Zimbabwe and other stone cities of the dead were rediscovered about forty years ago by Karl Mauch, a German explorer of considerable note. Once again, however, the discovery attracted little notice until this region was opened up to civilization by the efforts of Cecil Rhodes and his Chartered Company of South Africa. The Rhodesian pioneers sent back such remarkable stories of Zimbabwe, that the



Photo by permission of] [*The British South Africa Company.*

THE RUINS OF ZIMBABWE.

The outer wall at Zimbabwe, with the "herring-bone" pattern round the top.

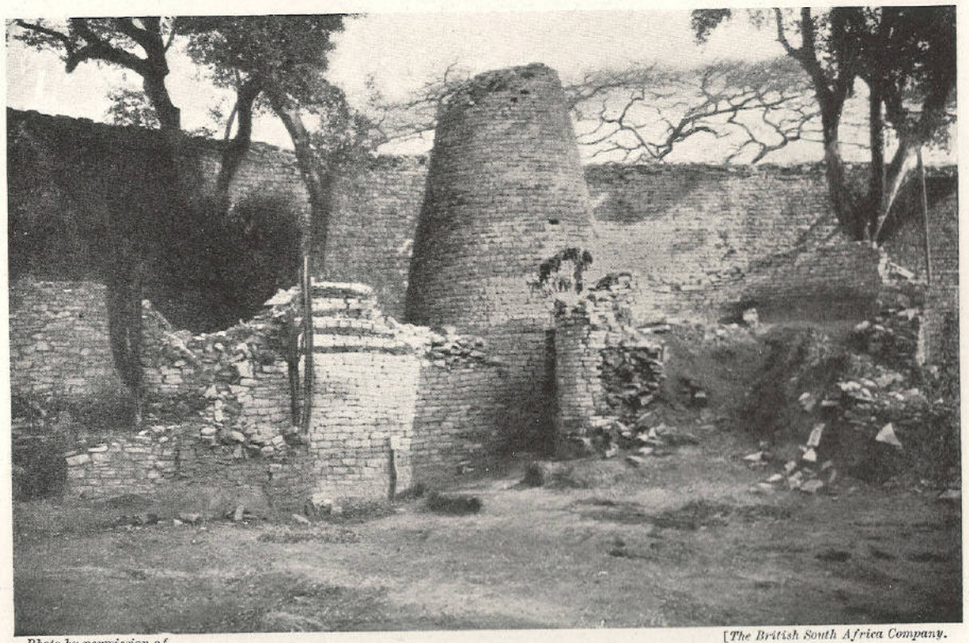


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THE RUINS OF ZIMBABWE

The interior of Zimbabwe (Rhodesia, South-East Africa), showing one of the round towers, like those of Ireland, Sardinia, etc.

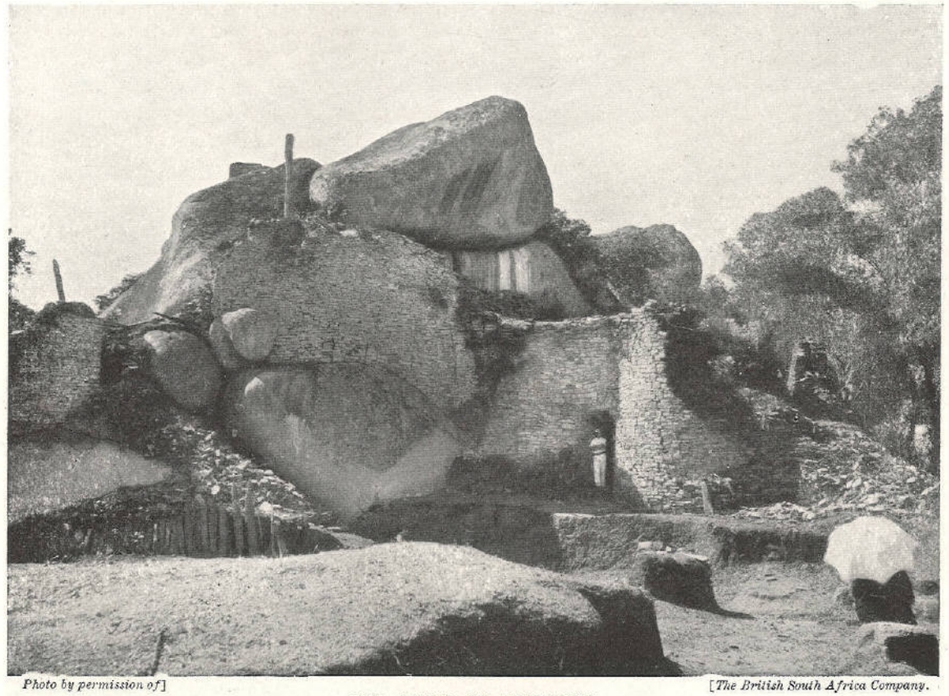


Photo by permission of] *[The British South Africa Company.*

THE RUINS OF ZIMBABWE.

A view of the western temple-platform of the Acropolis of Zimbabwe.

late Mr. Theodore Bent went there with his wife to investigate what seemed to be the relics of a Phœnician civilization. Since his time, the chief work in photographing and describing Zimbabwe and similar places has been done by Mr. R. N. Hall. Besides these lofty walls of carefully adjusted stones surmounted with a handsome herring-bone pattern, there were discovered well-made towers, big monoliths of stone sculptured into the semblance of birds, stone phalli, and many implements for the mining, assaying and weighing of gold. But nowhere was there a single inscription, nowhere was there any engraving or picture on the rocks to assist in deciphering the history of these dead stone cities (which are strewn all over South-East and South-Central Africa between the Limpopo, the Zambezi and the Kalahari Desert). Nor have any human remains been found of any antiquity buried under these ruins, except those of negroes.

Nevertheless, most of the explorers of Zimbabwe, down to about 1905, ascribed the origin of these ruins to some non-negro race, probably Arabians from South-West Arabia, or Phœnicians, or even ancient Egyptians, who had found their way along the coast of South-East Africa, had discovered gold in the streams and set to work to establish a gold-mining industry.* Zimbabwe was, however, examined with close attention by Professor D. McIver in 1905, and, later still, by Professor von Luschan, of Berlin. These and other scientific archæologists have decided that there is at present no evidence whatever that Zimbabwe and similar stone ruins in South Africa owe their origin to any race of immigrants of an earlier date than about 1000 A.D. That is to say, they might have been built by the Arabs who settled along this coast so strongly from the tenth century A.D. onwards. But as there is not the slightest indication that Muhammadan Arabs did build these stone walls

* Theories like these inspired Rider Haggard's novel of "She."

and towers, and carve these stone birds and phalli, the only alternative is to suppose that the stone cities of South Africa were erected by some vanished race of negroes which had attained a civilization higher than anything (not of European origin) yet known in Negroland. The stone birds at Zimbabwe recall the art of Benin, but nowhere throughout the whole of Negroland has any negro tribe thought of using stone for building, except here and there in the north-east or north-west, when influenced by superior races from the North. The mystery of Zimbabwe, therefore, remains completely unsolved. Yet its history must form a very important factor in the past of Africa.

The Tombs of the Mamluks, Cairo.—To the east and to the south of the walls of the citadel of Cairo are some remarkable buildings exceedingly picturesque in appearance and very arresting to the eye of the tourist with their domes and minarets. The group which lies to the north on the spurs of the Mokattam hills is known erroneously as the Tombs of the Caliphs (really the Circassian sultans of Egypt in the fifteenth century). This will be described and illustrated in a later part of this work. The illustration here given is of the Tombs of the Mamluks, which lie to the south of the citadel. These are tomb mosques, that is to say, mosques which have been built for purposes of prayer over the burial-place of some Mamluk notability chiefly of the Burji group.

The word Mamluk in Arabic means a purchased slave or captive, from the root Malaka, "he possessed." The term was applied by the decaying rulers of the great Caliphate on the Euphrates to the Circassian, Turkish, Greek, and Persian slaves whom they acquired in war or by purchase, and whom they trained specially for service in the army. These bold, personable youths became the dauntless cavalry of the Arab monarchs, and they were especially settled in Egypt under their great leader, Saladin, whose full name was An-Nâsr Salâh-ad-din Yusuf, the son of Ayub.* Saladin was the nephew of Nur-ad-din, the Sultan of Damascus. Saladin by his victories over the Crusaders (against whom he was despatched by his uncle the Sultan of Damascus), proclaimed himself

* Reduced to essentials, his name was really "Joseph, the son of Job." The preceding words are only honorific titles. Several of the "Yusuf" or Joseph place-names dotted about Egypt have nothing to do with the legendary patriarch of the Hebrew Scriptures, or the husband of Mary, but are references to the great Saladin

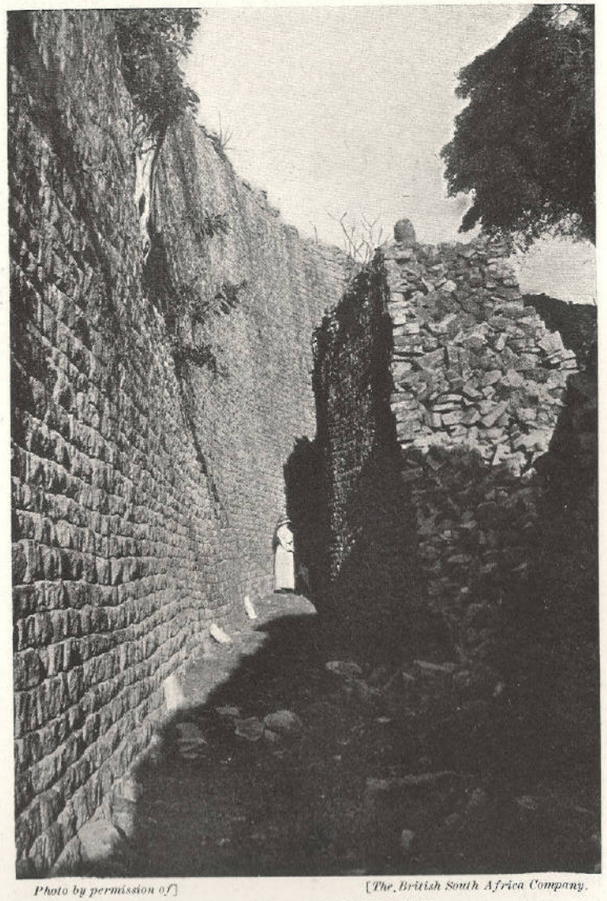


Photo by permission of] *[The British South Africa Company.*

THE RUINS OF ZIMBABWE

The wonderful masonry of the Zimbabwe walls and labyrinths of stone.

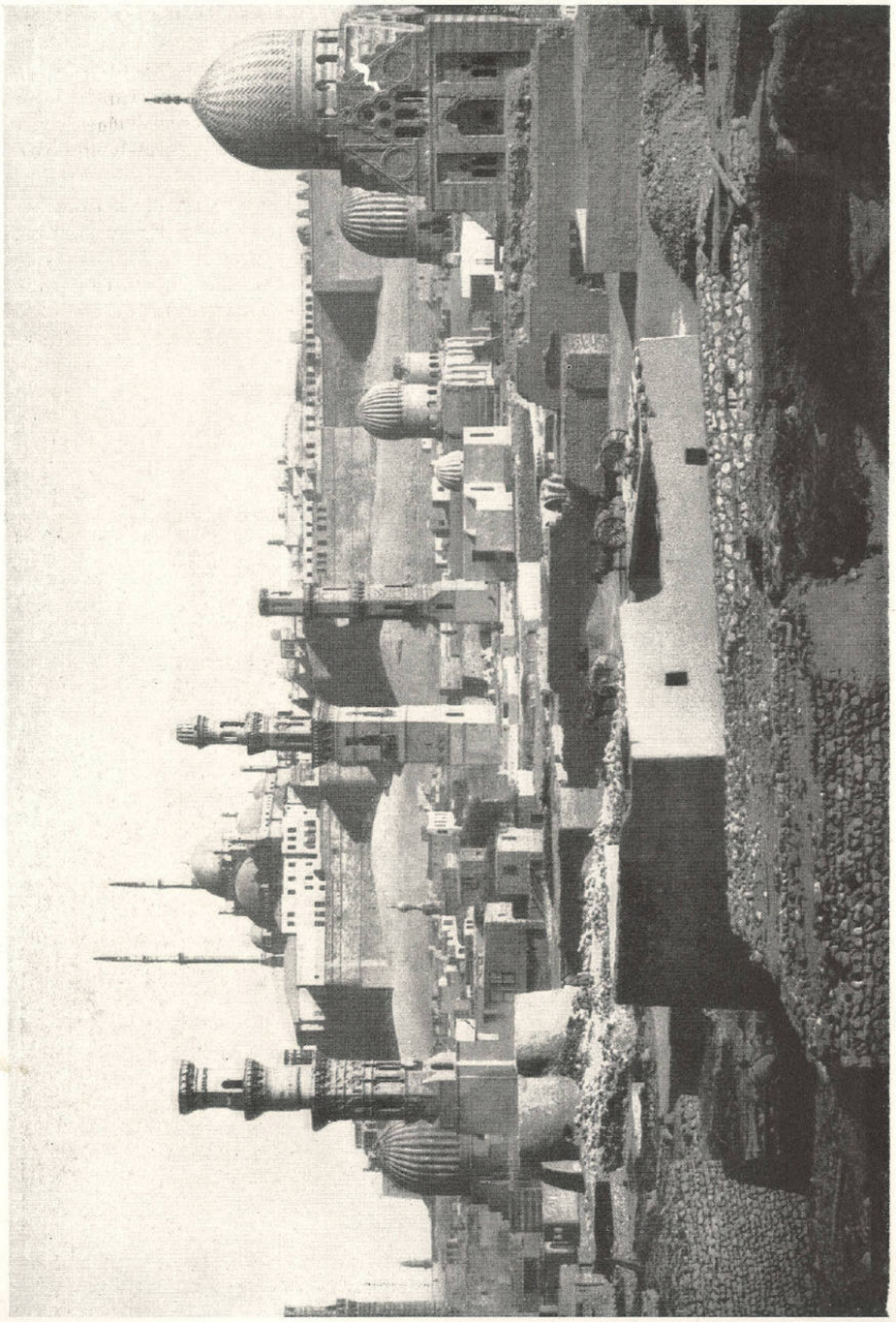


Photo by] [*Photochrom Co. Ltd.*

THE TOMBS OF THE MAMLUKS.

They are really mosques built over the tombs of the notable chiefs of the Mamluks, who were the Prætorian Guards of Egypt.

Sultan of Egypt in 1169. Saladin built the citadel at Cairo (Alburj), which was known by an Arabic version of the latinized German word borg (burg, burgus). From being chiefly located in this citadel, the Turkish and Circassian Mamluks became known as "Burji." They were the Prætorian Guards of Egypt and raised and deposed sultans over that country, not infrequently their own commanders. From 1388 to the Turkish conquest in 1517, these Burji Mamluks (increasingly Circassian in extraction) were the ruling power in Egypt, and their more notable sultans or commanders raised to themselves these magnificent tombs, now such a picturesque adjunct to the eastern side of Cairo. This Mamluk cavalry continued to exist even after the establishment of a Turkish pasha as controller of Egypt, and during the eighteenth century got back nearly all the power and government of the country into the hands of their leaders. They were finally crushed by Napoleon Bonaparte and exterminated by Muhammad Ali in 1811.

The Temples at Medinet Habu, Thebes.—Ancient Thebes probably, as a capital city, bestrode both banks of the Nile and thus dominated both the "lands of Egypt," the West and the East.* But in course of time the portion of the metropolis on the western side of the great river became a city of the dead—the Memnonia of the Greeks—while the living town lay along the east bank, and is represented to-day by Luxor and Karnak. To the southwards of Old Thebes, of the city of the dead, lies the Valley of the Kings, and Medinet Habu, with its three mortuary temples and pavilion. Some of the ruins here date back to Amenhotep I. of the Eighteenth Dynasty (about 1550 B.C.).

These temples are about a mile to the south of the great Colossi of Memnon, which will be later described. They consist of two distinct structures side by side, dating from epochs separated by as much as one thousand years; so that they have not the same angles of construction seemingly. The apparent position of the sun in the heavens having changed somewhat in this interval of time, it became necessary in the later-built temples to arrange the openings at a different angle in

* The phrase, "the lands of Egypt," meaning the countries west and east of the Nile in Upper Egypt, occurs principally in the writings of the XIth and XIIth, XVIIIth and XIXth Dynasties, and must not be confused with the other reference to the double kingdoms of Egypt (with their recognition in the double crown)—Upper and Lower Egypt.



Photo by] [*Photochrom Co. Ltd.*

THE PAVILION OF RAMSES III., THEBES.

The famous Pavilion of Ramses III. at Medinet Habu (Thebes), wherein are depicted scenes of warfare and of harem life typical of the life of an Egyptian monarch in the period of the last Theban Dynasty.

order to admit the sun's rays at the moment of sunrise into the holies of holies on the day appointed for the worship of the sun-god.

