The NATIONAL GEOGRAPHIC MAGAZINE

NOVEMBER, 1921

CONTENTS

SIXTEEN PAGES OF ILLUSTRATIONS IN FULL COLOR

Through the Heart of Hindustan
With 29 Illustrations
MAYNARD OWEN WILLIAMS

The Marble Dams of Rajputana
With 13 Illustrations
ELEANOR MADDOCK

The Empire of Romance—India
16 Illustrations in Color

Outwitting the Water Demons of Kashmir
With 9 Illustrations
MAURICE PRATT DUNLAP

A Pilgrimage to Amernath, Himalayan Shrine of the Hindu Faith
With 29 Illustrations
LOUISE AHL JESSOP

PUBLISHED BY THE
NATIONAL GEOGRAPHIC SOCIETY
HUBBARD MEMORIAL HALL
WASHINGTON, D.C.

$4.00 A YEAR
50c. THE COPY
THROUGH THE HEART OF HINDUSTAN

A Teeming Highway Extending for Fifteen Hundred Miles, from the Khyber Pass to Calcutta

By Maynard Owen Williams

Author of "Russia’s Orphan Race," "Czecho-Slovakia, Keyland of Central Europe," "Adventures with a Camera in Mary Lands," etc.

THERE is nothing provincial about India’s Main Street. Starting at the Khyber Pass, where the Afghan caravans weave a tenuous thread of trade between the frontier hills, it runs to Calcutta, where a goodly share of the world’s shipping is idly swinging to the tides of the treacherous Hooghly.*

The railways which parallel it more than 1,500 miles, as they parallel many of our own best highways, have diverted much traffic from the open road and cooped it up like crated fowls in third-class cars. But the bullock-cart still rolls on and the motor-car has made its presence smelt from the northwest frontier province to Bengal.

The “broad road” of Kipling’s lama and his adventurous chela, Kim, runs through one of the most thickly populated regions in the world. It is a plain road from beginning to end. From the mud fort of Jamrud to the docks at Kidderpore, this highway is a low way. It passes over the watershed between the Indus and the Ganges at an altitude of less than a thousand feet, and thence runs along with the Jumna or the Ganges to the alluvial delta in the midst of which Calcutta proudly reigns as queen.

*For a map of India, see “The Map of Asia” (size, 28 x 36 inches), issued as a supplement with The Geographic for May, 1921.

To the left, throughout the length of the road, are the eternal hills, beyond which the snow wall of the world’s mightiest mountains can sometimes be seen. To the right is the jumble of low hills which bear various names, but which, if the peninsula of India were slightly lowered, would form the irregular northern base of an arrow-shaped island, with its point at Cape Comorin, opposite Ceylon.

THROUGH A REGION OF RIVERS

Although Main Street runs through a region of rivers, let us not think of it as a garden land; for during much of the year it is dusty and dry and at no time does it have the lush loveliness which dots the hot southland with scenes of refreshing beauty. Throughout most of its length, irrigation has been developed to a high degree, and the farmer buys his water as he buys his soil.

From the arid furnace of Ali Masjid, in the Khyber, to the steamy Sundarbans, this road is deadly hot at times; yet ice formed in my tent-room in Lahore, and along the watershed between India’s two most famous rivers the nights in winter can be bitter cold, even for those Mongolian peoples whose heavy costumes remind one of the Himalayan snows, whence they come.
Main Street runs from the aridity of less than ten inches of rain annually, near the Afghan border, to the region of 75 inches, beside the lower Ganges; and were it to be continued farther, it would soak in the rains of Chittagong or Cherrapunji, where Jupiter Pluvius is always wringing out his heavy clouds like new washed towels and where in July, 1861, rain fell at the rate of one foot a day. Cherrapunji is accustomed to this form of hydraulic mining, which is wearing down the Garo and Khasi Hills, but with 75 feet of rain in twelve months, 1861 was known, even among those to whom rain is no novelty, as the year of the big rain.

While our Centennial was being celebrated in Philadelphia, the southwest monsoon, hitting the spring-board of the Khasi cliffs, leaped into the cold upper air and came down clotted to the extent of 41 inches in a single day. No other region on earth has attempted to break that record.

Throughout the entire plain which flanks the great Indian highway the mean annual temperature is between 75 and 78 degrees. In May the mean isotherm of all India runs so directly over the Grand Trunk Road that one would think that by stepping into the fields on either side he would run off its 88.7 degrees to 88.8 on the right toward the hot heart of the continental land-mass and 88.6 on the left as he turned aside toward the hill stations and breweries which line the lower slopes of the Himalayas from Murree to Darjeeling.

The density of population, like the rainfall, is lighter at the northwestern end; but from Rawalpindi to Calcutta one would have to go a considerable distance either side of the road to find a population less dense.
WHERE CENTRAL ASIAN TRADE RUNS THE GANTLET INTO INDIA

This view of the famous Khyber Pass is in the Jangi Gorge, near the Afghanistan end. It shows the roads that lead to Landi Khana, the last British outpost. In the distance is the Khargali ridge.
THE OLD PATHAN

The Afghan Pathans speak the Pashto language. They make excellent soldiers, and the name includes the virile, warlike Afridis, Wazirs, Swatis, Mohmands, and Orakezis. This old man would be more impressive if his skull cap were wound about with a turban.
than 400 persons to the square mile, although this is largely an agricultural land.

A PANORAMA OF RACES

Races are strung out along the road like ethnological exhibits, but the constant flow of life along this boulevard of people is such that the various stages in the transition, from the Turko-Iranians, whose handsome faces fill the Kabul Bazaar at Peshawar, to the Mongolo-Dravidians, who dominate the racial complex of cosmopolitan Calcutta, are difficult for the stranger to detect.

From the Pashto of Peshawar, which a Persian can understand, one enters the linguistic area of Lahnda, or Western Punjabi, with plenty of Kashmiri, another of the Outer-Aryan tongues, heard in the Rawalpindi bazaar. Then Punjabi, shading off to Hindustani, the lingua franca of a much larger region than that where it is common speech. Eastern Hindi, Bihari, and Bengali complete the needs of the man who would thread the road from Peshawar to Calcutta and understand the general conversation throughout. Faced with such un-American demands for glossological versatility, I fell back on English and sign language and found that both were understood, the latter far better than in any part of my native land.

Along the whole road, one finds Hindus and Mohammedans in imposing proportions. Between Lahore and Delhi the Sikhs, with their military bearing, Greek noses, and uncut hair, reveal themselves in considerable numbers, and at Buddha Gaya the yellow robe of the Buddhist adds a touch of variety to the religious complex.

Honeycombed though it be with many other faiths, India is predominantly a Hindu land. There are times in the bazaars of Peshawar and Rawalpindi when one forgets this. A visit to Lahore or a Friday noon at Delhi may cause one to think that the praying Moslems have as wide an influence in religion as their warring forefathers once had in politics; but an hour at the junction of the Jumna and the Ganges at Allahabad or ten minutes in the crowded streets or along the lively river front at Benares will convince one that monotheism is still a thin veneer

PATHAN WOMAN OF THE NORTHWEST

Pathan women, who customarily are rigidly secluded, are often handsome, with a Jewish cast of countenance. Many of them have rosy cheeks and fair complexions.
THE CASUAL PAGEANT OF PESHAWAR

The bazaars of North India are always spectacular. In Peshawar one feels that he is on the last frontier, for the outlandish Afghan is a frequent visitor, and even safety matches and safety razors cannot dispel the feeling of potential adventure.
over the huge mass of Hinduism, with its millions of gods.