The perfect state of the ruins at Medinet Habu is due to a populous Christian settlement having been founded on the site of these temples. The splendid buildings were used for Christian rites by small churches or chapels being built inside their courts. Some lingering superstition no doubt prevented any destruction of the ancient buildings and their adornments. Somewhere about the thirteenth century of the present era the Coptic village was succeeded by one of Muhammadan fellahin. Medinet Habu became a populous town and its ramshackle houses rose above the platform of accumulated rubbish which had been a Coptic settlement for six hundred years. By the end



Photo by] [*Bonfils.*

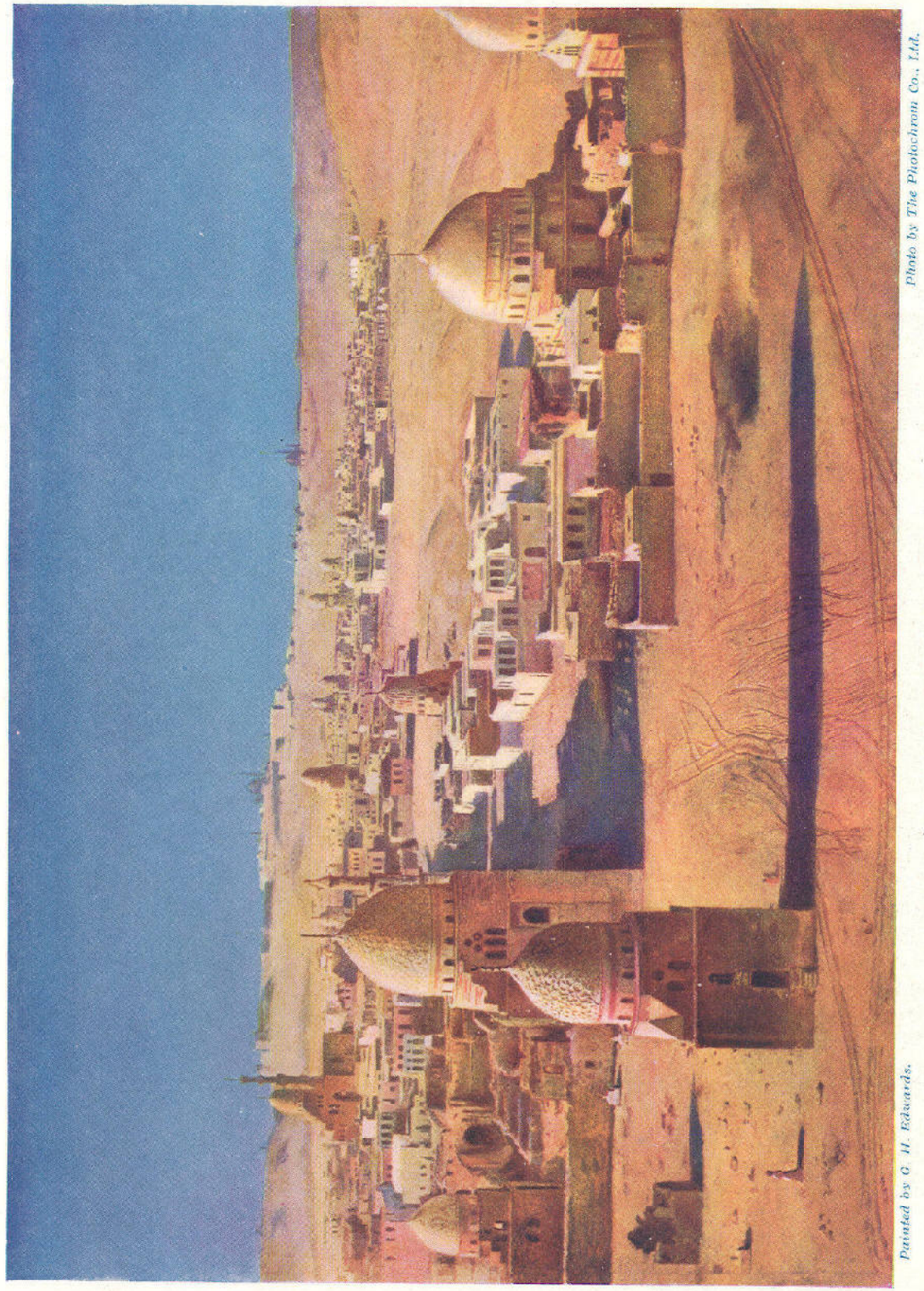
THE GREAT TEMPLE OF RAMSES III., THEBES.

The Hypostyle Hall of the Mortuary Temple built by Ramses III., the last of the "great" Pharaohs of Egypt, who reigned between 1198 and 1167 B.C

of the nineteenth century the Medinet Habu temples were completely buried in rubbish to the depth of one hundred feet. French archæologists, working under the direction or permission of the Egyptian Government, gradually excavated the temples of Hatshopsitu, Seti, Ramses III., and the Ptolemies; for the local government made a friendly arrangement with the townspeople of Medinet Habu to remove to another site provided for them.

The most noteworthy buildings of this group of Thebes ruins are these here illustrated—the Pavilion and the great Mortuary Temple built by Ramses III. of the Twentieth Dynasty, the last of the "great" Pharaohs of Egypt, who reigned between 1198 and 1167 B.C.

The Pavilion has a somewhat Asiatic look, with its crenellated towers, and this is due to the strong Syrian influence then prevailing at the Egyptian court, which affected the architectural style of the later Ramsesides. This Pavilion forms a kind of triumphal entrance to the great Mortuary



Painted by G. H. Edwards. Photo by The Photochrom Co., Ltd.

THE TOMBS OF THE CALIPHS, CAIRO.

These mosque tombs were erected as mausolea by the Burji Mamluk Sultans of Egypt, who arose as a dynasty in 1380; they had really nothing to do with the supreme Caliphs of Islam, nor with the Western Caliphs. Perhaps the most beautiful of all of them is the mosque of Kait Bey.

Temple of Ramses III., which was probably adjacent to the King's Palace, and which lies beyond the first and second courts of the Temples of Amenhotep I. and Tehutimes I. On the walls of the Pavilion are many interesting scenes incised on the stone showing Ramses III. warring against Nubians and Libyans, Hittites, Amorites, Sardinians, Etruscans, Sicilians, and that mysterious people the Philistines. In the great Mortuary Temple, with its first and second courts and its tremendous Hall of Pillars (illustrated in the accompanying photograph), Ramses III. is described as "a plundering lion terrifying the goats," and "a mountain of granite which fell on the Libyans so that their blood was like a flood and their bodies were crushed on the spot." The King, in these battle pictures, is represented as charging into the midst of the Libyans and leaving behind him in his victorious career "sixty miles of butchery." The Libyans are represented with long hair and side locks and abundant beards, very like the Berber peoples of Morocco and Algeria at the present day.

The Mortuary Temple ascribed to Amenhotep and his successor Tehutimes I., in the desert region bordering Thebes, is preceded by a First Court, and by a vestibule and pylons which were erected by the later Ptolemies and the Roman Cæsars. The old Egyptian temple of the Pharaohs of the Eighteenth Dynasty (which ruled over the two Egypts between 1580 and 1350 B.C.), is generally styled the Second Court. Although this temple was completed probably by Tehutimes III., it subsequently fell into ruin, and according to an inscription found on its walls, it was restored and rebuilt under the name of "the Splendid Throne of Amon-ra" by a little-known Pharaoh, Painezem I., who reigned between 1067 and 1026 B.C.



Photo by] [Bonfils.

THE GALLERY OF TEHUTIMES I.

Tehutimes (or Thothmes) I. was the successor, perhaps the son, of Amenhotep I., and a Pharaoh of the XVIIIth or "greatest Theban" dynasty. This second court was begun by Amenhotep I. about 1557 B.C., but was taken over and continued by Tehutimes I. and added to by his successors.

CHAPTER XIV.

By SIR HARRY JOHNSTON, G.C.M.G.

The Barrage of the Nile at the First Cataract.—In describing preceding photographs of the Island of Philæ and its temples, the history of Assouan and of Egyptian settlement at the First Cataract was dealt with in order to explain the subsequent importance of Philæ. Soon after the British occupation of Egypt, a study of the country by competent engineers led to the conclusion that no really great advance could be made in increasing the supply of water for irrigating Upper and Lower Egypt until, and unless, the Nile was dammed at the First Cataract. In spite of the great weir at Assiut and the barrage at Esna, and the celebrated Barrage twelve miles north of Cairo (begun by a French engineer in the middle of the nineteenth century, and finished by British engineers in 1890–1901), the supply of Nile water during the months of May and June was completely exhausted. In those months no water flowed out through the mouths of the Nile into the sea. It was all taken up in irrigating the agricultural regions of Egypt, and, of course, the limit of the water supply meant the limit of cultivation. Given enough water from the Nile—that is to say, from the tremendous rainfall of Central Africa—and the Desert of Egypt (except where the area is bare rock) could be made to blossom as the rose and provide the world with an enormous supply of cotton, wheat, sugar, and other vegetable products. The climate is so genial, the supply of sunshine so continual, that perennial cultivation could be carried on throughout Egypt, if only there were sufficient water in this rainless land. Other considerations in selecting the site for a dam higher up than Assiut had to be taken into account, namely, that during the times of highest flood the Nile water is so charged with alluvial matter that if, in this late summer and early autumn season of the year, the flooded Nile were banked up, it would soon deposit enough mud at the bottom of the reservoir to fill this vast receptacle in the course of a few years. It was necessary, therefore, to select some such site as the head of the First Cataract, where the Nile is well above

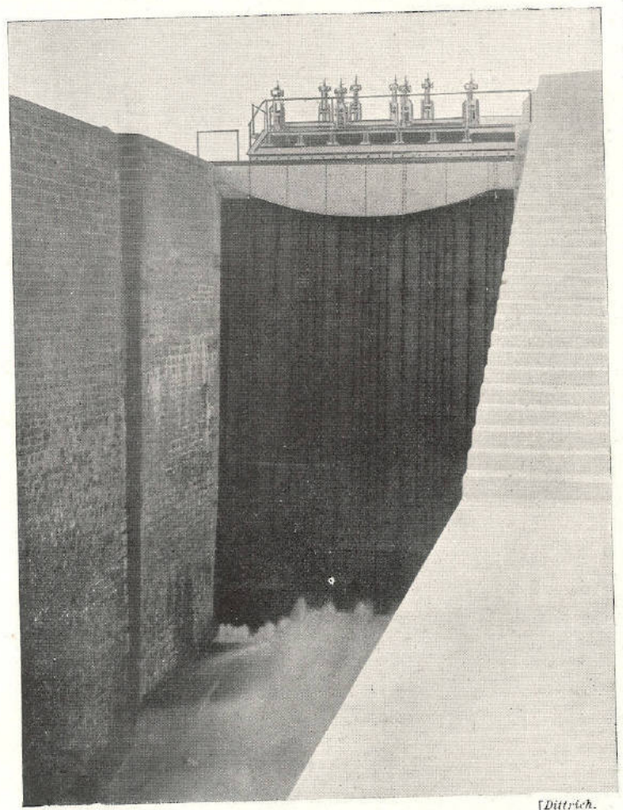


Photo by] [*Dittrich.*

A LOCK IN THE GREAT DAM AT ASSOUAN.

This is one of the upper row of locks or sluices, of which there are forty in all, each seventy-five feet square.

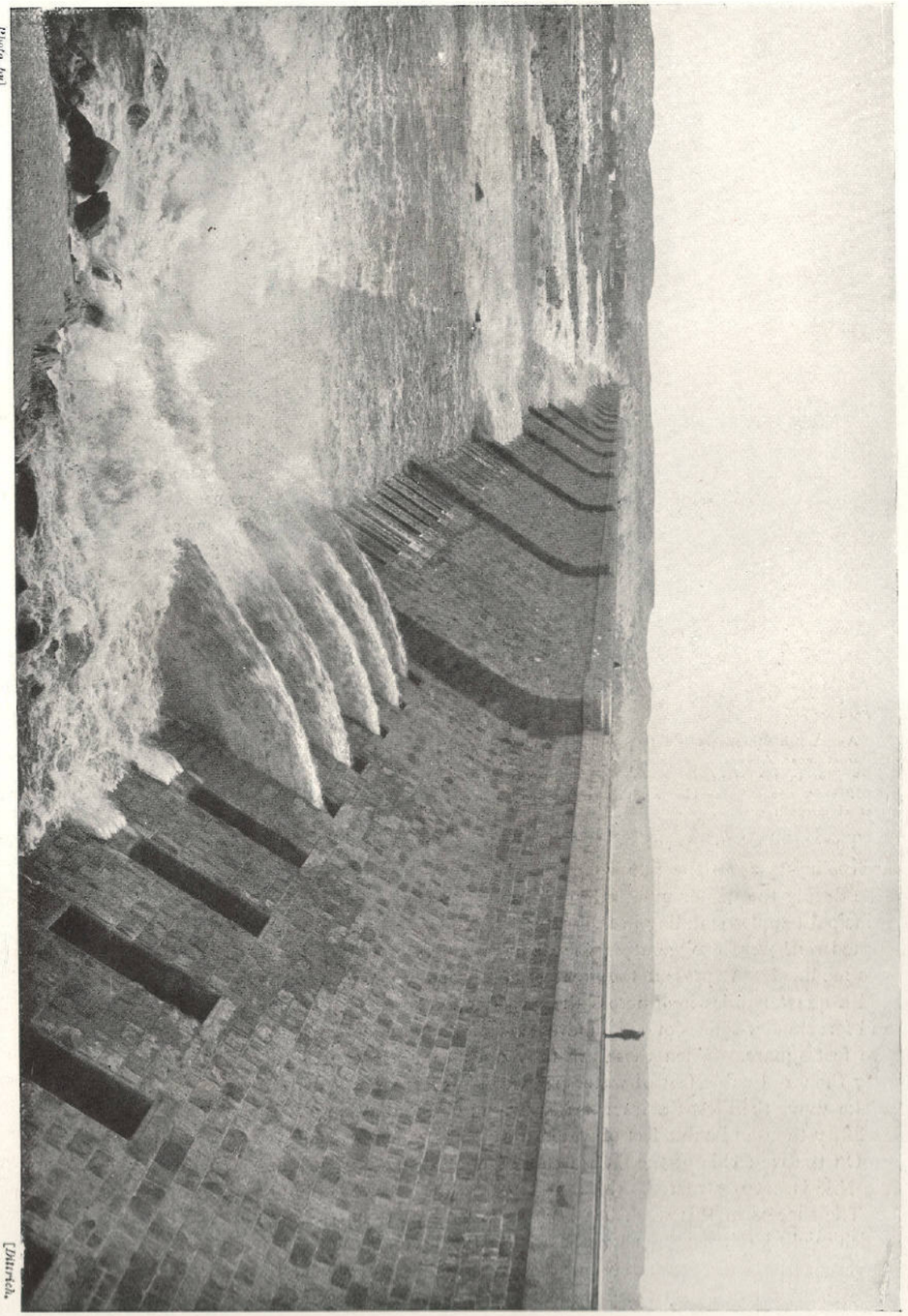
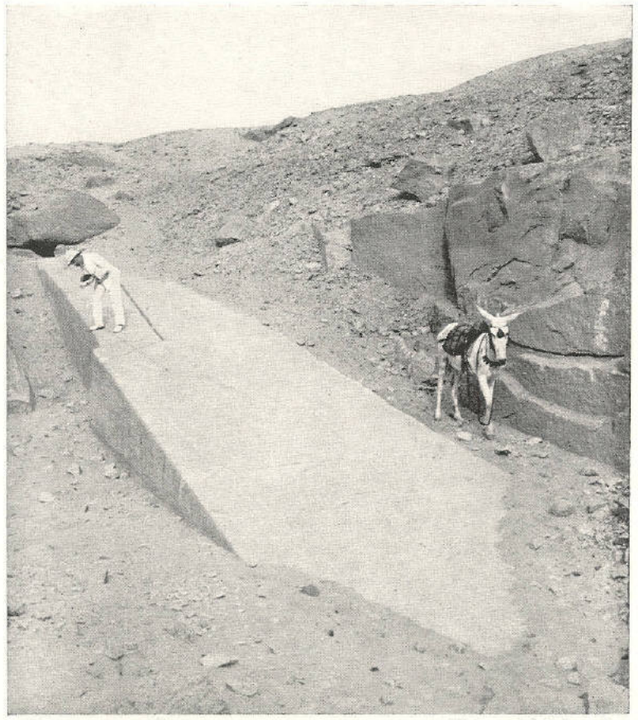


Photo by] [*Dittrich.*

THE GREAT DAM OF THE RESERVOIR NEAR ASSOUAN.

The length of this enormous dam is *one and a quarter miles*. It is pierced by 140 sluices and forty upper sluices or locks. The top of the dam is twenty-three feet broad; the bottom at the foundations is eighty-two feet thick.



From Stereo copyright] *[Underwood & Underwood.*

An obelisk ninety-two feet long, still lying in the granite quarry at the First Cataract, near Assouan. This obelisk, partly cut out, was probably rejected for some flaw in the stone, by the architect of Senusert I. (XIIth dynasty), some 3,850 years ago. Large blocks have been hacked off it, but it still measures forty feet of unspoilt granite.

sea-level, to make a dam which would bank up the water of the river when it was not in flood, namely, during the months from December to April. Consequently, the site for the great dam of the Nile was fixed at the First Cataract above Assouan, where a dyke of red granite crosses the river valley. This granite is so hard that the river as yet has been unable through countless centuries to cut a deep channel through it. The dyke, in fact, was a sort of subscription tendered by Nature towards half the cost of damming the Nile, as, if it were made use of, there was no necessity for laying the foundations of the dam under water.

This great feat of engineering, nevertheless, offered many difficulties, and was, of necessity, extremely costly. The engineer who designed it was the celebrated Sir William Willcocks. The contractors who undertook to carry out the work at a total cost of two million sterling, were the firm of the late Sir John Aird.

The original plans of Sir William Willcocks were interfered with by the outcry raised by archæologists as to the fate of Philæ Island. It was realized that the raising of the level of the Nile during the winter months would submerge a good deal of Philæ Island and leave some of the principal temples standing in the water. So to content these cavillers (who, as events subsequently turned out, were exaggerating the damage which would be done to the monuments) the scheme was modified. At present the greatest depth of water which is stored up in the dam (which is one and a quarter miles long across the river) is sixty-five feet. The dam is pierced by one hundred and forty under-sluices of one hundred and fifty square feet each, and by forty upper-sluices seventy-five feet square. When these are fully open they are capable of discharging three hundred and fifty thousand cubic feet of water per second. The storage capacity of the reservoir (which forms a lake above the First Cataract nearly two hundred miles long) is about three million seven hundred and fifty thousand cubic feet of water, a capacity which is reached about the end of March.

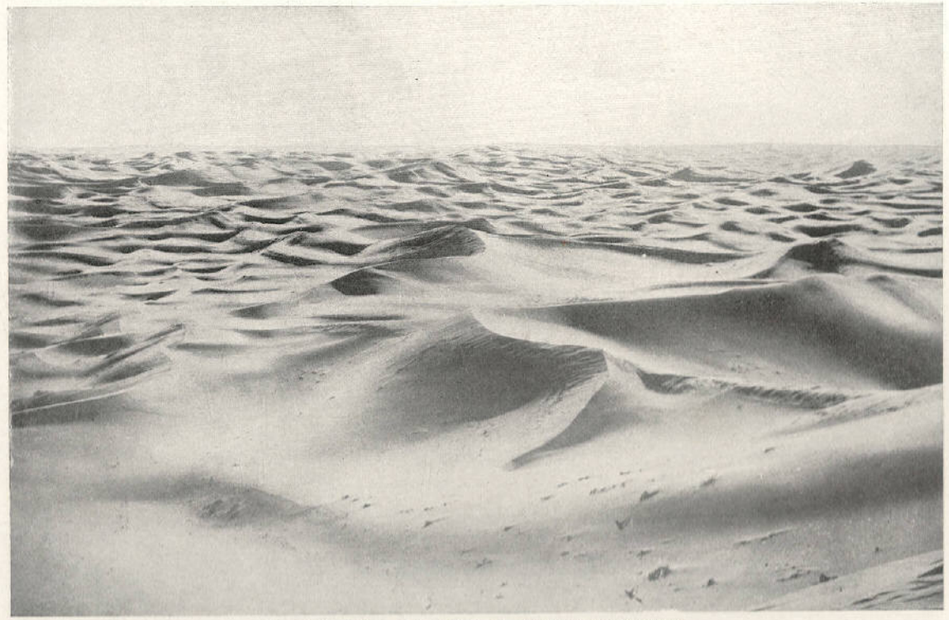
On the west side of the dam a canal has been made with four locks, so that the navigation of the Nile is not obstructed.

The success of this work has been so great that it has silenced the protesters against damage which might be done to some of the architectural remains of Ancient Egypt. In 1907 the Egyptian Government decided to carry out the plan originally designed by Sir William Willcocks, and to raise the Assouan dam twenty-six feet higher than the present level.

Ninety-Two foot Obelisk still lying in the Granite Quarry near the First Cataract, Assouan.—The region round Assouan was regarded by the Egyptians of early days, even as far back as the First and Second Dynasties, as semi-sacred, owing to the beauty of its red granite (syenite). The quarries from which this stone was cut lie in the eastern desert between Assouan and Shelal. In the first quarry to be reached from Assouan, a huge unfinished obelisk, about ninety feet in length and nine feet in breadth, may be seen, quarried but not removed from the parent rock, and with sides that have not been fully trimmed. Another obelisk lies similarly amongst the rocks near the railway station of Shelal. Mr. Weigall points out that a similar obelisk erected at Karnak, and obtained from these quarries, was cut from the granite matrix, despatched two hundred miles to the north, and erected in seven months from the time at which the order for it had been given.

The method employed for quarrying these stones in the times of the Ancient Egyptians was to make a series of wedge-shaped holes (by means of drills and picks) along a straight line. Into these were hammered wooden wedges, which were then soaked by water being poured over them. As the wood expanded it cracked the stone. The blocks split off from the hillside were then roughly dressed with copper tools and conveyed along a paved causeway of stone till they could be dragged by ropes to the water's edge. Traces of the wedge-shaped holes may still be seen in the rock surrounding the quarries.

A Sand Sea on the Algerian Frontier.—The Sahara Desert is not all sand, as is sometimes popularly supposed. Much of it is stony ground, or there may be high mountains. But all the low-lying regions, some of them at no great altitude above sea-level, and almost certainly the sites of former lakes or inland seas, are covered to a greater or lesser depth with sand. These are the areas known in North African Arabic as *Arg* or *Erg*. In Southern Algeria there are two main regions covered with these dangerous shifting sands—that on the south-east, which extends over a portion of Southern Tunisia, and that of the south-west. In proximity to these shifting sands there may

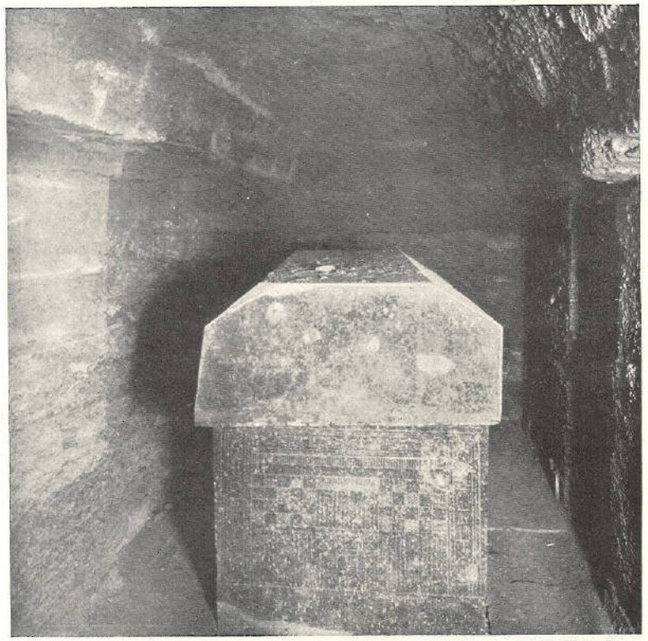


A SAND SEA ON THE ALGERIAN FRONTIER.

These landscapes of sand, with their hills and valleys, are continually shifting their features under a wind or even a breeze. They are firm to walk on nevertheless.

be oases, which in the peace and quiet resulting from French rule, are developing an important agriculture. The sand, however, carried by the wind has been gradually encroaching on the fertile parts of North Africa, and if it were not checked by man, would in time extend the area of hopeless desert very considerably, just as it has done, and is doing, in Mongolia and Northern Tibet.

I have ridden along the outskirts of the sandy sea in Southern Tunis, and it is a very impressive sight when a strong wind begins to blow, to see the landscape alter under one's eyes. The tops are blown off ridges, fresh hillocks are formed, and valleys filled up. One is never free from the dread that too strong a wind and too much sand may blow in one's own direction and engulf one's horse. Of course, in this way, under the strong winds which create the dust-storms, many a caravan has been buried; while by a subsequent blowing of a strong wind years afterwards the mummied remains of dead men and beasts have been once more exposed to sight. Very slowly, little by little, man encroaches on the sandy desert. The only way in which the sand can be fixed is by the spread of vegetation, and this can be achieved either by a change of climate, which induces rainfall, or by irrigation. The climate is changed and rainfall is attracted by the growth of trees. Moisture spreads far and wide from each centre of cultivation, and even if at first it produces little more than heavy dews, these make it possible for small plants to maintain existence on the sand, and so by degrees to cover this fluctuating soil with a thin coating of vegetation which arrests its movements and prepares it in course of time for cultivation.



Stereograph by] [*H. C. White Co.*

THE SARCOPHAGUS OF A BULL IN THE RUINS OF THE SERAPEION AT MEMPHIS, NEAR CAIRO.

In this and similar gigantic tombs the Sacred Bulls were buried with solemn rites. The tombs are of syenite (Assouan) granite, and are large enough to hold five persons.

A Sarcophagus in the Tombs of the Bulls, Memphis.—The Tombs of the Bulls are on the site of vanished Memphis, near Sakkara, about fourteen miles south-west of Cairo, on the west bank of the Nile. These enormous sarcophagi lie in subterranean chambers or galleries in the ruins of what was once called (by the Greeks) the Serapeion—the temple erected and dedicated at a very early period (First or Second Dynasty) to the god Hesiri-hapi (Osiris-apis, or Serapis, as the Greeks rendered it). Very early in Egyptian civilization began the deification of the Ox (Bull or Cow), a religious feeling which lingers still in parts of Negro Africa and throughout Hindu India. Hathor (better written, Hat-hor, or -har)—the house of Hor, the sun-god—was the Cow-goddess, symbolizing the fertility and productiveness of the female principle: Hapi (Apis) was the Bull-god, the splendid emblem of masculine force sometimes associated only with animal worship, sometimes treated as emblematical of the perfect, most virile type of man—Hesiri (Osiris) especially. To accomplish the worship of Hapi or Hesiri-hapi, it became the practice in remote times to select

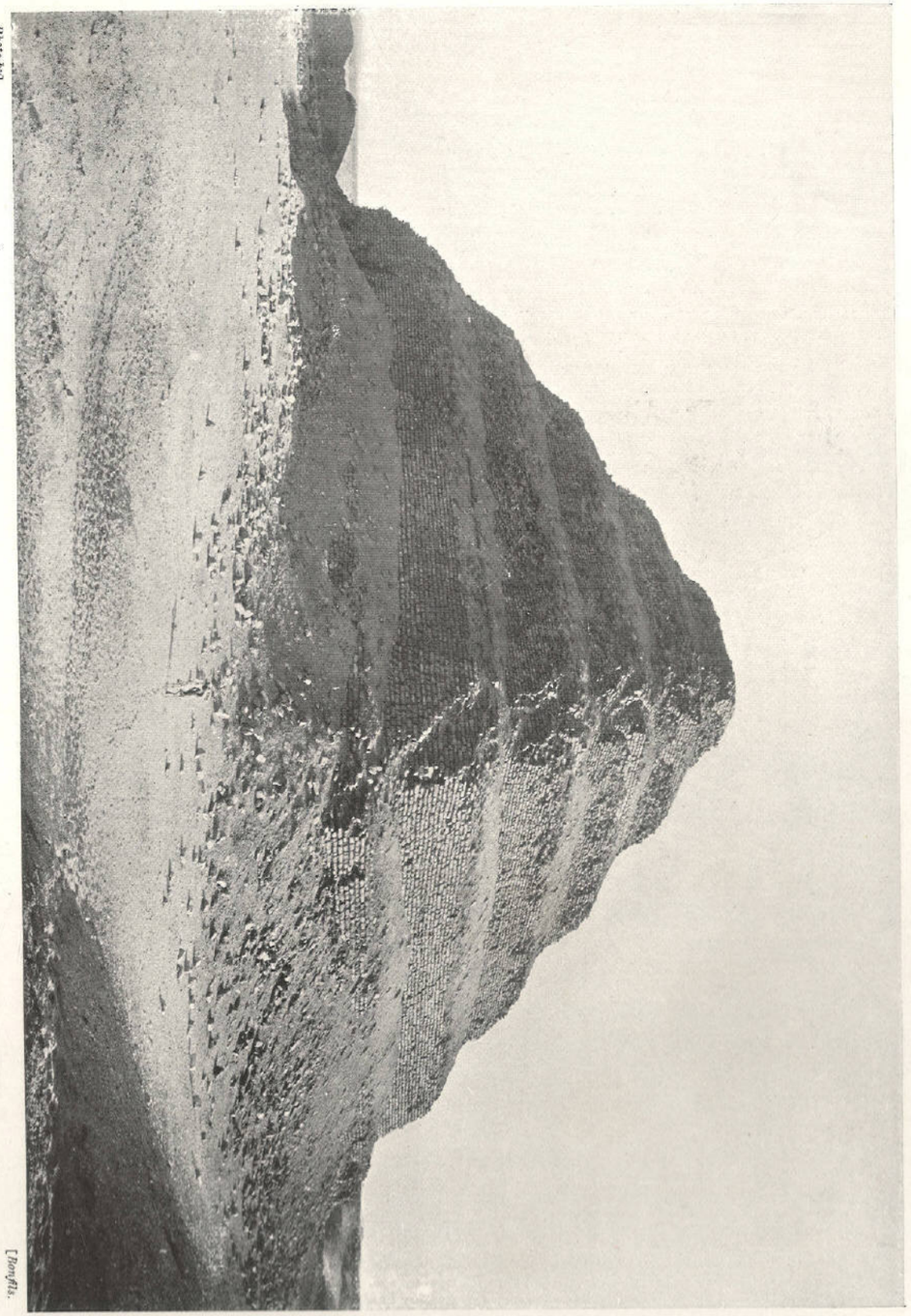


Photo by] [*Thonfils.*

THE STEP PYRAMID AT SAKKARA.

This is reputed to be one of the oldest monuments of Egypt. Its nucleus may cover the burial place of a King of the 1st dynasty. It is not square but *oblong* in shape.

special black bull-calves born with peculiar white markings. Such a calf was transported to Memphis and sumptuously lodged in a court of the temple. Here it remained, an object of worship, till its death. Then followed a period of mourning and a costly funeral. The carcase of the bull would be buried in an immense stone sarcophagus (of which the accompanying photograph is a good example), and over the sarcophagus a small temple would be built. During the Nineteenth Dynasty, and down to the times of the Ptolemies, however, another plan was adopted by the priests. Two great galleries were excavated in the rock, and the sarcophagi of sacred bulls were ranged along the sides in tomb-chambers. In these later times, moreover, careful registers were kept of the sepultures, giving the dates of birth, of deification and of death, and often the name of the birthplace and the name of the mother cow. [In all reference to dates in Egyptian chronology it must be understood that they were the number of the years of a Pharaoh's reign, much as we date our laws from the first, fifteenth, or other year of Victoria, or George III., or Edward VII., etc.

Lest we should think this worship very ridiculous on the part of the Egyptians, let us remember that we have the same inclinations about racehorses, pedigree cattle and dogs!

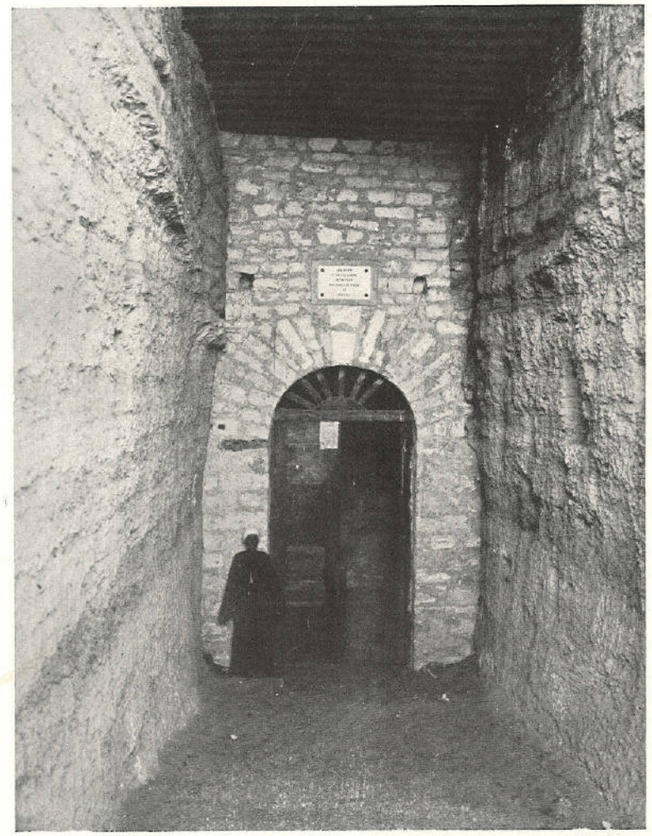


Photo by [*Bonfils.*

THE ENTRANCE TO THE SERAPEION AT SAKKARA.

The extraordinary Serapeion (Serapeum), or burial place of the Sacred Apis Bulls, was discovered by Mariette, a French Egyptologist, about thirty years ago. He worked chiefly on slight indications in the writings of the Roman geographer Strabo.

The Step Pyramid at Sakkara.—This interesting monument is of unknown age, but is supposed to go back to the beginning of the great dynasties of kings in Egypt. It is considerably older than the Giza Pyramids, and is often cited as an example of the Step Pyramid which preceded the more perfect structure with sides of smooth, unbroken masonry. Its place in the genesis of the pyramid tomb has already been alluded to in an earlier portion of this work.*

The Pyramid of Sakkara† is situated a little to the west of the site of the old Egyptian

* Professor Flinders Petrie believes that the Step Pyramid was built (at any rate as regards its nucleus) by King Neterkhet of the Third Dynasty about 6,000 years ago.