Following a route where fine sand and smooth clay are general and even a pebble is a curiosity, India's Main Street serves agriculture rather than industry or mining; yet home industries are general throughout its course and few indeed are the towns which are not noted for some material or product unsurpassed of its kind.

A curio lover may go from the Afghan border to the foreign shops of Calcutta and never be far from a place where carpets, wood carvings, embroideries, ivory work, fine fabrics and brocades, soft textiles, metal-work and gracefully shaped pottery may be found. The center where each of these is made may be some distance away, on some side street that leads to Rajputana or Kashmir, but there are numerous places along Main Street itself where all can be procured.

KHYBER PASS, A NAME THAT SUGGESTS ROMANCE

The very name of the Khyber Pass is romantic. To see it on the semi-weekly convoy day is to be transported back through the ages to the time when three wise men, garbed in voluminous mantles like those the Afghans wear, swayed back and forth to the slow stride of their desert mounts while following the Star.

Out in the dry plain below the southern mouth of the Pass is the mud fort of Jauhrud, its flat surroundings cluttered with tents and adobe huts. High on a plateau near the Afghan end is Landikotal, a lonely camp held by the guards of the gates of India. Twin roads, an aerial cableway, the slender life lines of the military telephone—these are the only signs during most of the week to indicate that trade here runs the gauntlet between threatening hills harboring lawless spirits who consider a hair-trigger gun the best defender of life and liberty, and most effective in the pursuit of somebody's happiness.

Half-way through, almost hidden in a depression which is mortal dull in winter and a place of intolerable heat in summer, is a cluster of tents, mingled with lines of tethered animals, known as Ali Masjid.

In winter the Khyber is more like the Near East than India, but in summer the gash in the sunlit hills is a fiery furnace and a living hell. Then the shaggy Bactrian camels are not seen and winter's flowing robes are cast aside, revealing hard chests weathered brown by sun and wind. At Ali Masjid a breeze would be a godsend. The atmosphere shimmers in heat-waves like the surface of a boiling cauldron.

WHERE THE CARAVANS MEET

Here the two caravans meet at noon-day, the one to hasten southward toward the Kabuli Bazaar in Peshawar, the other to finish before nightfall the most dangerous section of its long trail to the Hindu Kush or the noisy khans of Bokhara.

When the rough-coated Bactrians, whose home stretches along the high plateau of Asia from Iran to the Gobi, supplement the ugly but hardier cousins of the lowland deserts, the narrow funnel of the Khyber seems clogged with masses of dark-brown camel hair; but, dashing along beside the road reserved for caravans, hugging the new highway which has been constructed for their benefit or bounding over culverts bridging bone-dry waterways, there roars a covey of military motors camouflaged in their own dust.

"The Man Who Was" pictured the Khyber as the key to India. Whether it be the military or political key today is a question. But the Khyber on convoy day does give a key to understanding why it is that the anthropological museum which we know as India still deludes the world with visions of untold wealth instead of unspeakable misery.

THE CAMEL'S SHARE IN INDIA'S STORY

The camel is the reason. The heavy-duty engine conceals its romance in fire-box and boilers; but the zoological caricature called the camel is a relief map of romance.

When any one mentions cost per ton-mile, this beast turns up his disdainful nose. No cheap bulk freights for him! Silks, spices, jewels, priceless stuffs of soft pashmina or stiff cloth of gold—these are the cargoes! Who ever saw romance in lentils or block tin? Alchem-
A FRUIT-SELLER OF RAWALPINDI

Not only is Rawalpindi the Main Street showroom for Kashmir shawls; bitter also are the rosy-cheeked apples of the enchanted vale, the finest available in a land of many fruits.

Kith and kin, don’t dream of pig iron. Rich cargoes spell romance. And the camel, ugly drudge that he is, excludes cheap freight as easily as a white-stockinged footman excludes the proletariat. Say Kashmir shawls and the gold brocades of Benares and the camel will prick up his mouse ears and even take a reef in his pendant under lip; but don’t mention rice or cotton in his hearing. His leisurely legs protect his hump from vulgar burdens. If India had trusted in him, Manchester

prints and cheap German and Japanese manufactures would never have flooded the land.

Oh, moth-eaten mesmerist, ugly as a snag-toothed Atropos, evil-tempered as a jinni, high-headed disdain of your betters, you conjure up a rippling curtain of lustrous silks to hide the eternal tragedy of a hungry land. With India’s millions famished for unseasoned rice, you make us dream of rarest spices. With subtle prevarication you depict Golconda
before our eyes and with glittering gems blind us to the leprous sores of a famine-stricken land.

The oily iron steed of the smooth and shining trail makes your stilted stride jook rheumatic. Dun as a barren hill and drab as the life of an octogenarian bachelor, you bathe the lands you traverse in radiant alpenglow.

You are blind, a charlatan and an evil-tempered eyesore; but, because you are an optimist and a magician, live on till death confirms your dazzling illusions in fairest fields of Paradise.

THE KHYBER PASS ON CONVOY DAY

In Bombay, motor trucks will batter your ear-drums if not your body. In Calcutta a striking taxi driver may smash the windshield of your private car. In Madras the bullocks smell of kerosene and lubricating oil. Modernity in India will smudge your collar soon enough. So come to the Khyber on convoy day and dream of the time when fair Circassians passed this way, when jeweled potentiates played pachisi with Georgian slave-girls clad in filmy clouds of crépe as “men” and swept the radiant pieces they had won into the soft splendor of their purdahs.

India is a vast, a prosaic land, whose God of Prosperity is Jupiter Pluvius masquerading under the name of Monsoon, and whose ideal is Nirvana—some escape from the unending round of monotony and suffering to which the hopeless people cling with Sisyphean perrinacity.

Photograph by Maynard Owen Williams

A DISCIPLE OF HIPPARCUS AND PTOLEMY

“The stability of the earth and the sun’s revolution about it” fully explained for the price of four annas. A geocentric universe is not thought eccentric in Peshawar (see text, page 446).

Peshawar, like many another city in India, is a combination of native city and cantonment—the former closely packed and interesting, the latter widely sprawled and as deadly dull to the casual visitor as the outside of an exclusive club.

There is tennis on excellent courts, sensational polo by military men mounted on splendid ponies, with white-legged grooms lined up behind the goals, and the side lines a sandwich of attractive Europeans wedged in between the less attractive and more interesting natives, to whom polo seems aristocratic and exotic, although this most ancient of hockey games came overland from Persia through Turkestan hundreds of years
Akbar's Imposing Fort at Attock on the Indus

Ranjit Singh, the Lion of the Punjab and founder of the Sikh State, took the Attock fort from the Wazir of Kabul in 1812. The British then took it and lost it again after a spirited defense by Lieutenant Herbert. It was restored to the British after the second Sikh war.
ago and was played in India long before the English, smashing the Spanish Armada which barred the water-gate to the opulent East, gave impetus to imperialism by founding the East India Company.

The cantonment is the place where the visitor sleeps and eats, and where he obtains permission to traverse the ghast in the barren hills through which the Central Asian commerce ebbs and flows. But for interest he drives or, better, plods along the two-mile dusty road which leads to the native city, composed, like its Central Asian counterparts, of mud walls and mud houses, with an added story, which is often nothing more than a wattle fence plastered with mud, on the roof. Here live the womenfolk, and bither the natives climb when the hot breathlessness of the dark rooms below drives them to a summer refuge beneath the stars.