† The more common spelling of the name is Sakkara, but Egyptologists prefer to use the q as a more exact equivalent of the thick guttural met with in Arabic, in Ancient Egyptian and in allied languages. This guttural seems to have penetrated to the Southern Aryan tongues, such as Greek and Latin. It is the parent of our letter q. In the modern Egyptian dialect it is often replaced by a gasp or a hiatus, so that Saqqara is often pronounced by the donkey-boys Sa'ara.

capital of Memphis ("Mennofer," or "the good place," as it was called by the Egyptians). It is probably the tomb of a king of the First Dynasty, and consists of six courses of steps made of small stones, put together with very rough masonry. Originally—namely, when first constructed—it was much smaller. Then it was added to at different times, but for what purpose, or in whose honour, is not yet known, the Step Pyramid being one of the unsolved mysteries of Egypt.

The Roman Aqueduct at Tunis.—This is a very prominent feature in the scenery, and anyone driving about the outskirts of Tunis is bound to pass and re-pass this wonderful aqueduct, which originally covered a distance of over forty miles. It was built by the Romans to convey the water from the summit of Zaghwan mountain to Carthage. The ruins near Tunis are chiefly met with in the slight depression of the Wadi Melam (near the Bardo suburb), and are usually known as the "Spanish" Aqueduct, because the Spaniards, during their thirty-five years' occupation of Tunis in the sixteenth century, restored the aqueduct to partial use.

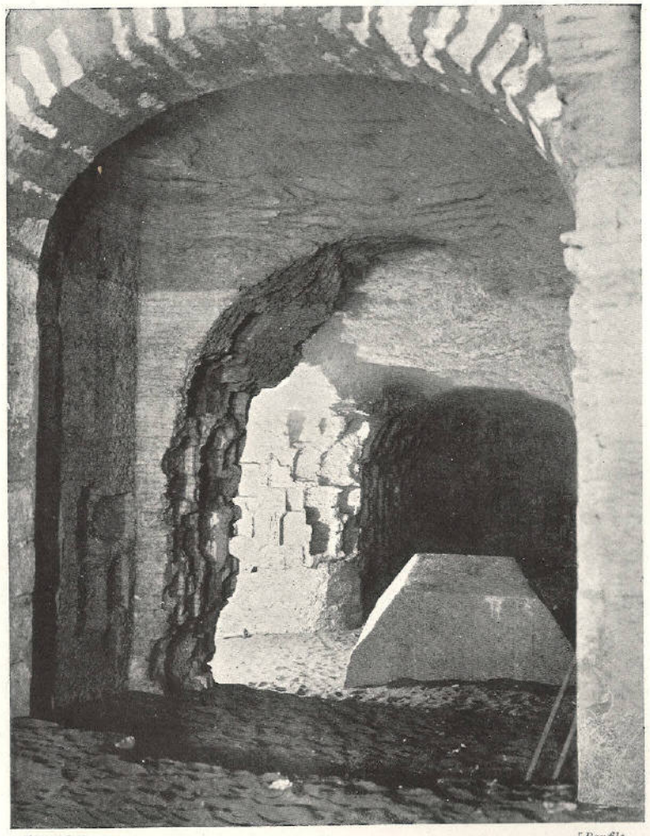


Photo by [*Bonfils.*

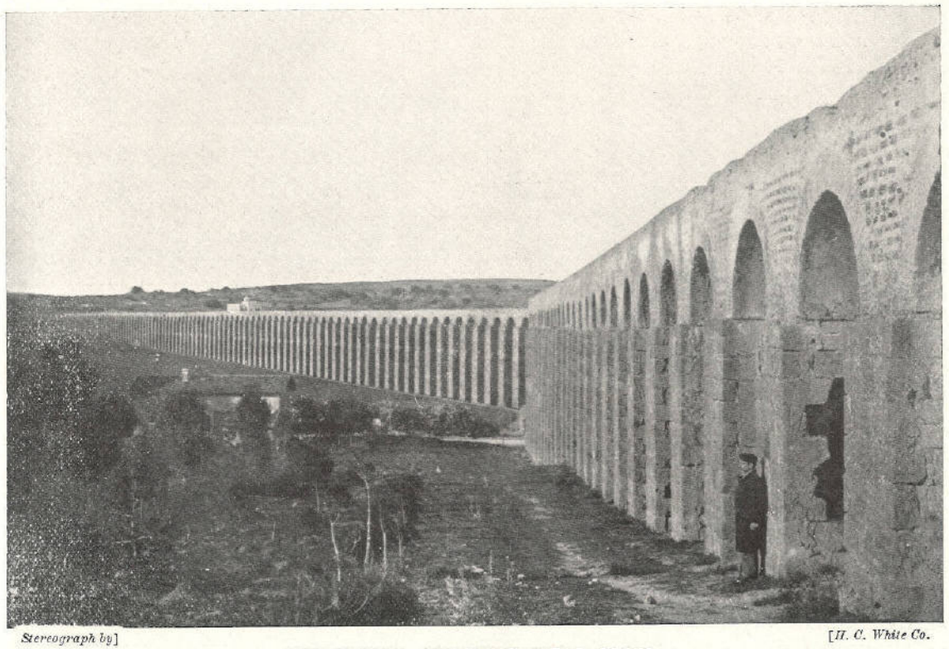
THE INTERIOR OF THE SERAPEION AT SAKKARA.

In the Serapeion there is an avenue 600 feet long, with hundreds of sphinxes to guide the way. On either side of a vast subterranean hall, to which this avenue leads—a hall 1,200 feet long—there were vaults for the granite sarcophagi of the Sacred Bulls.

The Street of the Camels, Algiers.—Algiers, like so many towns of the North African coast, is of great antiquity as a centre of human habitation, though under its present name (which is supposed by some to be a corruption of the Arab words Al-jazair—the islands—from two little islets which have since been linked to the mainland, and by others to be the corruption of an old Berber name, Jir or Zir) it only dates from the tenth century of the Christian era, when it was built or rebuilt by the son of a great Berber chief named Ziri. In this period it was sometimes known as Jazair bini Masghanna, or the two Islands of the Sons of Masghanna. But it was simply the rebuilding of the Roman town of Icosium, which had been partially destroyed in the fifth century by the Vandals; and Icosium was only a Roman continuation of a Numidian town which had preceded the Roman settlement. This, again, can be traced back to the remote antiquity of Neolithic times. Curiously enough, before Algiers became a human settlement the site or the vicinity of this town, which has little streams of fresh water flowing down from the hills and mountains

behind, was the haunt of enormous quantities of wild animals. In the truly beautiful botanical gardens of the city, which are half an hour's tram ride from its centre, the remains of the African elephant, the hippopotamus and a huge buffalo with enormous horns are constantly being dug up.

The Rue des Chameaux is one of the many picturesque streets of Moorish Algiers. This phase of the town—as a great capital of the Moorish corsairs—began in the sixteenth century, after Algiers had been snatched from the Spaniards by the Turkish pirates nicknamed the Brothers Barbarossa, who not only repulsed the Spaniards, but laid the foundations of a Turkish dominion over much of North Africa. During the sixteenth century much of the picturesque part of the town was built. Fortunately, a good deal of it remains to delight the eye of the tourist, for beyond question the old parts of Algiers are one of the most picturesque incidents in the world's scenery. These streets ascend by innumerable short steps to the heights above, on which the great Kasba,



Stereograph by] [*H. C. White Co.*

THE ROMAN AQUEDUCT, NEAR TUNIS.

This aqueduct now only remains in portions, but it extended once all the way from the upper part of Zaghwan mountain to Carthage, a distance of about forty-five miles.

or fort, was constructed. In spite of the steep climb, some of these streets, such as that which is here illustrated, could be ascended by camels. Others are only accessible to human beings on foot. The ascent to the Kasba by these narrow streets is an indispensable excursion to all who are able to stand a little fatigue. The fronts of the houses usually project to meet one another, and the overhanging balconies are supported by rough-looking sticks, but the doorways are frequently of beautiful Saracenic designs, and every now and then the passer-by catches a vista of surprising beauty as he looks through one of these horse-shoe arches into a tiled patio glowing with bright flowers and tropical plants. In some of these streets the manners and customs can only be vaguely indicated in a book for general reading, but it may be said that they transport one at a glance back to the dissolute times of the Roman Empire; consequently, those who are easily shocked by crudities should not be pressed to traverse the old Moorish part of Algiers.



Photo by] [*Neurdrein Freres.*

THE STREET OF THE CAMELS, ALGIERS.

The streets of Algiers, of which the Street of the Camels is one of the best examples, ascend by innumerable short steps to the heights above, on which the great Kasba or fort was constructed. On each side of these streets the fronts of the houses project to meet one another, and the overhanging balconies are supported by rough-looking sticks.

The Baobab Tree.—The Baobab tree (*Adansonia digitata*) belongs to the natural order of Mallows or *Malvaceæ*, and to the tribe or group *Bombaceæ*, which comprises three species of gigantic trees—*Adansonia* (represented by two species, one in Africa and the other in Australia), *Bombax* (the magnificent silk cotton trees of Tropical Africa, Asia and America—mainly American), and *Eriodendron*, a gigantic tree with spiny trunk, also found in South America, Africa and Eastern Asia. The trees of this Bombax group are very prominent objects in these tropical landscapes, and from time immemorial have attracted the attention of savage man, who has sometimes made them objects of worship. They are also immediately noticed by the tourist travelling through these countries, the Baobab on account of its enormous, gouty stem, and the Eriodendron and Bombax from the huge, rigid, wall-like buttresses which support the elegant, lofty stem of the tree. The Baobab and its allies are related to the Cotton Plant (*Gossypium*), and the Bombax trees of America yield in their seed-capsules a beautiful silky substance which is of some use in commerce. The very large seed-capsule of the Baobab, on the other hand, contains nothing but a pinkish-white pith. This, however, is flavoured with an agreeable lemon taste, and when chewed in the mouth of a thirsty traveller produces almost the illusion that he is drinking lemonade. It is sometimes called the "Monkey Bread Tree," because baboons break up the large calabashes to eat this pleasant-tasting pith. During the dry or winter season the Baobab sheds its leaves: indeed, it is so prone to this condition of leaflessness that most photographs taken of it represent it in that condition.

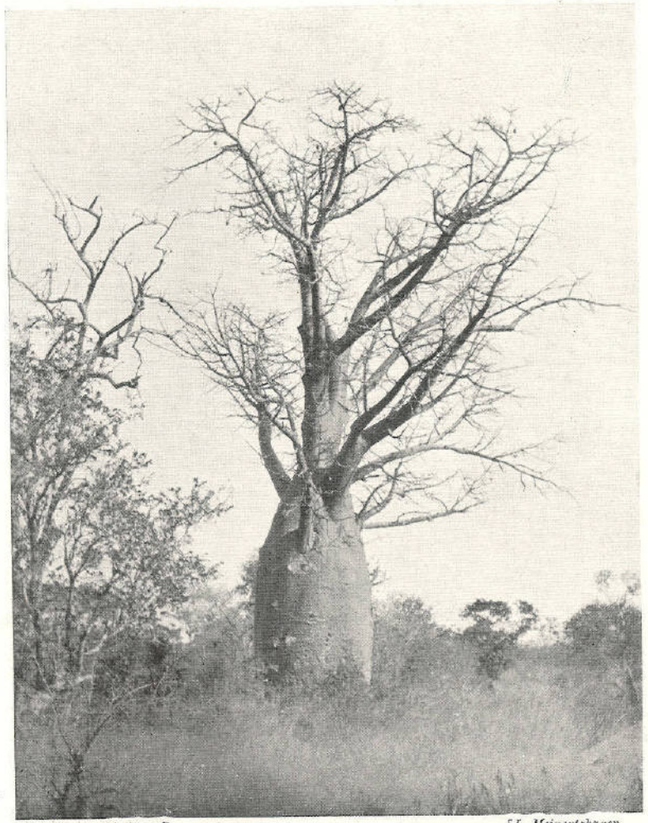
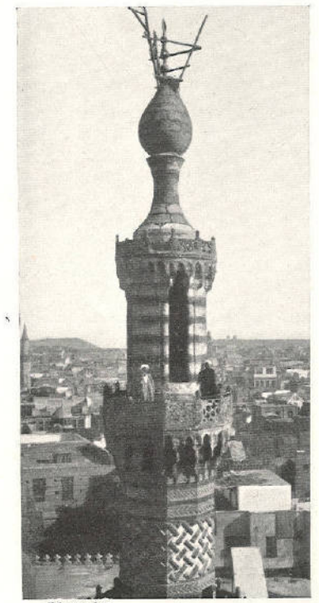


Photo by permission of [*L. Meinertzhagen.*

A BAOBAB TREE, RHODESIA

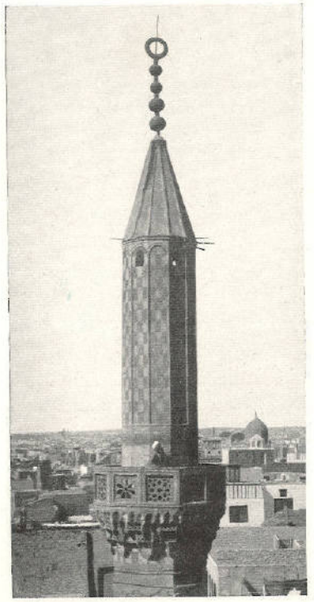
This monster is rather a colossal plant, distantly allied to the Mallows and the cotton plant, than a true tree. Its huge trunk is hollow, as are all the larger branches.

With the first rains, however, it pushes forth its digitate light-green leaves (something in shape like those of a horse-chestnut), and, above all, develops its remarkable flowers. A Baobab tree in full flower is a very notable object in the African landscape, for this gigantic monster (with a trunk perhaps thirty feet in diameter, covered with glabrous pinkish-grey bark and expanding into huge gouty branches) is hung with what appear to be at a distance little golden lamps hanging by strings perpendicularly from the branches. These are the flowers, which are large, with thick, whitish petals, looking very much as though they had been cut out of felt. The flower develops an enormous number of stamens of golden yellow, and hangs quite perpendicularly by its string-like stalk from the branch above.

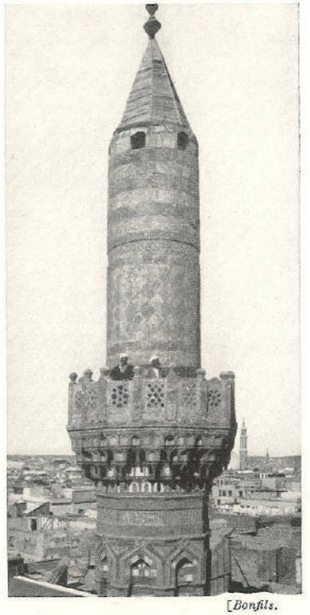


Photos by] [*Bonfils.*

A minaret of the Mosque of Al-Azhar, with the Muezzins calling to prayer.



A minaret of the Mosque of Al-Azhar, with a view of the city of Cairo.



Another minaret of the Mosque of Al-Azhar.

These minarets of the Al-Azhar or "splendid" Mosque, which is the Muhammadan University at Cairo, are much admired for their carving and for the alabaster and marble introduced into their decoration. But the architectural style is Turkish rather than pure Saracenic.

The wood of this gigantic vegetable—for it is little else—is very light and pithy. Consequently, the tree is sometimes hollowed out by the natives to form a temporary house or shelter, or is made into a cistern to hold supplies of water. The bark is fibrous and of some use in commerce.

The Mosque and University of Al-Azhar, Cairo.—This word is pronounced "Az-har," not as though the *zh* were pronounced like *z* in *azure*. The foundation of Al-Azhar ("Gami-al-azhar" = "The Splendid Mosque") as a teaching centre seems to date from the time of Jauhar, the general of the Caliph Al-Moizz, the creator of Cairo. Jauhar, who did much to encourage the revival of learning in Egypt, made this mosque a university in 988 A.D.; but some of the minarets and the greater part of the buildings of the mosque and university date from what may be called the "Silver Age" of Muhammadan Egypt—the period between 1270 and 1500. Additions were also made in 1720 and 1855.

Though Al-Azhar, until the recent uprising of Indian institutions, has been regarded as the principal Muhammadan university in the world, its teaching was, and is, of little help to Egyptians who wish to become world citizens and play a part as important as that of Christian men. Teaching in the courts and corridors of this vast mosque was limited to a study of the grammatical inflection and syntax of the Arabic language; the principles of rhetoric based on the work of ancient Greek philosophers; versification (about as useful in the struggle for life as the similar fetish worship of the Latin verse still wasting the time of our youth at notable English public schools); logic; jurisprudence as based on the law laid down in the Koran and in the accepted Traditions (Hadith) which

are a kind of supplement to the Koran; and also algebra and a certain amount of mathematics, especially such as are of use in the fastidious calculations of the Muhammadan calendar and religious observances connected with times of prayer. But the chief purpose of the university was the inculcation of the orthodox Sunni views on Muhammadan theology, the exposition of the Koran and the traditions of the Prophet.

In the slight revival of civilization in Egypt, which the changes wrought under the reign of Ismail Pasha brought about, an attempt was made to introduce modern teaching on philosophical questions into the Al-Azhar University through the engagement of Afghan or Indian lecturers who had dared to cast aside prejudice and study deeply the remarkable works of Spanish Muhammadans of long ago, such as those of Avicenna.

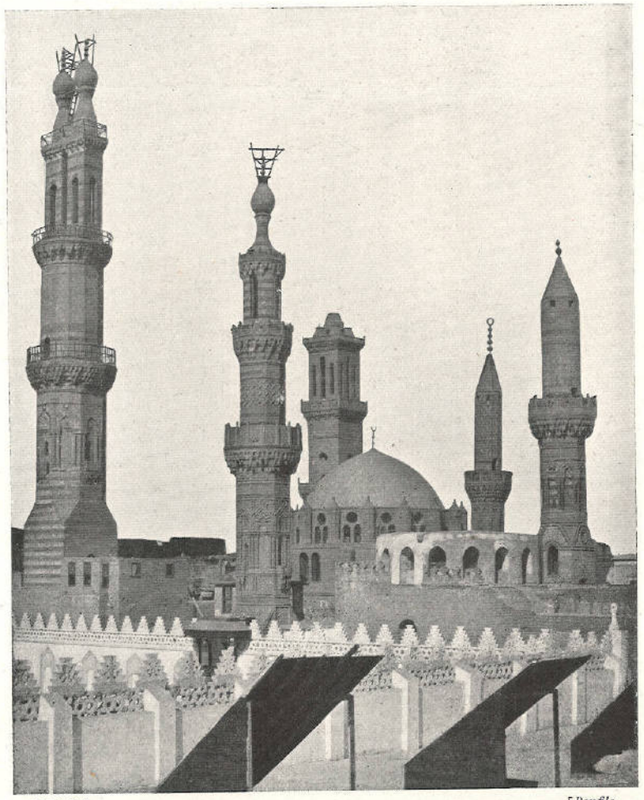


Photo by [*Bonfils.*

A GENERAL VIEW OF THE MINARETS AT THE MOSQUE OF AL-AZHAR, CAIRO

Though the Mosque of Al-Azhar was founded in the tenth century, and though much of its structure dates from the Silver Age of Saracenic art in Egypt (fourteenth and fifteenth centuries), these minarets are much more modern and have been built or restored in the eighteenth and nineteenth centuries.

An Afghan professor, named Jamal ad-Din, attempted between 1872 and 1878, to expound Avicenna and similar writers to the students at Al-Azhar, and to open their minds in regard to real facts in geography and astronomy (for at Al-Azhar, probably till the present day, the students have been taught, or allowed to believe, that the sun goes round the earth and that the earth is the centre of the universe).

Jamal ad-Din brought with him a globe into the Al-Azhar Mosque with which to explain the form of the earth and the chief ideas now held about mundane geography and the universe in general. But the other and more orthodox professors opposed him almost with violence, forbade his entrance into the mosque, and in 1879 procured his exile. So long as the Muhammadan world allows by common consent knowledge to be strangled by religion at its fountain head, so long they will occupy a position of hopeless inferiority to the Christian nations who have now shaken themselves free of similar trammels. No doubt the education at Al-Azhar is less irrational than it was twenty-five years ago, and lessons in geography and astronomy are more in accord with the science of Europe. But there is no information to hand that its course of teaching is such as to fit its students to play a useful part in the administration of Egypt

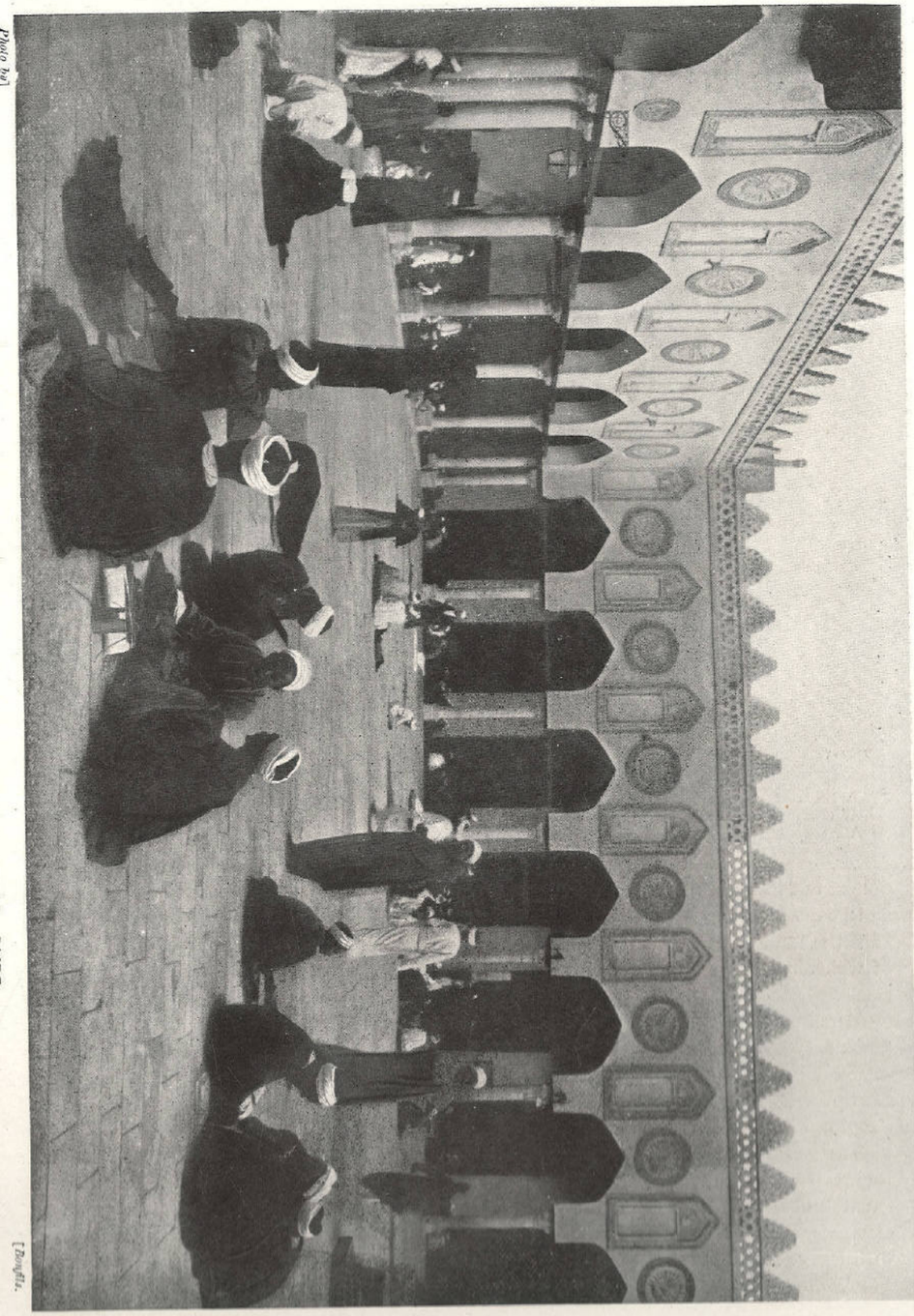


Photo by [*Bonfils.*

THE OPEN COURT OF THE UNIVERSITY-MOSQUE OF AL-AZHAR, CAIRO.

This is the place where the theologians give their instruction in the intricacies of the Muhammadan faith, or in the "orthodox" Sunni branch of that faith. Only four orthodox rites of the Muhammadan religion are recognized at Al-Azhar: the Shafei, the Maliki, the Hanafi, and the Hanbali.

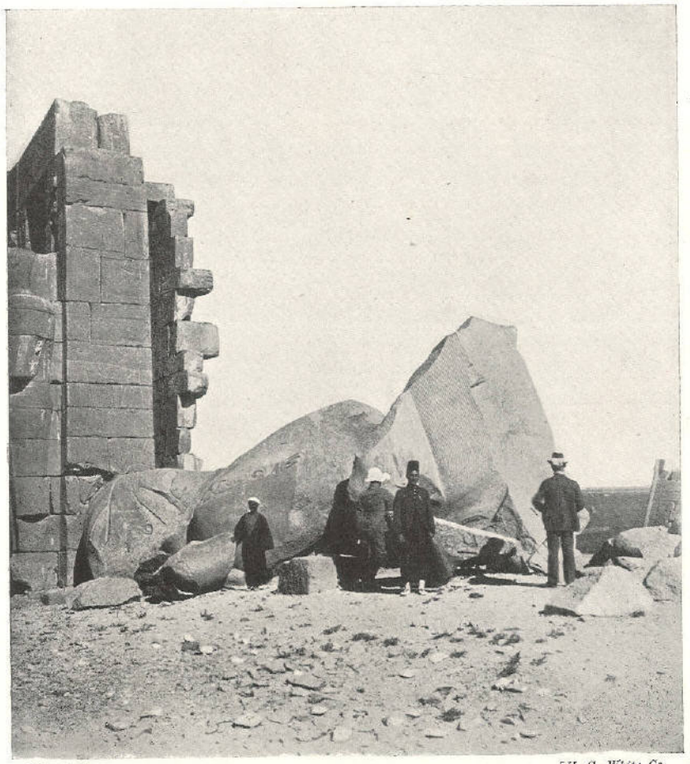


Photo by] [*H. C. White Co.*

FALLEN STATUE OF RAMSES II., THEBES.

When complete this statue must have weighed over a thousand tons. It was fifty-seven to fifty-eight feet in height, and was cut out of a single piece of red granite quarried at Assouan.

A good deal of the architecture of the mosque is beautiful, though the style has been spoilt rather by Turkish influence in the last two centuries. From its minarets resound with peculiar force and fervour the calls to prayer by the Muezzin and the Muhammadan profession of faith: "There is no other God than Allah, and Muhammad is the prophet of Allah."

The Ramesseum at Thebes. — Amongst the mortuary temples of the Kings of Egypt in that curious series of bifurcating valleys or wadis (which no doubt represent an ancient backwater of the Nile at Thebes) are the temples of Medinet Habu (already described) and the Ramesseum.

To reach the Ramesseum the tourists ride away from the western bank of the Nile opposite Luxor, on donkeys—one or more of which is sure to bear the name of Ramses—past the Colossi of Memnon, past cultivated fields with fragrant crops, full of flowers and lively with quail and hoopoes, to the unreclaimed sand of the desert, out of which rises in front of a background of cliffs the Ramesseum, the only remaining temple still standing out of a group of six, the foundations of which were brought to light by Dr. Flinders Petrie in 1896. These six temples were side by side, and (according to Mr. John Ward)* in one of these temples was discovered the great Stele of Merenptah (the successor of Ramses II.), the supposed Pharaoh of the Exodus, whose army, pursuing the retreating Israelites, was engulfed in the mud or the waves of the Bitter Lakes, or some other prolongation of the Red Sea. On this stele was found the first mention in any Egyptian inscription of the Israelites, if the allusion applies to this people rather than to any other section of the gipsy Semites—the hated Hyksos, or Shepherd Kings.

The Ramesseum is believed to have been commenced by the Pharaoh Seti I., the father of Ramses II., though it is always regarded as the mortuary temple of the last-named, whose tomb is situated farther to the west in the valley of the Tombs of the Kings. Upon the walls of his great mortuary temple Ramses II. caused to be sculptured various scenes from his wars and his dealings with the gods of Egypt, especially Amon-ra. Under the Ptolemies this Temple of Ramses II. was

* "Pyramids and Progress."

called the Tomb of Osymandyas (the Greek translation of one of the names of the titles of Ramses II.); later, it was called the Memnonion, and the name Ramesseum was only given to it by one of the first of modern Egyptian archæologists, Champollion (1828). Down to the beginning of the Roman period in Egypt this temple remained in excellent preservation, and contained a colossal granite statue of Ramses II. some sixty feet in height, but a good many centuries ago this figure was shattered by lightning and is now a heap of broken blocks. When complete this statue must have weighed over a thousand tons. The head is still there, with an ear that is three and a half feet in length, and a face nearly seven feet broad. Mr. Arthur Weigall states that the nail upon the middle finger is about thirty-five square inches in size. On the west side of the wall of the Second Court there is a row of four headless figures of Osiris, standing against four square pillars. They formed a portion of a row of similar figures and pillars which have since fallen into ruin.

The great Hypostyle Hall originally contained forty-eight columns, those of the middle aisle possessing capitals beautifully carved in the semblance of the calyx of a flower. This temple is full of designs engraved on the stone surfaces to illustrate the wars of Ramses II. against the Hittites and the Syrians. Amongst other names of towns given are those of Jerusalem, Damascus, Askalon, and the Amorite fortress of Zapur. In all these wars the Egyptians (assisted by Sardinian mercenaries in horned helmets) were pitiless, and in one picture the sons of Ramses II. are shown stabbing and slaying the old men, women and children of the Amorites, who are begging piteously for mercy.

Around the Ramesseum Dr. Flinders Petrie discovered by excavating the huge wine cellars which belonged to the religious sect that was charged with the special worship of Ramses II. The cellars, arched with brick, were in perfect preservation and contained many of the wine jars entire,

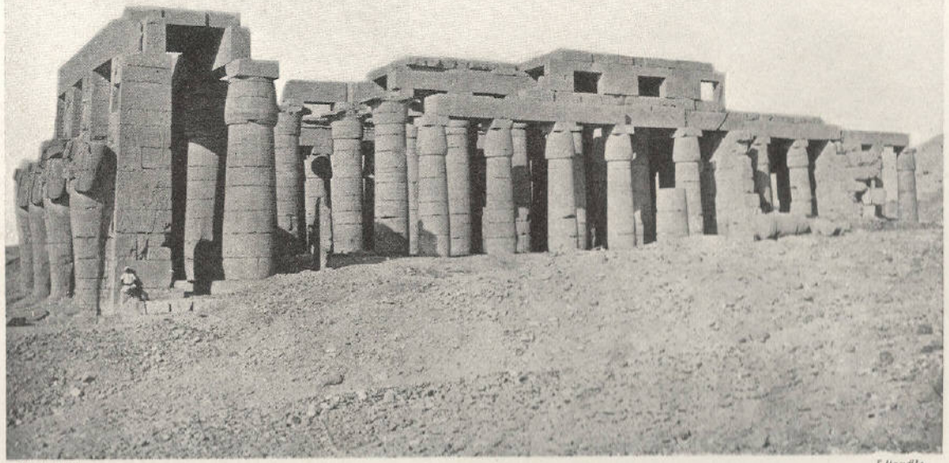


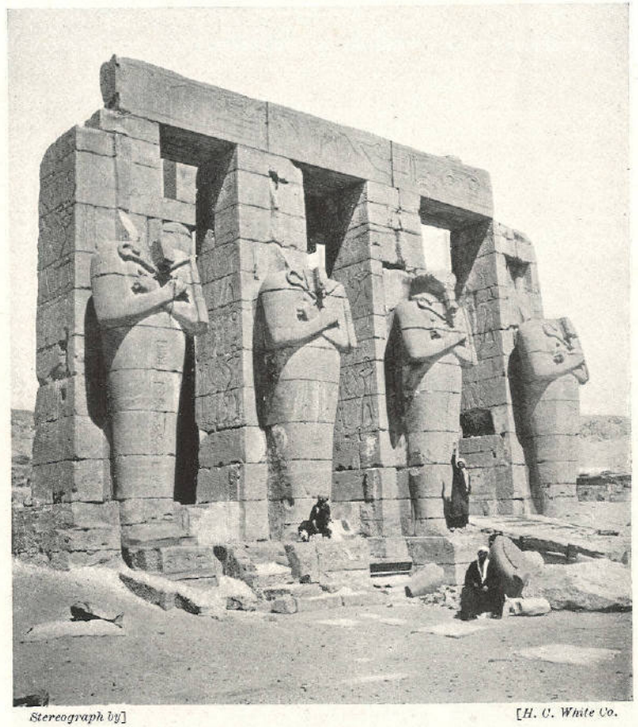
Photo by] [*Bonfils.*

THE RAMESSEUM, OR MORTUARY TEMPLE, OF RAMSES II. AT THEBES.

This temple is situated on the edge of cultivation to the north of Medinet Habu. It became celebrated in history by the Greek name of the Memnonion, or the tomb of Osymandyas—the Greek name for Ramses II.

with their corks undrawn, sealed with the King's seal, and the name and date of the vintage scrawled on the outside, but (writes Mr. John Ward) they were hollow mockeries, for during the three thousand or more years which had elapsed since their storage the wine had somehow all evaporated.

The Colossi of Memnon.—The celebrated Colossi of Memnon were long reputed as a minor wonder of the world. They are both of them seated statues of the one king, Amenhotep III. (" Amenhotep the Magnificent "), the husband of the celebrated Queen Thiy. [There is a splendid portrait in granite of Amenhotep III. to be seen in the British Museum. Unless he has been flattered by the sculptor of his day, he was indeed a handsome man, and according to certain inscriptions, must have been a mighty hunter, who was able to relate that he had killed one hundred and two fierce lions before his marriage to the Queen !]



Stereograph by] [*H. C. White Co.*

FOUR HEADLESS STATUES OF OSIRIS AT THE RAMESSEUM, THEBES.

These are all that remain of a long row of Osiris statues and columns which once flanked the west side of the wall of the Second Court at the Ramesseum.