**VIVID PICTURES IN THE STREETS OF PESHAWAR**

Peshawar's streets are always of interest. One's eyes are entranced by rich carpets from Bokhara and Merv and Afghanistan, bright copper trays, the high color of geometrically piled fruit, the white veils, shaped like collapsed circular tents, beneath which the Moslem women seem struggling to extricate themselves; the Navajo savagery of the painted pottery and the silken sheen of the bright-colored lungis, which, bound round a pointed red or gold skull-cap, transform ordinary-looking Punjabis or Pathans into supernmen.

The turbans of India, like the sheepskin shakos of Turkestan and the sombrero of the cowboy West, are magical headgear which make heroic figures of commonplace men. After these sturdy men of the frontier hills, the fat Bengali will be a comic figure.

The grain market in Peshawar is like the one in Samarkand, although it has less color. The beautiful lungis, or turbans, of soft tones, with bright bands of a contrasting hue across the free end, alternate with solid-colored ones of yellow, lemon, pink, or white. The coats reveal much of the khaki of war times, although many a Pathan wears a foreign-style vest over a long white shirt hanging outside full trousers, which are gathered up on the inside of the leg so that they hang in concentric folds looped downward from the knee.

**BAGPIPES HERALD CHRISTMAS MORNING NEAR THE KHYBER PASS**

I had gone out to the Khyber the day before Christmas, and on a cold, clear morning which needed only snow to remind one of reindeer and sleigh-bells instead of camel caravans and dusty roads, we were wakened by the sound of bagpipes outside the hotel. This inopportune method of Christmas caroling first made me think that some Scotch troopers from the army lines had come to serenade some of the officers who were in Peshawar for the holidays. But when I saw the two squirrel-cheeked Indian lads crushing wheezy, melancholy moans from the bloated bag, I thought of that English joke impregnated with American slang, "Why do bagpipers stride up and down while they play? Do they think it will make a hit?" "No; they think it will make them harder to hit." Sleep was out of the question.

Leaving the cantonment, we passed the railway station, where the Calcutta mail, starting its 1,600-mile dash, was belching forth a pearly cloud into the leaden sky, and swung into the dusty road which leads to the native city.

The heavy mist, which still hung low, softened the hard lines of the Oriental scene. Across a field where grain had been, great arching trees showed dimly through the haze and a white-clad tailor, squatting beside a steaming irrigation brook, added a fairy touch to the scene. Farther on a satiny canal shimmered in the morning sun, curving away from the path of Phoebus into a silvery distance in which crude mud walls and a slender minaret took on a beauty worthy of the day.

As the dark shadows of a row of small arches grew out of the haze, a long line of Bactrian camels, thick of neck and slow of foot, emerged from a city gate and made their way to a muddy drinking place, their uncouth drivers muffled in heavy cloaks, but with their dark-brown ankles bare above rough slippers with pointed heels and loop-the-loop toes.

Walking through narrow streets between blind walls of monotonous same-
WHERE ELECTRICITY DISPELS THE ILLUSION OF ARABIAN NIGHTS

The balconies of Lahore suggest love feasts and intrigue; but the shops below are devoted to prosaic, though often eloquent commerce, and the electric light now spies on the incognito wanderings of the modern Haroun al Raschid.
ness, one almost expected to find chalked crosses added by Marjaneh to the robber cipher which was to have undone the dull-witted Ali Baba.

MOSEL WOMEN PIONEERS IN ADOPTING SOCKS

In a sunny corner, wedged between mud walls, an open-air tailor shop turned snowy masses of white cotton cloth into the latest style of masculine garb to the throbbing song of several hand-power sewing-machines, while a street peddler whose main display was short socks such as Moslem women like, but northern men forswear, stood by and watched.

In another street deft workers were patterning the insignia of some frontier regiment on bright-colored squares of silk with viscous wax. These chromatic nightmares would some day educate distant Yorkshire in the art motifs of the unchanging East. If the East would only remain unchanged! But to voice such sentiments in these hectic times is to suggest sympathy for Gandhi and his followers, who seek at this late day to turn back the hands of the clock to the time when steam, through freedom, went to waste and implements were fashioned in Biblical simplicity.

Then through the shameless street of
the harpies and out into a main bazaar, where the mellow glint of hand-hammered copper suggested Mohammedan ways, just as the more radiant brass of Benares would later signify the Hindu faith.

A crowd was gathered about a handsome man who bore a banner and a wallet, the one proclaiming his ability to prove the sun’s revolution about the earth, the other containing copies of the proof, which he was peddling to the credulous at four annas a copy. Although Einstein had not yet shaken my faith in the old-time planetary laws, I refused the invitation to debate the theorem before that interested mob, even though he generously offered to translate my arguments into Pashto or Hindustani for the benefit of the audience. In Peshawar it is not even necessary to hire a hall, nor is the soapbox essential as a foundation for Utopia.

THE BARBER IS A PUBLIC TORTUREE

At a prominent corner, near the principal mosque and surrounded by the booths of money-changers, who, like Ali Baba’s wife, measure the ancient-looking Afghan currency which here is changed for Indian coins, there is a small kiosk wherein a sloppy fountain soaks a floor deep hid in cast-off pith of tooth-crushed sugar-cane. Its rails are hung with flabby skins which the tanners leave for an ardent sun to cure, and on the sidewalks, safe from the feet of plodding bullocks and slow camel trains, a bevy of barbers practice chin-golf on painted faces, whereon they never make the course in anything like par. The claims of any modern shaving preparation would sound like a fairy tale to those tortured beings whose heads and chins are razed with ruthless lack of emollient aids to a close shave.

A side street climbs to a high tower from which mere man could feast his eyes on a Moslem paradise peopled with houris were it not for the fact that this is well known by the women of the neighborhood, who, when they venture forth upon the flat mud roofs, draw close their veils to shield the modesty which is their all.
No city reached by iron rails can quite express the East, but mud Peshawar, rising humbly from a widespread plain swept half way round with hills, is well worth visiting, even if one approaches it by de luxe express in a first-class compartment from which the very spirit of the Orient is barred until the ticket-taker comes with different voice and asks for "tikkuts" in a dialect which no Western tongue could imitate. The northern end of Main Street is full enough of strange, exotic charm to warrant the trip of nearly sixteen hundred miles, each one of which has interesting features of its own.

AT THE TOMB OF LALLA ROOKH

Between Peshawar and Rawalpindi, Main Street and its attendant railway cross the swift Indus at Attock, where a fort erected by Akbar to protect his Indian holdings, from his brother, Hākim Mirza of Kabul, reminds one that he is on an historic highway. Traffic policemen and corner cigar stores of modernity have not yet taken the places of the forts and caravanserais which marked the cross-roads in earlier days. Here Alexander the Great is supposed to have crossed the Indus on a bridge of boats.

A curve of the road soon hides from view the turbid whirlpool swirling past slate cliffs, on one of which the towering fort looms high, and the train passes between barren fields to a small station near the tomb of Lalla Rookh.

Possibly no other legendary spot, unless it be the corner of the Père la Chaise in Paris where Abelard and Heloise rest.
side by side and sentimental lovers come to deck their graves with flowers, is steeped so deeply in a borrowed luster due to love.

Here, at Hassan Abdal, the Bucharian prince, masquerading as a minstrel, strummed his seven-stringed \textit{vina} and recited a story in which he set forth the beauties of the Kashmir Vale toward which the rove-veiled litter of his beloved one was bound. It was the story of Nur Mahal, the Light of the Palace, and as he sang he gathered inspiration from the eyes of Lalla Rookh, from which looked forth a love she sought to kill because of her betrothal to a man whose unfamiliar image young Feramorz eclipsed.

Not by the crystal pools of Shalimar in Kashmir’s rosy vale, but close beside the shining rails of raucoir iron steeds, there stands the tomb of Lalla Rookh. No one imagines that the lovely daughter of Aurangzeb really lies there. That tiny tomb, laden only with a legendary queen, like the ungainly camel, remains to lend a touch of poetry to a decadent land.

At Agra one may see the fairest monument royal lover ever had erected to his wife’s memory. The Taj Mahal is known to the world as a dream in marble. But the tomb of Lalla Rookh is so lowly a structure that it does not even confine the imagination to material walls. And when one leaves the spot and sees the hurried natives crowding into modern railway cars, he mourns the loss of a resplendent past, when men knew how to love.

RAWALPINDI, ENTREPOET FOR KASHMIR SHAWLS

A short, dull ride brings us to Rawalpindi, where the mail motor is impatiently awaiting our train. If we choose to enter the enchanted vale by mechanical power, we can roll into Srinagar tomorrow afternoon, after having braved the snows of the 7,700-foot pass above Murree. Along those two hundred miles of road we shall never be for long beyond the sight or sound of automobiles, for the patient bullock cannot keep pace with the transportation demands of India’s "Happy
INDIA’S GREATEST CASTE-DESTROYER

To the railway train is due much of the modern breakdown of caste rules and Oriental courtesy: “Each for himself” is the rule beside the tomb of Lalla Rookh, as it is in the subway beneath Trinity Church.

Valley,” circled though it is in winter by snow-clad hills.

But, attractive as side trips are, there are reasons for staying on the main road. Rawalpindi will engage us for a while, largely on account of its being an entrepôt for the soft shawls, the fine wood-carving, and the gaily-colored embroidery of Kashmir. The old rose, magenta, and soft purple embroideries of earlier and more discerning days are now difficult to obtain, and the present trend is toward autumn maple tints and a turquoise blue which seems to reflect the evening light on the dome of Timur’s tomb, far away across the mountains in silken Samarkand.

One can still obtain warm shawls, ample enough to give a Carmen room in which to sway lithe limbs while stamping pretty feet to spirited fandangos, but so soft that they can easily be passed through a wedding ring. The matchless shawls of old, however, are no longer to be found in the market-place. One mass of beautifully blended colors and intricate details, these priceless treasures were elaborated on the loom and were not, like so many of the modern shawls and chadars, simply soft stuffs of wool or pashm, decorated with chain-stitch needlework, ground out on a machine.

IN LAHORE, CAPITAL OF THE PUNJAB

Lahore, the city of Kipling and Kim, is worthy of a story of its own, though the Anglo-Indian genius has already sketched its charm in deft phrases which suggest the very spirit of the place. As capital of the Punjab, Lahore is being beautified with many buildings which retain the spirit of the past and in the planning of which the father of the Bard of the Barrack Room had a hand.

The crowded bazaars, overhung by balconies behind whose lattice fronts bright eyes look down upon a world from which the women are withdrawn, are always averse with life, and out behind the Great Mosque, whose lonely beauty gains impressiveness from lack of teeming crowds, pastoral flocks make one forget the narrow streets, while shep-
THE DARBAR SAHIB, OR GOLDEN TEMPLE OF AMRITSAR

Made of gilt, copper, and marble, this sacred shrine of the Sikhs houses the Holy Book of their faith. There is also a small Hall of Mirrors, where the Guru once sat, which is swept out with a peacock-feather broom. Around this jewel, whose brightness was stolen from Mohammedan buildings in Lahore, lies the Pool of Immortality (see text, page 453).

herds smoke their gurgling hookahs and evening settles down behind bright bulbous domes.

TAKING A PHOTOGRAPH IN THE "PEARL BAZAAR"

Lahore, like many another Main Street city, has its "pearl bazaar," where wait the harpies "who paint their eyes and trap the stranger," where "Flowers of Delight" sit on soft cushions gazing downward to the street.

At one arched window I caught sight of massive earrings and a necklace worthy of a better place. Ascending steep, dark stairs, I sought a photograph of such a dancing girl as dyed the face of Kim so that he seemed a low-caste Hindu boy. There was bargaining—most serious. Amply able to trap a stranger, these modest-mannered women were at a loss to classify me; but once convinced of my readiness to play fair and not take photographs without permission, several of them did what they could to make my photographs worth while.

One furnished a second head chain of soft gold to hold in place the raven hair of the girl whose picture I desired; another lent a nose-ring which she thought would add luster to the portrait; and all aided in arranging the dress of my subject until a natural effect was out of the question. Her fat hands were weighted down with rings, but the pride of her existence was a cheap wrist-watch, which she refused to conceal.

Her hair was neatly parted and looped low above each temple with two chate-laines of soft gold. She wore a white waist, long and with a skirt to it like a Russian shirt, and over this a woven vest of checker-board pattern in mauve and tan edged with purple. Her full trousers were spotless white and her heavy tinkling anklets were marvels of intricate design. Her dark tan socks were wrinkled and faded.

A SOLEMN STRANGER TO DELIGHT

As she sat beside her window looking down into the street, she was a picture
of barbaric showiness and amazing lack of taste. Her eyes were hard; not as of those who repeatedly taste bitter-sweet, but the straight-looking eyes of a man of purpose. The crown jewels of a continent could not have rendered her attractive, yet simplicity might have given her real charm. Priestess of pleasure though she was, she seemed a solemn stranger to delight.

The wrinkled socks and the white waist buttoned high beneath a necklace that would protect a bull dog's throat were too much. I had glimpsed from below a picture of heathen witchery. Confronting me was a being for whom a Milton or a Dante could find no words but prose. I suggested removing the socks and hiding the triangle of white cloth at the throat behind the ugly vest.

To have the socks removed was the work of an instant. Emboldened by this I even tried to get her to lay aside her shiny wrist-watch; but under no consideration would she bare her throat to me or to my camera, even though she wore enough jewelry to hide some modern creations. The old woman of the place understood my wants and finally the cloth was pushed aside, disclosing a very fair throat.

"I tell her foreign womens do so," explained the antique bag to account for her success.

By this time a second girl with a giggle asked that her picture be taken, and again some of the jewelry changed hands. Her eyes laughed, and her vest of soft plum-colored plush reminded me less of a fashionable sport costume at Piping Rock than the checker-board vest of her sister siren.

AT WORK ON A LARGE CARPET IN AMRITSAR

Around the tough warp fibers the woolen yarns are tied with various types of knots. They are then beaten close together with a heavy metal comb and the nap is trimmed down to uniform length. A single American firm buys most of the rugs of Amritsar's leading factory.

A CIRCLE OF GARDENS AROUND THIS CITY OF THIRTEEN GATES

Then up from the street there came a lost and lonely soul, her pock-marked cheeks deep rouged and her sparse hair arranged in grotesque curls plastered to her head. The other women looked down upon her. Even amid such pitiful scenes
THE FRONT STEPS OF THE GREAT MOSQUE AT DELHI

With the coming of the afternoon shadows the red sandstone steps of the Delhi mosque are dotted with color. The whole inclined becomes a bustling bazaar, draped with silks and cluttered with pottery, and beside this truly Oriental scene the itinerant billboards of the local cinemas bespeak patronage and modernity.

of sordid show she was declassé. As though seeking to retain some vestige of my respect, she sadly waved aside the tip I proferred her.

Around the dusty base of the cityward walls of the ancient fort, great herds of water-buffalo stand, baking their parched hides in the sun, but around the city of the thirteen gates there runs a green girdle of gardens pleasing to the eye as well as the body. Only on the northwest is this circle of coolness broken by a dusty expanse stretching toward the Ravi River.