These two Colossi, and perhaps a third of which traces have been seen in the Nile mud, probably flanked the front entrance to the now vanished mortuary temple of Amenhotep III. This monarch himself recorded that " My majesty " erected these statues, " which caused great amazement because of their size." The two remaining Colossi represent the monarch seated on a throne, and between the legs of each statue is a small figure of his wife, Queen Thiy, and of his mother, Mutemua. A figure of a daughter stands by the knee. On either side of each throne are incised pictures of the Nile gods of Upper and Lower Egypt, who, by plaiting together symbolically the stems of the lotus (representing Lower Egypt) and the papyrus (the symbol of Upper Egypt), unite the two great provinces under one rule. The material out of which these Colossi are made is sandstone, and they were both originally hewn in a single block, though they were each about seventy feet in height, and perhaps thirty feet at their greatest breadth. But during the period of Roman rule in Egypt, one of the Colossi (that which lies to the north) partly fell to pieces as the result of being cracked by earthquakes, which were frequent in the Nile Valley at the commencement of the Christian era. It was restored by being built up with separate blocks of stone. This was the colossus (cracked in the great earthquake of 27 B.C., and finally repaired more than two hundred years afterwards by the Emperor Septimius Severus) which became famous in the

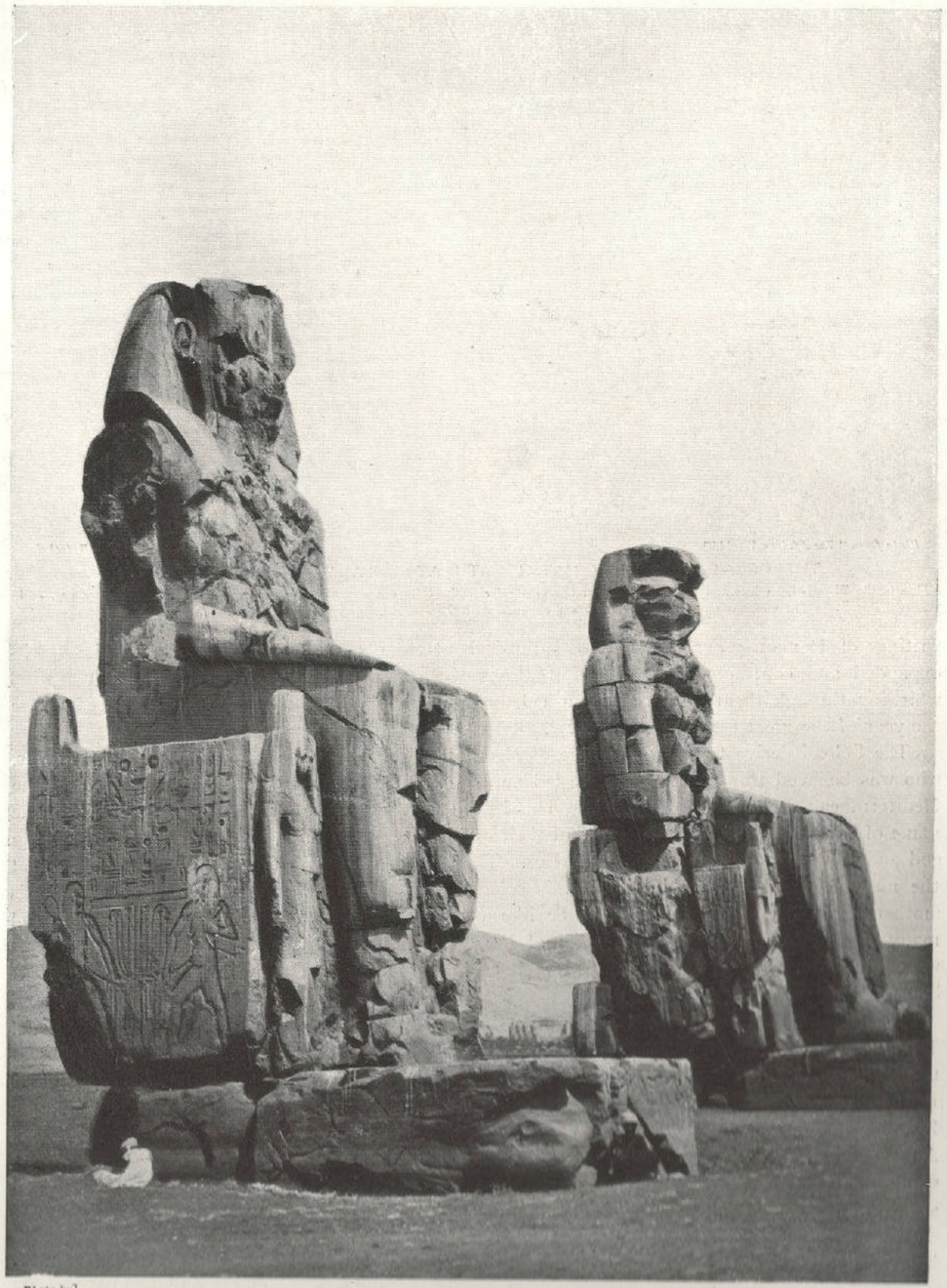


Photo by] [*Bonfils.*

THE COLOSSI OF MEMNON AT THEBES.

These are twin statues (there was once a third which has become engulfed in Nile mud) of Amenhotep III., XVIIIth dynasty. The name of his dearly loved queen is engraved on the throne, and a small figure of his daughter stands against his knee.

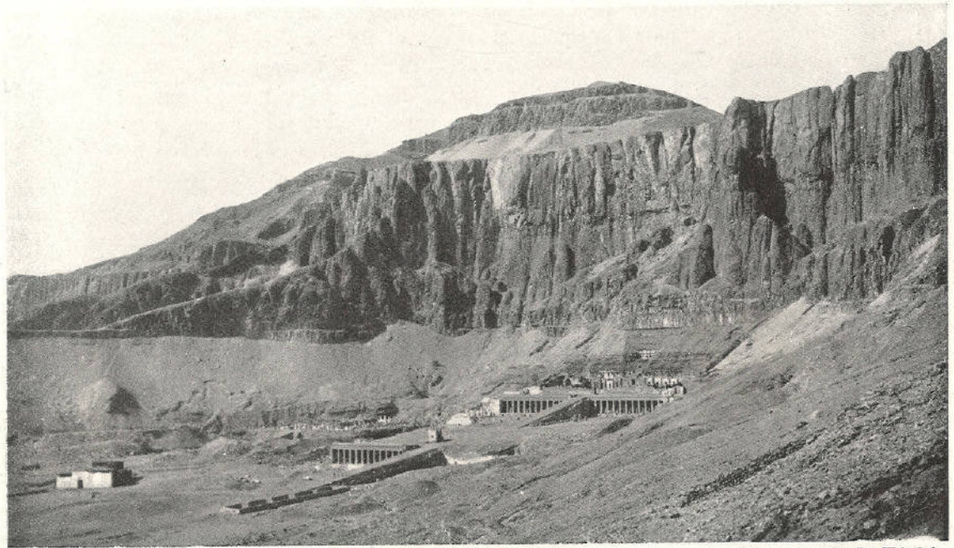


Photo from "The African World." [*By permission of Leo Weinthal.*

THE GREAT TEMPLE OF HATSHOPSITU AT DĒR-AL-BAHRI, NEAR THEBES.

This is the "beautiful white temple at the foot of the vertical cliff." It is cut out of the limestone rock in three terraces, and the flat walls within the colonnades are covered with bas-reliefs, finely sculptured and richly coloured.

writings of Roman geographers for its musical utterances at dawn. The earthquake cracks expanded and contracted with the alternations of early morning heat and cold, and the wind whistling through them produced a musical, booming noise, which had never been noticed before the year of the great earthquake (B.C. 27).

The Colossi derive their Greek name of Memnon from one of the heroes of the Trojan War, who was believed traditionally to have led an army of Ethiopians from Upper Egypt across the Mediterranean to the Greek Peninsula. This legend was due to the Greek historians muddling the name of Amenhotep with the Memnon of their own traditions, who had been the son of a Nubian god and of the beautiful dawn-goddess, Eos. The Roman writers invented the poetical idea that the musical sound thrilling out from this colossus at the dawn was the cry of Memnon to his mother Eos. The sound was said to be like a gong or blast of a trumpet.* Its fame attracted many tourists from Rome in the times of the Cæsars, and Roman poetesses as well as poets wrote verses on the feet of the Colossi, much as modern European and American tourists might like to do.

The Temple of Dēr-al-Bahri.—The great temple of Dēr-al-Bahri is situated to the west of Thebes, at the base of the lofty limestone cliffs which flank the Theban plain. This vast temple was excavated and constructed by the wonderful Queen Hatshopsitu (already described in these pages), who dedicated it to the glory of her father, mother and herself. Portraits of Hatshopsitu appear on the walls and represent a handsome, if somewhat Semitic looking, type. Amongst the pictures is a quaint one of the Princess Khebt-neferu, a naked girl-child, with elaborately dressed hair, a necklace, armlets, and a lotus flower in the right hand, who was a sister of Queen Hatshopsitu, but died in infancy.

The beautiful Dēr-al-Bahri temple lies at the foot of vertical cliffs, and is mostly white in tone, being built in three terraces mainly cut out of the limestone, and supplied with colonnades of white

* Mr. Arthur Weigall.

fluted pillars "pure in style as those of a Doric temple." [Indeed, it is thought by some authorities that the Doric style of architecture had its origin in this and similar Egyptian works of the same period, the ideas being conveyed thence at a later date to Greece by travellers and mercenary soldiers.] The actual name of the architect of this building (or excavation) is recorded by the permission of Queen Hatshopsitu. His name was Semut, and in a tomb which he was permitted to build above his masterpiece he recorded the story of his life and works. It is at Dēr-al-Bahri—a lasting monument of the greatness of Hatshopsitu—that the pictures of the expedition to Punt are given, already referred to in my description of Hatshopsitu's life and reign. "Everything belonging to Hatshopsitu was beautiful" (writes Mr. John Ward). The doors of the shrines in this marvellous temple, the wonders of which are only just beginning to be revealed and appreciated, were of ebony, which must have come either from Tropical Africa or the tropical parts of South-West Arabia. Dēr-al-Bahri is indeed one of the wonders of the world.

The Great Mosque at Tlemçen.—Let us now turn away for a little while from Egypt to a much later phase of African civilization, the wonderful development of Saracenic art which arose in Egypt, in Tunis, in Western Algeria, Morocco and Spain between the end of the twelfth and the end of the fifteenth centuries of the Christian era; an art subsequently crushed or vulgarized by the Catholic Christians of Spain on the one hand, and the Byzantine Turks of Constantinople on the other. No doubt this evolution of beauty in form and colour, this great renaissance of Saracenic art, was closely connected with the impulse of the European renaissance, which began in Italy in the twelfth century.

Before the fanaticism of the Spanish Catholics and the bloodthirsty stupidity of the Turks had inflicted deadly blows on the progress of civilization, a generous feeling of emulation and interchange of thought and commerce was taking place between East and West, North and South. The Norman conquests in the Mediterranean and on the north coast of Africa, and the



Photo by] [*Neurdein Frères.*

THE MAHRAB AND PULPIT IN THE GRAND MOSQUE AT TLEMÇEN, ALGERIA.

This mosque and other buildings at Tlemçen represent a very notable development of Saracenic art in Western Algeria and Morocco which arose under Berber dynasties between the thirteenth and fifteenth centuries.

Crusades which brought the warriors of France, England and Germany to Syria and Egypt, really stimulated rather than checked this fusion of Muhammadan and Christian ideas and this revival of Greek and Roman culture. The Arab rule over North Africa, especially, had almost faded away before a great revival of indigenous Berber or Libyan peoples, who founded dynasty after dynasty, kingdom after kingdom, in Mauretania and Spain. Prominent amongst centres of their art and luxury was the beautiful city of Tlemçen (Tlamsan) situated at an altitude of about three thousand three hundred feet on the flanks of a great mountain (Jebel Tarmi), in the very mountainous country of Western Algeria, at no great distance from the modern boundaries of Morocco. Tlemçen was no doubt a Roman colony under the name of Pomaria, which may have meant the fruit yielding, or orchard, city. Here the invading Arabs and their Berber allies built the town of Agadir, not long after all traces of Byzantine rule had disappeared from North Africa, and Agadir developed into Tlamsan (written by the French Tlemçen).* After many vicissitudes under the different Arab and Berber dynasties, during which Tlemçen was alternately built, burnt, plundered, starved, rebuilt, and left to decay, it became the capital of a great Berber dynasty known as the Abd-al-Wad. This dynasty really began to rule Tlemçen in 1227, as the viceroys of the Al-Mohad emperors who reigned over Spain and North Africa. The great warrior Yaghmorassen-bin-Zeyan converted this vice-royalty into a sovereignty in the middle of the thirteenth century. Tlemçen, as we see it to-day, really took its origin from the magnificent buildings erected by Yaghmorassen at this period.

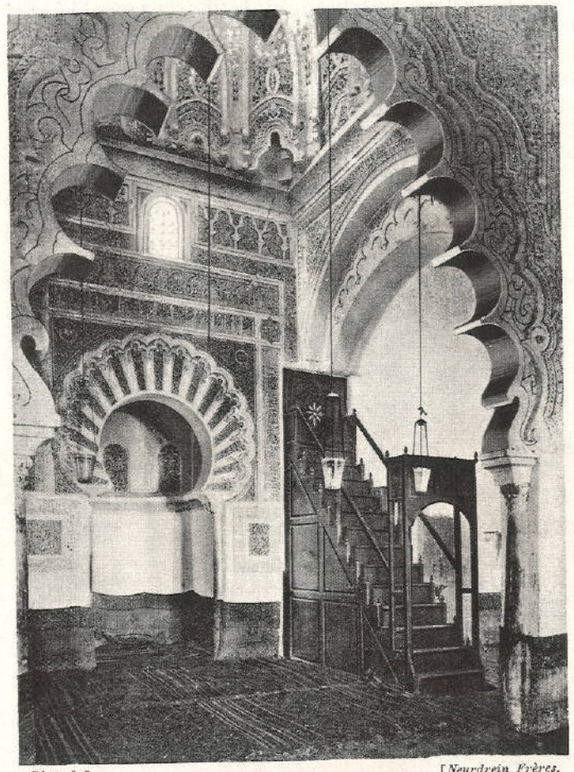


Photo by [*Neurdrein Frères.*

THE MAHRAB OF THE GRAND MOSQUE AT TLEMÇEN.

Note the exquisite carving of the fine stucco and the beautifully-shaped Mahrab with its perfect horse-shoe arch. The Mahrab or Mihrab in a mosque is the niche which represents the direction in which lies the sacred city of Mekka. In reality the Mahrab shrine is the relic of an esoteric worship of the generative principle.

The Great Mosque, which is here illustrated, was commenced and mainly finished by about 1300 A.D. It is a vast building of about one hundred and sixty-five feet square, flanked with a rectangular minaret one hundred and fifteen feet high. This minaret is decorated with small columns of marble and mosaics of lacquered porcelain. The staircase leading to the top contains one hundred and thirty steps. The great mosque itself is entered by eight doors which open on to a splendid court paved with what the French call "onyx" (a kind of marble), and with a fountain of the same beautiful stone. The sanctuary of the mosque itself has its ceiling supported by seventy-two columns, and beautiful arcades of the style illustrated in the accompanying pictures. The

* The Talensin of Leo Africanus.

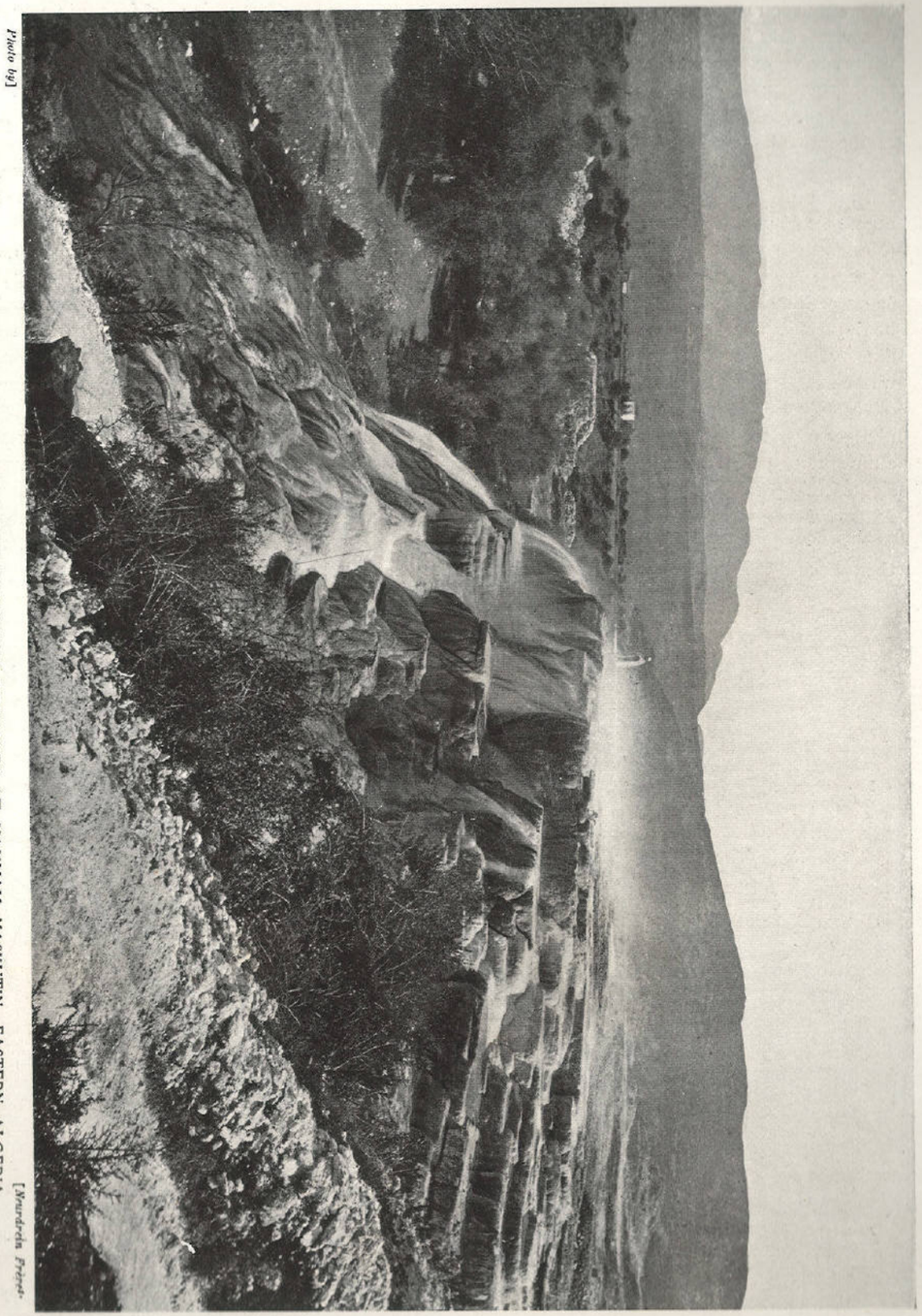


Photo by]

THE CASCADE OF BOILING WATER AND THE LIMESTONE TERRACES AT HAMMAM MASKUTIN, EASTERN ALGERIA.