Situated at an intersection of two streets is the Sonehri Masjid, its three golden domes a radiant brightness in the deep shadow of the bazaar, and further on one comes to a square across which is seen the great arched entrance to the Mosque of Wazir Khan, its tiled walls colored in a way that suggests Shakh Zinda, on the outskirts of Samarkand.

AMRITSAR, THE CITY OF CARPETS

Leaving by the fort-like station of Lahore, within whose battlements a few brave men could long withstand a mob and thus protect the railway lines, an hour's ride brought me to Amritsar, whose carpets all the world now knows.

Within the long, low sheds the weavers work with shaggy balls of varicolored wool, and designers draw improved patterns for Oriental rugs from plates published by the Austrian Commercial Museum. In Peking I found a rug-maker copying the knot and colors of a carpet from Merv. In Amritsar several looms were given up to Chinese designs.

As far as India is concerned, Amritsar is not known for its carpets, but as the Mecca of the stately Sikhs, who furnish Shanghai with policemen, the Indian army with its handomest warriors, and the government with many an anxiety.

The stout-hearted Sikhs are a race of lions, each bearing the name Singh. For enduring courage they rank with Richard Cœur de Lion.
The horrors of the year before were still fresh in the memory of the people and I was advised not to go into the native city.

So attractive, however, is the scene around the Nectar Pool and the Golden Temple of the Sikhs that I could not resist the temptation to wander barefoot around the square tank in the middle of which stands the glittering building in which the Granth is housed. It may have been reaction from the advice of anxious friends, but nowhere in India did I find more courtesy and conceive a deeper respect for the people with whom I came in contact than in the sacred city of the Sikhs.

Amritsar is a low-lying city with a bad reputation for malaria, but is second to Delhi as a commercial center of the Punjab. Two religious fairs, held in April and November, did much to spread the fame of the city, and famine in Kashmir drove expert weavers to Amritsar, there to establish an extensive industry in shawls.

It was about this time that the Kashmir shawl furnished the fabric for many a scrafar's romance and the shoulder covering for the elite of Europe. The demand was so great that 4,000 looms were soon competing for a highly remunerative trade. The fickle fashions of Europe changed, bare shoulders became popular, the shawl industry suffered, and soon a thousand looms could turn out all the loveliness the world demanded.

But Amritsar, like Nizhni Novgorod, had gained a reputation, and trade continued to come to the waterlogged city of the mesopotamia or doab of the Punjab. From beyond the Hindu Kush came silk goods which the people of Amritsar copied so successfully that now Kabul looks south instead of north for such silk as Bokhara formerly supplied to the trade mart in the midst of which the Sikhs raised their holy temple.

A DENTAL STUDIO ON DELHI'S CHANDNI CHAUK

The Delhi dentist is not restricted to humorous journals and fiction magazines for his waiting clients. He shows how the job is done and pictures a benevolent goddess in place of the imp who is prodding one's jaw with red-hot needles.

WITHIN THE SIKH TEMPLE, A SCENE OF BEAUTY

The Sikh temple inclosure seems formidable at first. Not only must one re-
move his shoes, but it is forbidden to carry any tobacco inside the gate which leads to the sacred pool. But once inside, the beauty of the scene soon wins one's admiration. The women are unusually handsome and their broad trousers of wine-colored velvet bear glittering appliqué fleur de lis figures in pure gold thread. Their filmy scarves, like clouds of mist, are marked with bands of gold or silver thread, giving them a rich appearance.

A marble causeway with rows of gilt lamps on each side leads from a small entrance gateway, beside which a handsome doorman with a heavy silver mace stands guard, to the Golden Temple itself, radiant as the noonday sun in the midst of a turquoise sky.

In the center of the temple is a widespread cloth upon which a shower of pilgrim coins is continually clinking. The rupee I tossed down won for me a reward of rock candy fashioned in the form of a bowl. Upstairs a noble-looking Sikh was reading the Granth, or Holy Book. A strong side light fell on his fine face and snowy hair and I wanted to take his picture. That was forbidden, but I was taken to see the manager, a high priest to whom all things are possible.

He admitted that he could give me permission, but refused, not on the ground that it never
THE MIRRORED BEAUTIES OF THE TAJ MAHAL.

As though the loveliness of the Taj were not enough, the landscape artists provided a silver waterway lined with fountains, behind whose spray a second Taj appears reflected as through a silken veil (see text, page 459).
had been done, but because to do so would, in his estimation, be a betrayal of trust.

"I was given to believe that anything you sanctioned would be all right," I said.

"Quite so," was his reply, "but one in a responsible position must heed the superstitions and desires of even the most ignorant." Had he been a politician rather than a religious leader, he could not have been more considerate of his constituency.

**THE SIKHS ARE A REFORMED SECT OF HINDUS**

It would be proper to call the city of immortality the Jerusalem of the Sikhs rather than the Mecca, for the Sikhs form only about one-ninth of the population, one-half of which is Mohammedan, while the Hindus outnumber the Sikhs four to one. The Sikhs are a reformed sect of Hindus, disciples of the Gurus, who were their religious leaders. The sect was founded by Nanak, a native of Lahore, late in the fifteenth century. They denounce idolatry and have abolished caste.

That these fierce fighters are not intolerant is shown by the fact that one of their number has built a Mohammedan mosque and a Hindu temple in Rawalpindi, and that their sacred courts swarm with Hindus, Moslems, Lamaists, Buddhists, and Aninists.

In one part of the grounds some naked
fakirs basked in the sunshine of publicity. Near them some Bhootias had laid out a camp, from which they were coaxed by a curiosity to look at each other through my camera. Several of them strongly resembled the Chinese of Shantung in winter garb. There were some others whom I could not classify, the women looking like certain Indian women of South America, with large rings in their ears. Evidently the Golden Temple is a magnet which draws many types of visitors, and well it may, for the enclosure, together with the crowds it attracts, is one of the splendid sights of India.

TOURISTS FLOCK TO DELHI

When it comes to visitors, Delhi stands in a class by itself. Benares is a religious edifice with running water laid on. The Mela ground at Allahabad is a hive of Hindu pilgrims. But Delhi attracts great numbers of visitors whose interest is not in temple or mosque, but in the historical buildings of the fortress.

If the crowds I have seen there on two visits to India are fair samples, there is a lively popular interest in the old buildings erected under Shah Jahan. During the entire time that the buildings are open, bright-colored crowds of natives follow Indian guides from place to place and listen attentively to the lectures.

Those of us who think of India as a tourist land should not make the mistake of picturing every interested traveler as a helmeted foreigner with stentorian shoes. Much more fitting to these scenes of past splendor, when the Peacock Throne stood in the Hall of Public Audience and when the private rooms echoed to the laughter of graceful brown women disporting in white marble pools, are the Indian women whose high-arched feet caress the smooth floors and whose jingling anklets and swishing skirts edged in gold braid suggest the glory of the olden times.

The Hall of Private Audience in the Delhi fortress is not only the most splen-
did interior outside the Library of Congress, but is also a great help to writers. The Persian poet once said of this room:

"If Paradise can be on the face of the earth, it is this; oh! it is this; oh! it is this." Which is ample indication that early poets, like the author of Lalla Rookh, were paid by the word, and few indeed are the writers since who have overlooked this redundant money-maker.

**LIFE IN A BULLOCK-CART CAMP**

One who goes outside the present city of Delhi to the site of some former or future capital is almost sure to come upon a bullock-cart camp. On primitive ovens the women bake bread while the men sit around and smoke or lie corpse-like under quilted blankets. Children play around the high wheels, and under the heavy body of the cart a baby may be seen sleeping in a hammock.

The costumes seem to be chosen to contrast with the arid earth. Sunbursts of red and orange bear blinding gleams where tiny mirrors have been worked into the pattern, and the diminutive bodice is decorated with bright green and blue.

Big feet and a silhouette suit don’t go well together: but even the capable feet of an Indian peasant woman borrow grace from a skirt so full that when laid out on a hillside to dry it looks like a very fat doughnut with a very small hole for the waist.

Along the roads outside Delhi in winter one will see patient donkeys with bare-
legged drivers who look for all the world, or at least two thirds of it, like Syrian muleteers skirting the Lebanon.

WHERE INDIA'S CAPITAL IS BEING BUILT

So many capitals have risen and fallen above the dusty plain between the present Delhi and the Kutb Minar that some feel that the Government of India has gone out of its way to tempt fate. The buildings of the new capital are to be immense. After we had lost our way among the substructures of the wide-stretching pile, my companion, a government official who lives near by, discovered a Court of Victory filled with enough German guns to have reduced Verdun had it not been for French valor. He admitted that this great space was new ground to him. It must be as hard for officials of the Government of India to go out from the attractive city to this dusty plain as it was for the American federal officials to follow John Adams from pleasant Philadelphia to the wilderness which was to become the city of Washington.

To me, the most interesting structures on the new Durbar site belong to the building-block school of architecture, and any four-year-old could copy them with complete success. The wide plain at Delhi is swept by hot winds charged with dust, and if these thousands of brick wells succeed in protecting the tiny trees which they inclose, these unimposing piles which mark out the future roads may prove more useful than the Durbar Hall itself. If sheltering trees can be made to grow along these branching avenues, they may come to rival the cryptomeria avenue at Nikko or the poplar portals to the capital of Kashmir. How few are the builders who have planted trees and encouraged Father Time to cooperate with them instead of letting him pick away with feeble but persistent fingers at decaying piles of brick and stone.

AT AGRA, IN THE SHADOW OF THE TAJ MAHAL

It is hard to leave the lovely fort, the imposing mosque, the colorful river bank, and the lively Chandni Chauk, to say nothing of the scenes connected with the Mutiny. But Agra lies ahead and even Delhi must give way to the Taj Mahal. All that I can say about the Taj Mahal has long since been said. Its loveliness, enhanced by green gardens and mirror-like water-ways, makes it impossible to describe. Pages of type only prove the futility of words to visualize it. One approaches it across a golf course, and the spell which the incomparable structure has, even over those long familiar with it, can be understood when I say that golfers have been known to take their eyes off the ball when driving in the direction of the Taj dome. Never was there a better or more beautiful alibi for indifferent play.

Visitors to the Taj are marvels at memorizing; and on a busy day one can hear the same sentence repeated from four sides at once; but it took a woman to show how futile is the task of memorizing specifications.

On each corner of the main platform stands a white marble minaret with three balconies. Several times I heard one man speak of the symmetry of the tomb, of the ground, of each detail. To hear his enthusiasm over the perfect balance of the place, one would suspect him of being one of those ambidextrous artists whose right hand knows so well what his left hand is doing that it can exactly imitate it.

TESTING THE SYMMETRY OF THE TAJ

I caught up with them later, when we were on the second of the three balconies of one minaret. He was leaning outward over the low balustrade, hanging onto his hat and looking upward to see how much more he would have to climb to reach the top. It was a risky piece of acrobatics and evidently his wife feared for his life. The marble platform, ninety feet or so below, looked hard.

"Henry, didn't you say that these grounds were perfectly symmetrical?"

Red faced from his bending, the husband glared at his patient wife, but managed to keep his voice respectful.

"Yes, my dear. Everything here is symmetrical."

She pointed to a twin minaret across the platform.

"Then, why don't you judge the distance to the top of this one by comparing it with that one over there?"

Lovely as is the Taj, fairylke as is the view of it from the fort in which his son Aurangzeb imprisoned Shah Jahan, beau-
A ‘SNAKE-CHARMER OF BENARES’

As though they would add to the gruesome effect of the holy city of Kashi, there are always snake-charmers to be found along the bathing ghats. Not only snakes but scorpions and other gentle pets are proudly exhibited to the curious.
tiful as are many of the buildings which make the Agra citadel a mahogany-colored jewel-box, filled with bright bangles. I was much impressed with the tomb of Iltumud-ud-daula, father of Nur Jahan, whom Moore made famous as Nur Mahal. Here marble is used for screens which rival in delicacy the ancient filigree jewelry of Greek and Etruscan goldsmiths.

Sunset and evening star furnish the soft light which bathes the Taj Mahal in a fairy glow, but it is the splendor of the moon that makes the hotel business of Agra fluctuate like a lunar see-saw. Nearly every one wishes to see the famous mausoleum at the full of the moon, but he who is not susceptible to the glory of its light can well afford to plan his stop in Agra at a time when its lure does not force him to share a tent instead of monopolizing a comfortable room.

To add to or deduct from the Taj Mahal would seem blasphemy; but Lord Curzon achieved the miraculous. Above the twin tombs of the world’s most monumental lovers there swings a lamp from Cairo which the English Raj caused to be hung in the matchless mausoleum in memory of the woman who was his own Mumtaz-i-Mahal.

As one steps from the bright moonlight into the yawning darkness of the great gateway, he sees a tiny light set in the ethereal face of the world’s loveliest building. Instinctively one repeats the Shakespearean simile: “So shines a good deed in a naughty world.” Brighter than the radiant marble tomb which frames its golden glow, this spirit-lamp sends forth its gleams to shoot one line of golden glory through the silvery fabric of the peerless perspective of green gardens. There, lightly hovering above the marble cenotaphs of Shah Jahan and the “Pride of the Palace,” his beloved, the seraph flame shines like the sweet soul of Arjmand Bano, who, loving much, was loved so well.

ALLAHABAD DURING A FAIR

Allahabad is ordinarily an uninteresting city; but during the mela it takes on the odor of sanctity and dust because of its position between the two great rivers, the Ganges and the Jumna.

Once a year the Magh Mela is held. Once in twelve years the Kumbh Mela buries the sands of the alluvial plain beneath a flood of human beings. A mela is a religious fair, but mêlée is as good a word. At the annual fair the number of pilgrims on a given day is only a quarter of a million; but in 1930, if all goes well, a million and a half pilgrims will come hither to stir up the fine dust, skid through the slippery clay, and bathe in the chocolate-colored waters of the sacred rivers.

NO CARRIAGES ALLOWED.

During a mela the whole countryside is placed under strict control. No carriages are allowed in the grounds. Sanitation becomes, pro temp., a serious matter. Photographing is forbidden, without special permission and a bodyguard.

Before the January fair takes place a village of rush shelters springs up on the low shore, which the receding water has left parched and cracked into great squares. Flags, which may or may not mean anything more than display, but upon which most of the dramatis personae of Mother Goose and the Jungle Books appear, rise on bamboo poles whose assertion of individual independence gives an inebriated look to the row of fluttering pennants. No two have the same slant. A corn field is a miracle of geometric precision compared with this awkward squad of waving flags.

Holy men, dressed in a gray coat of ashes, chat with one another or sit in silent meditation, while others, sheltered from the fierce sun by a rush screen or protected by a cloak or blanket hung to sunward, chant psalm after psalm from their holy books, wedged like a Koran on a small stand, while they accentuate the monotony of their tones by strumming on a musical instrument which seems to be a hybrid of mandolin and soup ladle, much the same type of instrument that one finds, far away across Persia, pictured on the ancient Hittite ruins on the upper Euphrates.