The creamy-white deposits of limestone on the steps of this fine cascade make a very beautiful and noteworthy spectacle. The same deposit has coated isolated (and sometimes erect) boulders, not easily visible in this picture, which are regarded by the Arabs as figures turned to stone.

[*Neurdrein Frères.*

Mahrab, which is the Holy of Holies in all Muhammadan mosques, but which originates in a symbol of a very early form of Nature religion, is a miracle of artistic beauty, its surfaces, of course, of hard white stucco exquisitely carved. Above the Mahrab the dome has been sculptured in such a way as to turn it into an elaborate lace-work of interwoven tendrils which admits daylight and air. In short, the Great Mosque of Tlemçen is one of the most exquisite specimens of Saracenic art existing at the present day.

The Boiling Cascade at Hammam Maskutin.—Algeria, we are slowly beginning to realize, is full of wonders, both those which are of natural formation and those which are the handiwork of man. Amongst its noteworthy sights are the cascades of hot water at Hammam Maskutin (Meskoutine) in the eastern part of the province of Constantine near Guelma. There are two principal sources the waters of which unite in one stream, the course of which is marked by gigantic cones of limestone, some of which are thirty-six feet high. The water, issuing from the ground at boiling point, falls into natural basins of a creamy-white colour, due to the deposit of carbonate of lime. The total fall of the great cascade is nearly one hundred feet. All round about, the warm water, percolating through the soil sustains a wonderfully rich vegetation the whole year round—olives, pistachio trees, vines, oleanders, ash trees, caroubs, oaks and pines. As the boiling water plunges over the richly-coloured limestone terraces, a blue steam rises into the air which gives an alluring touch of mystery to the surroundings. This cascade, in fact, is one of the most beautiful sights in Algeria. The hot water was, of course, utilized by the Romans. Its present Arab name *Maskutin* means the accursed baths, as they are thought to have some connection with Hell-fire. The legend of the Berbers, or Arabs, to explain this strange natural feature is to the effect that there once lived at this spot a man of importance who found his sister, or half-sister, as she grew



Photo by] [*Maximiliano Lohr.*

THE PEAK OF TEIDE IN TENERIFE, SEEN FROM THE VILLAGE OF MATANZA.

The name of this village means slaughter, and it was here that a great massacre of the indigenous Guanches of the Canary Islands took place during the Spanish conquest of Tenerife in the fifteenth century.

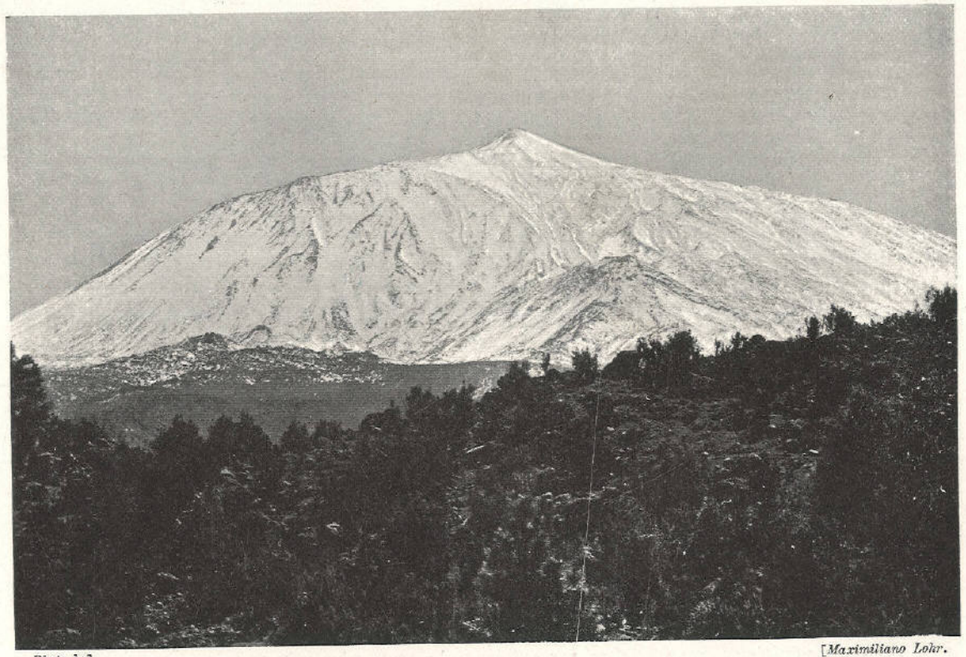


Photo by] [*Maximiliano Lohr.*

THE PEAK OF TEIDE (THE GREAT VOLCANO OF TENERIFE) COVERED WITH SNOW.

This sublime spectacle rising above the rich vegetation of the mountain's lower slopes would only be visible ordinarily in the months of January or February, as after the height of winter the snow melts as soon as it falls, except along the ridge and peak of the summit. Curiously enough the peak seems snow-flecked all the year round, but this is due to *white* deposits or veins of lava catching the sun's rays.

up to be so beautiful that he considered no suitor was worthy of her, therefore he married her himself. But whilst the marriage was being celebrated, the judgment of heaven descended on the incestuous pair. Fire came from below, the water of the stream from ice-cold became hot, bride and bridegroom and some of the wedding guests were turned into stone, and are represented by the limestone cones, which are such striking objects at the present day.

Near to Hammam Maskutin there is a remarkable subterranean lake at the bottom of a cavern. The lake is about seventy feet deep and is, no doubt, together with the neighbouring sulphurous springs, connected with the boiling water of Hamman Maskutin. There are also in the neighbourhood the ruins of the wonderful city of Tibilis, an important Roman city built amid these hot and medicinal waters to make use of their advantages.

The Peak of Teide, Tenerife.—The Canary Islands are a group, mainly volcanic, situated off the north-west coast of Africa, though the eastern members of the group are probably the remains of a former peninsula stretching out from the Morocco coast. These Islands were populated at an early date by a branch of the Berber race coming from North Africa. They were, in fact, known to the Berbers of Mauretania, who told the Romans of their existence. They were celebrated for an indigenous breed of dog of very large size, which probably is why the largest of the islands were called *Canaria* in Latin. [That these large dogs were not wholly a myth has been shown recently by the discovery of a skeleton in a cave. It was possibly a breed allied to the large white collie dog kept by the Arabs and Berbers of North Africa at the present day.] The most noteworthy feature of this interesting archipelago is the lofty volcano of Teide, the celebrated "Peak of Tenerife." This mountain reaches to an altitude of twelve thousand two hundred feet, and is

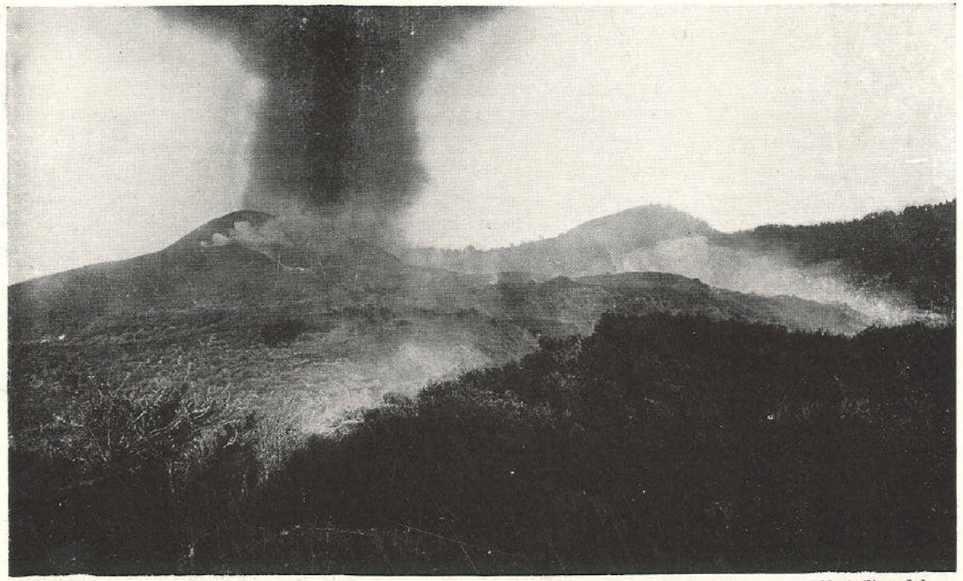


Photo by] [*Maximiliano Lohr.*

PANORAMA OF THE ERUPTION OF THE SMALL VOLCANO, CHINZEROS, TENERIFE (19th November, 1910).

There were considerable signs in 1910 of volcanic activity—smoke, steam, ashes and even boiling lava issuing from the minor craters of the volcanic ridge in the Island of Tenerife. There has been no eruption of lava from the main peak of Teide since the eighteenth century or earlier.

situated in the western part of the island of Tenerife, the largest of the Canary group. There is snow on the Peak of Teide all the year round in a cavern at about eleven thousand feet, but for nearly half the year the snow is absent from the visible parts of the summit. In the late winter and spring the mountain is often a magnificent spectacle, especially seen from the sea, its flanks covered with snow above the dark vegetation of pines.

The beautiful town of Orotava, lying to the north of Teide, is the nearest civilized centre from which ascents of the mountain are made, and it has become a favourite winter resort on account of its excellent hotels and perfect climate. The vegetation on the sea-coast and round about Orotava is almost tropical in luxuriance, scarcely any tropical palm or flower refusing to grow in this winterless region, where the atmosphere is moistened by the rain clouds of the Atlantic and protected by the mountains from the harsh desert winds of Africa.

*The Tomb of Thiy** must not be confused with the celebrated Queen of the same name, who was the spouse of Amenhotep III., and who is such a prominent personage in the temples and tombs of Thebes. The Tomb of Thiy, at Sakkara, is believed to date back about five thousand years, and to have been the burial-place of a great personage who, amongst other things, farmed on a large scale and was evidently very interested in beasts and birds. He was also a sportsman, and pursued with bows and arrows the big and small game of Lower Egypt. He attacked, slew, or captured, crocodiles or hippopotamuses in the Nile. He kept large herds of long-horned cattle of the type now confined mainly to Equatorial Africa, and troops of asses, besides tamed oryx and addax antelopes, ibexes, gazelles, and probably guinea-fowl from Nubia. On this and on some similar paintings on Egyptian monuments it would seem as though at a period of about five thousand years ago (but not later) the Egyptians had domesticated the addax antelope and kept it tame in herds like cattle. [This interesting creature—a type of oryx, but with spiral

* Also spelt "Ty" and "Tiy."

horns—is an inhabitant of the desert regions stretching between Egypt and the Atlantic Ocean. Of late years it has been pursued so vigorously by European and Arab sportsmen that it has been brought almost to the verge of extinction.] In the paintings on Thiy's tomb are shown the plan of his farm in the country, and apparently of his mansion in a town. At the country establishment he kept quite a menagerie of rare beasts and birds. His serfs and peasants are depicted sowing, reaping, and storing grain, driving asses, ploughing and building; peasant women are bringing tributes of many food substances; together with birds that appear to be geese and pigeons. They are also followed by little lambs. Thiy himself is depicted on the walls—a fine-looking man with a short beard—together with his wife and son, the boy holding a tame bird, probably a pigeon. The art of this period was realistic and vigorous, and the pictures in this tomb are of the highest possible interest.

The Tombs of the Kings of Egypt (as distinct from their mortuary temples, wherein they were worshipped either as gods or as manifestations of gods, or in memory of their great deeds) are situated in a valley of the limestone hills behind the great temple of Dēr-al-Bahri and the Theban plain. The Pharaohs buried here are those of the Eighteenth, Nineteenth and Twentieth Dynasties. Strictly speaking, the tombs are excavated in the face of the limestone rock at different levels. Sometimes the earliest Pharaohs were buried with the greatest secrecy, and no doubt the tombs erected over the burial-place were sometimes at a great height above the actual lodgment of the

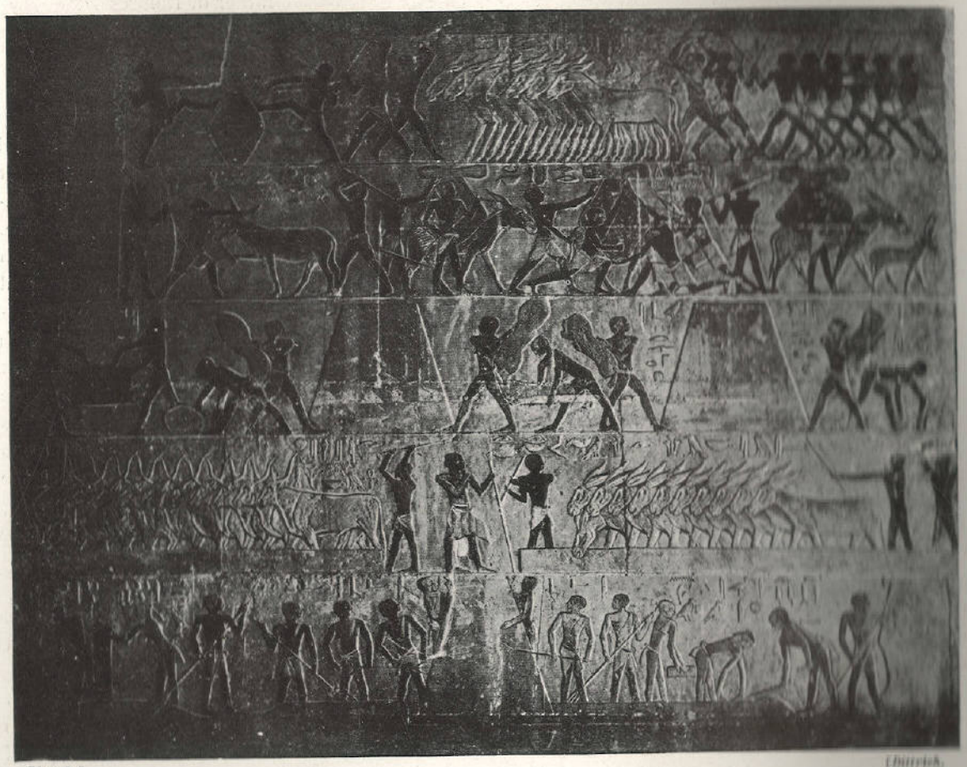


Photo by] [*Brogi.*

THE PICTURES ENGRAVED AND COLOURED ON THE WALLS OF THE TOMB OF THIY, AT SAKKARA.

Thiy was a great Egyptian landowner and "gentleman farmer" who lived about 5,000 years ago and prepared for himself before his death a magnificent tomb, the pictures on the walls of which should illustrate his love for the chase and for agriculture.

mummy in the rock chamber. It was the custom to bury jewellery and other precious articles with the bodies of the kings and of such few queens or ministers of state as were allowed to be interred in this privileged region. As soon as the great personage had been buried, the entrance to the tomb was generally concealed by débris, and it is supposed that the men who undertook the work of excavation were bound by the most solemn vows to keep the location of the tomb secret. Possibly the slave-workmen were afterwards killed. It even happened that so completely would the location of a grave be forgotten that some succeeding Pharaoh might drive the shaft for his own tomb into the burial-chamber of one of his predecessors, even someone who may have died but a few years before him. Sometimes a well was sunk near the tomb, not only to draw off water and to keep the place dry, but to deceive robbers on the search for buried treasure. But as time went on, either less valuable things were buried, or for some other reason there was less risk of tombs being rifled, and therefore those of the later Pharaohs were not so much concealed, and the entrance chamber to the tomb was frequently decorated magnificently with paintings such as those which may be seen in the tomb of Seti I., a Pharaoh of the Nineteenth Dynasty and the father of Ramses II.