Yellow-faced gods in groups of four or six spread their tawdry silk skirts in mute appeal for largesse in coins of microscopic value. Over the whole ant colony of massed humanity there hangs a yellow dust cloud stirred up by myriads
of bare feet and awkward slippers with huge hanging tongues. Stooping street-sprinklers with swollen water-skins weave back and forth, rescuing a wide roadway from the dusty strand which in summer is hidden beneath the murky waters of the sacred rivers.

Out beyond the line of religious boats, each with its tinsel shrine, the pilgrims seek the place where the cleansing flood of the Jumna enters the sacred Ganges, and coffee-colored rivers make a coffee-colored people whiter than snow—in their own estimation.

Like other religious fairs, the Megh Mela at Allahabad is a mecca for money-makers, and the principal thoroughfare is lined with mat-shed shops for the sale of sacrificial brassware, tiny brass idols, holy berries made into dark necklaces, and shining brass water bottles, zoned with mellow-tinted copper, in which holy water can be taken to remote parts of India by credulous people. Here and there one finds men with small furnaces full of heated pitch, sealing the water vessels so that not a germ or an atom of holiness can escape.

I had entered the grounds with my camera without knowing that photography was forbidden, and near the river I came upon an old man upon whose time-furrowed face many cabalistic signs were painted.

He was reluctant about having his picture taken. Then a policeman came up and said that photography was forbidden.

Evidently the modesty of my time-honored friend had been false or assumed, for at this sign that he could not have his picture taken he began to rail at the policeman in terms which defied, but did not require, translation.

Being endowed with an American respect for agents of law and order, I started to put up my camera; but by this time a crowd had gathered and it was evident that the cabalistic signs on the pilgrim were far more potent than any symbol of police authority, and not only were the three policemen who had joined the first officer overruled by the pilgrims,
but I was urged to take the old man's picture under the very eyes of those who sought to prevent it. Verily, the holy man is a force in India, especially at such a time and place as the Megh Mela at Allahabad.

**BENARES, A CITY OF PERPETUAL PIETY**

From Allahabad to Benares is a step from periodical pilgrimage to perpetual piety. Benares is enough to sicken a surgeon. Mark Twain has described it so truthfully that subsequent writers have had the choice of quotation or paraphrase.

It is a city of narrow streets in which the heavy scent of jasmine flowers becomes a stench and the holiest spots: foul retreats. Luckily, there are a few places where the foreigner is not allowed to enter. But the sight of flower-decked bulls crowding spindle-shanked children from the streets is enough to remind one that he is in a land where human life is cheap, but where a riot may be started by the killing of peacock or pigeon or monkey.

Benares is a crescent waterfront on a filthy stream backed by a malodorous city. According to Mark Twain, a self-respecting germ won't live in Ganges water, but this does not prevent the people from bathing in it, drinking it, washing their clothes in it, and tossing half-burned bodies into it, to float about in the backwaters around some ruined masonry until flood carries them down the stream.

![Photograph by Maynard Owen Williams](image)

**THE BURMESE SMILE IN AN INDIAN SETTING**

At Bodh Gaya, whither Buddhists flock from many quarters, the merry smile of the Mongoloid Burmans can always be seen. The two young nuns had just been initiated and the one in the middle still felt the responsibility (see text, page 465).

Across from the city is a low plain of soft sand, along whose shoreward edge a row of vultures can often be seen. They are lazy beasts. A vulture's life in Benares is too easy and opulent to be admirable.

For three miles the river front is lined with a succession of ghats and palaces which make it a vision of beauty. Travelers usually embark on small boats which are rowed up and down the Ganges, giving intimate views of the bathing and other activities. From this vantage point the city is of surpassing interest.
My first visit was in the heat of summer, and the swollen Ganges lapped the fallen masonry and threatened to tear us away from the scene; but in winter the ghats or stairways where the bathing goes on are much higher and more impressive and the river is easily navigable with little effort on the part of the oarsman.

A POPULAR PLACE IN WHICH TO DIE

Benares is a popular place in which to die. Thousands of Hindus arrive with one foot in the grave, happy to be able to put the other into the sacred river until death comes to bless them who die here. Funeral fires are always burning, not only on the regular burning ghat, but at other places along the stream. The procession of corpses seldom ends. Embers from the pyres drop like lava on the native sweets and fruits which are sold along the roadways.

Occasionally there is a happy touch to the scene. On one occasion I saw two young women, who by any standard would be called beautiful, stepping down into the brown flood, which harmonized well with their satin-skinned bodies; but just behind them came several widows with shaven heads and shrunken breasts, their whole bodies bleached as though widowhood were an anemic disease which robbed one of health as well as happiness.

The widows who come to the Benares ghats are almost convincing arguments for suttee or progress. Caught between the two millstones of a law which makes their death on the funeral pyres of their husbands criminal, while it does not save them from unending bitterness, they can well curse the lot that has been forced upon them and pray that Mother Gunga will some day understand and take them to her swelling bosom.

Benares is famous for its brasswork and its kincobs or kamkhwabs, resplendent silken fabrics woven with gold and silver thread, thus becoming veritable cloth of gold. India is using less of these fine textures, but it would seem that the West might adopt them for many things. A handbag of Benares brocade surpasses in loveliness the best bead bags that I saw in the luxury shops on Kartnerstrasse in Vienna.
The West is never tired of ascribing to the East different standards of thought and action from our own. For the Westerner, this difference is all in his favor. I owe my possession of a lovely Benares scarf to the flexibility of personal contact, in which the West is so lacking.

SHOPPING WITHOUT FUNDS IN BENARES

Heavy expenses and difficulty in the transfer of money left me almost penniless in Benares. Had my time been longer, this would have been anything but a calamity. But my schedule was made up in advance and the banks, in spite of enough official letters to choke a mail-box, could advance no funds.

The most prominent firm of silk merchants in Benares had earlier offered to let me have some goods, for which I could pay them when my money arrived. It was Saturday, and to wait for the bank to open on Monday would disarrange my plans; so I went to the silk store, told the manager that I had no money and no checking account in India, but that I would purchase a better scarf than I could afford if he would advance me enough money for two days’ expenses.

The scarf was quickly wrapped up, a generous supply of rupees was placed in my hands, with offers of more if it would help, and I went out into a large world with a gold-thread scarf under my arm, money in my pocket, and a surety that two days had been saved by Oriental dealing.

At the station at Benares the hawkers sell small marble paper-weights reading “God is Love” and “Time is Money.” Benares gives strange interpretations to both statements.

At Sarnath, near Benares, Buddha first preached his doctrines. But for present-day Buddhists one must go beyond the Brahmaputra or climb to the Himalayan foothills, except for the small group in the rest-house of Buddh Gaya, near the sacred pisol tree where Sakyamuni gained freedom from the unceasing circle of rebirths. Asoka is said to have erected a temple here in the third century before Christ, but the present pyramidal temple, restored forty years ago, probably does not antedate the seventh century of our era, when the Chinese pilgrim Huen Tsiang saw it.

Hindu pilgrims who visit the temple of Vishnupad in Gaya also visit the famous Buddhist shrine, but after Allahabad and Benares, Hindu pilgrims have lost something of their novelty. I found much more interest in the Burman and Himalayan pilgrims who were staying in the rest-house which the Gaya District Board has provided for Buddhist visitors.