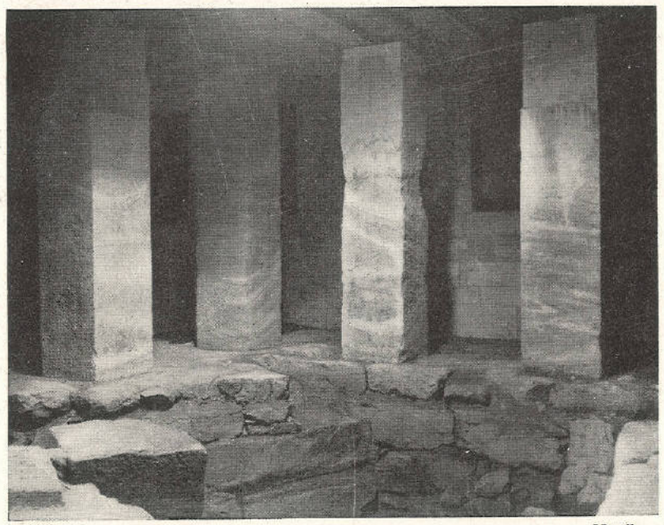


Photo by [*Bonfils.*

THE ENTRANCE TO THE TOMB OF THIY, AT SAKKARA.

There are many remarkable Tomb Temples at or near Sakkara, dating from the times of the Ist to the VIth dynasties. Sakkara is not far from the site of the old capital, Memphis, and seems to have been its necropolis. The tomb of Thiy is specially remarkable for its paintings.

Belzoni discovered the entrance to Seti's tomb as far back as 1817. In the farther domed chamber lay the empty coffin, its lid broken into fragments. It was of purest Egyptian alabaster, nine feet by five, completely covered with hieroglyphics within and without, which were beautifully engraved and filled with blue enamelled paint. It is now deposited in the Soane Museum, Lincoln's Inn Fields. But about 1850 some Arabs discovered at the bottom of a deep shaft leading to a tunnel in the rock fifty or more mummies of Egyptian Pharaohs, which had lain in this place of concealment for a thousand years before the Christian era, evidently removed thither by the guardian priests of the tombs in some time of trouble. Every mummy was labelled and separately rolled up (writes Mr. John Ward) so that they could be easily restored. But as a matter of fact, they are all now in the Museum at Cairo, and amongst them is the body of Seti I., who died about 1292 B.C.

Pompey's Pillar.—Alexandria, founded after the great days of Egypt were over, contains very few remains of the days of the Pharaohs, but a great many relics of the Ptolemaic renaissance of Egyptian art, of Roman rule and of early Christian monuments. Perhaps the most noteworthy feature of ancient days still remaining in the town is Pompey's Pillar (which had little or nothing to do with the Roman general of that name). This noble column is a great shaft of Assouan granite, probably made from an Egyptian obelisk of vast size by being rounded and fitted with a capital of Greek

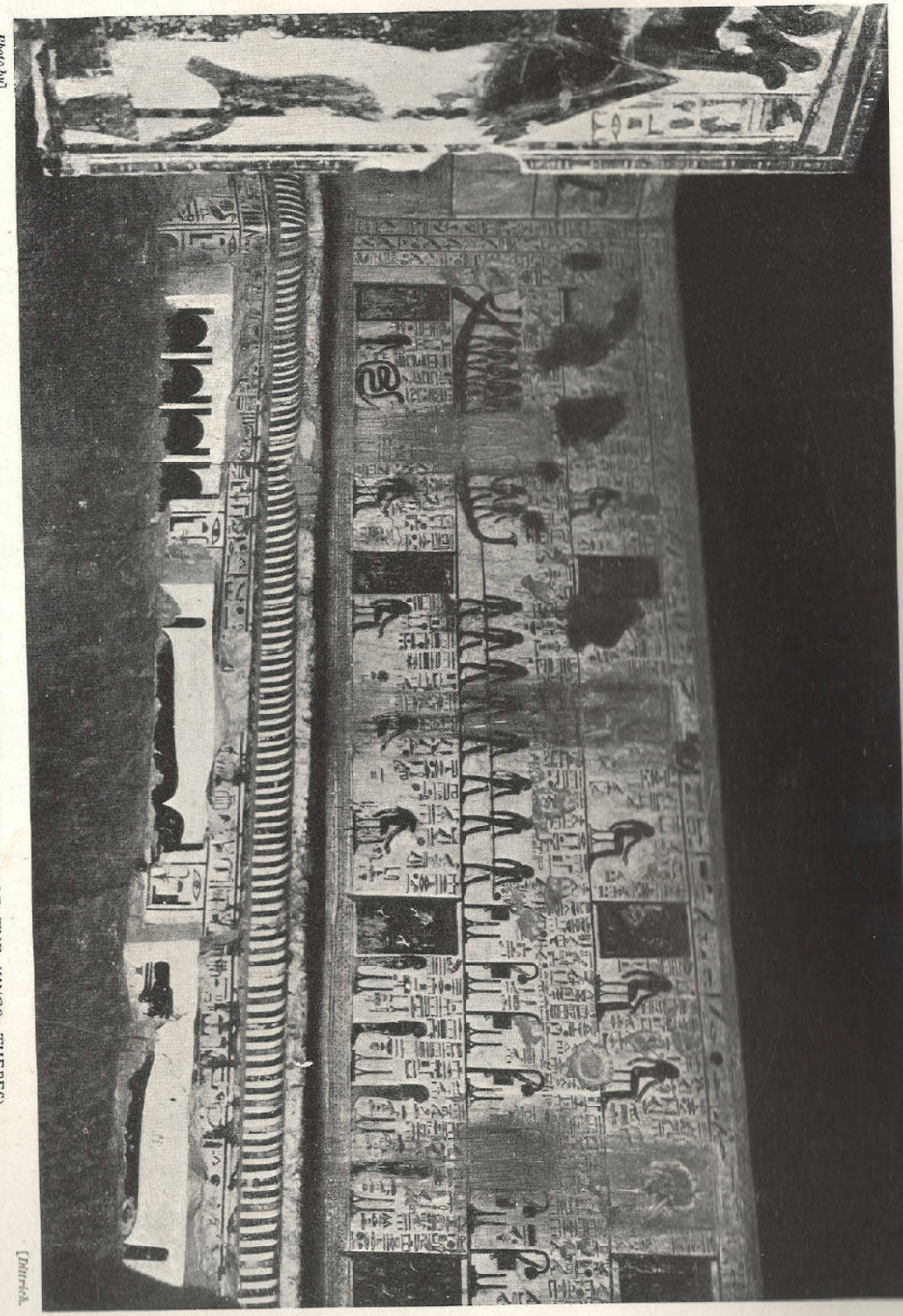


Photo by [*Dittrich.*

THE PAINTINGS ON THE WALLS OF THE TOMB OF SETI I. (VALLEY OF THE KINGS, THEBES).

Seti I. of the XIXth dynasty was the father or predecessor of the great Ramses II. He has been styled by Petrie the "Grand Old Archæologist," for he not only built much himself, but restored most carefully and reverently the work of his predecessors.



Photo by] [*Bonfils.*

THE MOUNTAIN AND VALLEY OF THE TOMBS OF THE KINGS, NEAR THEBES.

On the western side of the Nile, opposite Luxor and Karnak, is the vast necropolis of ancient Thebes. Here are the Colossi of Memnon, the Ramesseum, Medinet Habu, and Dēr-al-Bahri and other mortuary temples, and behind all are the limestone cliffs into which innumerable caves have been tunnelled to form tombs for the Kings of Egypt.

design. Originally it stood in the centre of the Serapeion temple, of which scarcely any vestiges remain. Dr. Botti's excavations, however, have revealed great subterranean corridors near the pillar's base, in which the mysteries of Serapis were celebrated.* But not only that: Pompey's Pillar rests on a foundation which is composed of remains of a granite temple of the far back time of Seti I.—about 1300 B.C. So that, evidently, Alexander merely founded another city on an old site used ages before by the Egyptian Pharaohs in their plenitude of power. This ancient temple had been destroyed to make a foundation for a Roman column, itself apparently made from an Egyptian obelisk between four thousand and five thousand years old.

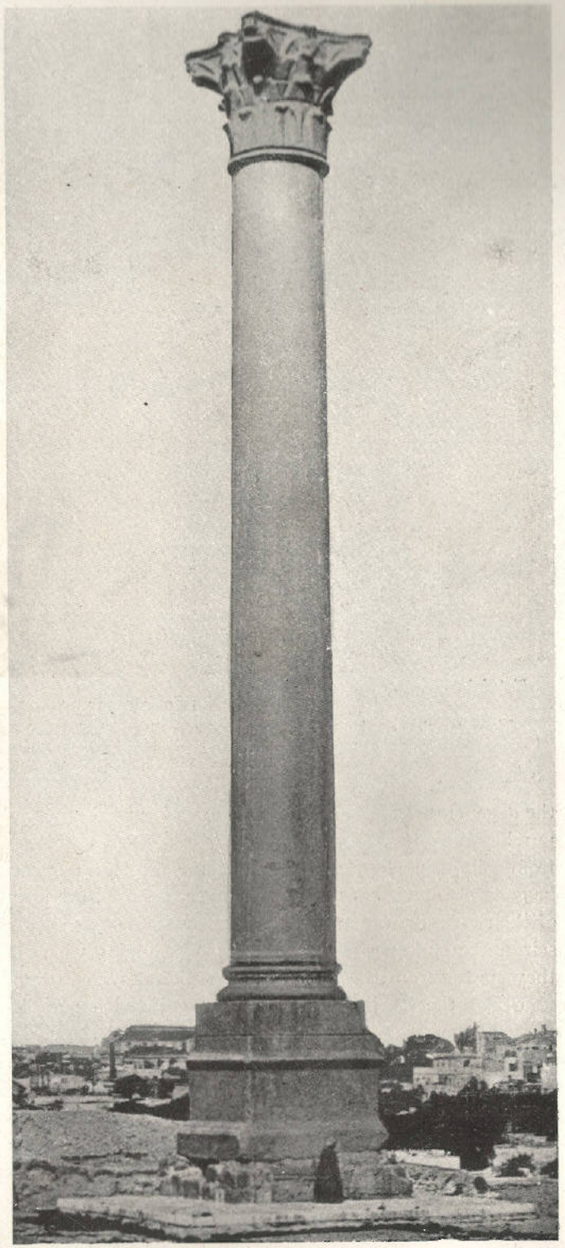
Fetish Houses at Ibadan, Yorubaland.—Yorubaland, in West Africa, is a very important division of the British Protectorate of Southern Nigeria (Lagos division). It was formerly an empire of allied states with its centre at Oyo. The empire seems to have been founded and the beginnings of civilization introduced a thousand to twelve hundred years ago (perhaps even earlier), by negroid adventurers—hunters, blacksmiths, metal-workers, soothsayers, or merchants—coming from the north or north-east. In Yoruba was founded quite a remarkable African art and culture which spread to Benin, Dahome, Ashanti, and in cognate forms to the open country along the Benue River and the Kamerun hinterland. With these arts coming from the north, came more elaborate ideas of religion, in which ancestor worship gave place to the adoration of definite personal divinities, some of them embodying natural forces and phases. To these small temples built of thatch, or of clay, were erected, and offerings of food and drink tendered; while first human, and then later beast and bird, sacrifices were attached to this worship. It is believed that the extreme north of Yorubaland

* The worship of the man-bull or bull-god.

even obtained some inkling of Christianity about twelve centuries ago through the arrival of Berbers (Tuaregs) from across the Sahara Desert, who had received an initiation into Christian ideas through the Latin Church of Carthage.

Muhammadanism entered Yorubaland about four centuries ago, and now the northern Yorubas are nearly all Muhammadans; but the southern half of this region (including the celebrated Abeokuta) is still given over to the worship of numerous gods and goddesses, evil spirits and good spirits. To honour these divinities fetish houses are built in or near all centres of habitation, or occasionally in sacred groves. Inside the fetish house there is a painted clay or wooden idol, or group of idols, representing the outward form of the god or goddess, and to these figures gifts are made of cloth, beads, kauri shells, etc. Palm wine and trade gin are offered as libations, fowls or goats are sacrificed, and, of course, there is a priest or fetish man (or woman) to act as the intermediary in these acts of worship and propitiation. But Christianity is spreading fast in the south and Muhammadanism in the north, and these fetish temples will soon cease to exist.

The (so-called) Tombs of the Caliphs, Cairo.—These beautiful Mosque-Tombs had really nothing to do with the supreme Caliphs of Islam who ruled from Baghdad, nor with the Fatimite or Western Caliphs, who reigned over Egypt during the period between 973 and 1171 A.D. They were erected as mausolea (tombs with mosques built over them) by the Burji Mamluk Sultans of Egypt, who arose as a dynasty with Barkuk, a successful soldier, in 1390. The Burji Sultans were mostly of Circassian origin, though among them were several Turks, and one at least of Greek origin. It had long been the custom of



From Stereograph by] [*H. C. White Co.*

POMPEY'S PILLAR, ON THE SITE OF THE SERAPEION AT ALEXANDRIA, EGYPT.

This enormous column is a monolith—a single stone—and probably an ancient Egyptian obelisk rounded and surmounted with a capital. It is the most prominent object in Alexandria at the present day, and is over 120 feet high.

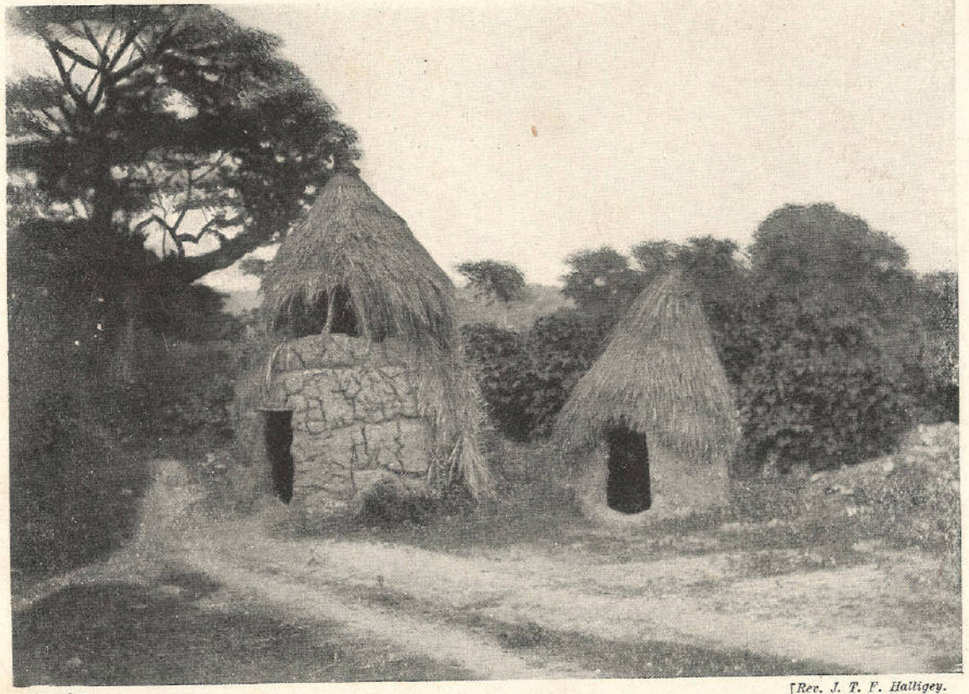


Photo by] *[Rev. J. T. F. Halligey.*

FETISH TEMPLES AT IBADAN, SOUTHERN YORUBA.

These temples are built of sticks and clay, with rudely-thatched roofs. Inside on the floor there may be a raised platform of dried mud on which libations are poured and offerings of food are made, or there may be in addition idols of painted clay or wood representing divinities of the native religion. Often these temples, however, are erected to enshrine the spirit of some dead person.

the degenerate Caliphs of the Muhammadan world to employ in their civil and military service slaves purchased as boys (or obtained by raids or as presents or tribute) from Turkish-Tatar tribes, from Circassia, Persia, Greece or the Balkan peninsula. Frequently these Mamluks rose to be generals or viziers, and as frequently deposed the puppet Caliph or Sultan and founded dynasties of their own, or were selected by their soldiers as occupants of the throne. The Circassians who seized the supreme power in Egypt, beginning with Barkuk, were nicknamed "Burji" because they sprang from the force of slave-soldiers which occupied the Burj, or Citadel, of Cairo.

Under the Burji Mamluks Egypt enjoyed a period of about a hundred and twenty years of comparative peace (though the people disliked the constant exactions of these foreign princes and their soldiery); and, as always happens in such times, the forgiving East (so prompt to smile at the least excuse) enjoyed a fresh development of art and industry: practically the last before the nineteenth century. For in 1517 Turkey closed her hand on Egypt, kept the Mamluks to bleed her to death, and stifled Egyptian art and literature. Sultan Barkuk and his successors encouraged architecture and built for themselves splendid tomb-mosques, with lofty gilt domes and a fanciful network of limestone or marble tracery. Perhaps the most beautiful of all these mosques is that of Kait Bey (built about 1470). This mosque (on the left-hand side of the picture) has a minaret one hundred and thirty-five feet high, and has been not infrequently instanced and illustrated as a fine specimen of Saracenic art. It was carefully restored in 1898.

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