ENTERTAINED BY A HIMALAYAN PRINCESS

A princess from the Himalayan borderland was staying there on the day of my visit. Her son spoke excellent English, and together they made me very comfortable; but even more interesting were the young Buddhist nuns, whose shaven heads proclaimed the ceremony they had just completed, but whose laughing eyes marked them as creatures apart from the sullen Indians who live in this region. Buddh Gaya is charming because of its peaceful quiet, just as Benares is interesting because of the constant thrill of life and the eternal pall of death which hangs with the smoke of the funeral pyres above the busy city.

CALCUTTA, AT THE END OF THE STREET

After Lahore and Benares, after the gay colors of Amritsar and the dun crowds of Allahabad, Calcutta is of little interest. The docks teem with life in spite of inaction resultant upon the mystery of foreign exchange. There is a race-track more famous than most, and one night I attended the Duke of Connaught’s ball in the Government Building, to which a Nepali nobleman with a bodyguard in headdresses heavy with pearls added an exotic note to an affair which was democratic but commonplace.

The district made infamous by the Black Hole is now as imposing with solid-looking bank buildings as any Occidental financial district, and no more so. Kali-ghat almost, but not quite, reminds one of Benares. The theaters almost, but not quite, recall Picadilly Circus or Times Square. Yet Calcutta, queen city of India, is proud of herself. “Second City of the Empire” is a phrase which is always left in type by the Calcutta papers.

The Maidan at Calcutta is a great breathing space for a breathless city. It has a tall monument that looks like a prodigal light-house which wandered over
BATHING AT CALCUTTA'S PRINCIPAL HINDU FANE

In Benares the fanatic and ignorant worship with their hearts in their mouths. At Kalighat the half-Europeanized babu worships one of Hinduism’s most repulsive demons with his tongue in his cheek. Here young lambs are sacrificed to the destroying goddess, Kali, whose name is revealed in the modern name of India’s queen city.

from the Hooghly, and it is the most conspicuous stock farm in the world. Sheep browse here and there, cropping the grass of cricket path or soccer field; goats run about, showing an independence unthought of by their meeker cousins; thoroughbred horses, cared for by picturesque grooms, are led back and forth in plaid blankets; pedigreed pups are cared for by men whose looks would entitle them to more manly labor; pet birds are carried about as in China and fishes are raised in ponds. Only the native babies seem to grow up by themselves.

Calcutta, of all India’s cities, has suffered most from commercializing tendencies. Beside the store where Benares brocades are sold, American shoes shine lustroously under electric lights, and close to the curio shop where Tibetan temple treasures are exposed for sale a costly cabaret offers “jazz” to jaded pleasure-seekers.

One hazy morning, before the air has begun to dance in the heat, we slide down the treacherous Hooghly in a spotless little ship, with a sweet-voiced soprano singing in the airy saloon. We pass much shipping, gaily pennoned in honor of the Duke, who is to open a new dock. It is hours before we emerge from the muddy waters of the stream, and our prow piles up crystal cascades against the deep blue of the bounding sea.

Down the coast lies Burma, the land of soft-colored silks and smiles, of elephants piling teak, and the silver tinkle of the temple bells. We lie down, happy in the thought that soon a golden cone spearing the sky will tell of gaily-dressed worshipers surrounding Shwe Dagon.

And after Burma, Colombo, Marseilles, Paris—home. But happy is the thought that we cannot forget the piles of carpets outside Edwardes Gate, the gleam of the golden temple in the balconied streets of Lahore, the Friday worshipers in the Delhi Mosque, moonlight at the Taj Mahal, the hot sands of Allahabad, the bathing ghats of Benares, and the golden
trumpet-flowers which match the yellow robes of the Buddhist priests at Buddh Gaya.

India is a continental stage on which many dramas are constantly being enacted. To the tourist it is an unparalleled spectacle.

One has frequent occasion to think that the vast peninsula is an unbroken succession of dull tones; but the next instant a brown-skinned man, dressed in bizarre tints, radiates color in floods of light or points his brilliance against the dim background like a circus poster on a mud wall. When the grays and browns of countryside and complexion seem most deadly in their monotony, the glint of copper and brass, the shine of silver anklets, the shimmer of silk, the glitter of nose beads or earring breaks in on one’s consciousness as insistently as reveille in the midst of deep sleep.

Nor does India depend upon color alone. It discharges sensory stimuli in broadsides. When color is for the moment lacking, there is movement, sound and smell. And behind it all there is the atmosphere, which seems almost tangible in its intensity.

Nine-tenths of India is monotony, lassitude, silence. Yet so compelling is the spectacle that, even when time has dulled the impacts that color and sound and smell have made, one is still reminded of vividness such as one finds in the screeching of lustrous green parakeets amid the jasmine flowers at Shalimar, when the setting sun has made an upturned cauldron of the heavens and the placid pools become smooth mirrors reflecting a chromatic explosion.

The native seldom has a chance to leave the stage and view life from the gallery or pit. To the great majority, existence is a drama the magnificence of whose setting is obscured by the poignancy of its tragedy. A white-hot sun is the floodlight for a play, with the fickle monsoon as its hero and with famine as the sleepless villain. When the monsoon fails, the horizon of hunger contracts until famine shrouds its victims in an uncanny influence to which the bravest must tamely submit.
A THING OF BEAUTY AND OF USE FOREVER: ONE OF THE DAMS OF RAJPUTANA

The waters of Raj Sambhar, an artificial lake of great depth, are imprisoned by a marble dam extending nearly three miles. This magnificent engineering structure was erected by Rana Raj Singh in 1661, following one of the most terrible visitations of famine and pestilence known in the history of India. Ten years were required for its construction (see text, pages 476 and 477).
THE MARBLE DAMS OF RAJPUTANA

By ELEANOR MADDOCK

With illustrations from photographs by the author and by courtesy of Prince Bhopal Singh

TIME is not reckoned in India by years, but rather by centuries; in dealing with the rise and decline of her dynasties, buried one above the other under the restless sands of her five rivers. Yet, in accordance with the cyclic law which sweeps the tide of progress westward, old footways survive, leading back to the "ancient days of art," with signs along the way for those who will stop to read them.

When the first Mohammedan invasion poured into India through the vulnerable passes of the Himalayas, those great guardian barriers of the north, the followers of the Prophet found states and cities inhabited by thirty-six royal races of Indo-Aryans, with a civilization which included a knowledge of constructive and mechanical arts, of cosmic laws, of certain forces of nature and how to use them, much of which has yet to be acquired in modern times.

But, great and powerful as were these Hindu states, they were overthrown one after another when the Moslem hordes swept down upon them. Some, less able to withstand, submitted to their new masters; others, daring anything to escape the barbarians, retreated from their fertile plains to a wild country less tempting to the foemen's greed, bordered on the northwest by the waterless sands of the Great Indian Desert.

Racial Remnants Establish "Land of Princes"

Whoever has traveled in the Bernese Oberland of Switzerland needs no description of the Aravalli Hills of Rajputana, whither, among the mountain fastnesses and ravines, spanned by natural ramparts, the remnants of the thirty-six races retired to escape the hated invaders. Still possessed of vast hidden wealth and resources, they established the different states of Rajputana, or Rajastan, the "Land of Princes," raj meaning royal and than a dwelling.

Rajputana may be said to be the heart of India, first because it occupies the central area, and again by reason of its being the exclusive territory of the Rajputs, the proud survivors of the old stock and flower of the Indo-Aryan race. Of the various states ruled by native chiefs and princes, Mewar is known as Udaipur: Marwar as Jodhpur; Amber as Jaipur. Others are Bundi, Jaisalmer, and Kotah, with more of lesser importance.

While the Rajputs claim descent through the solar dynasty, the Sesodias, or Gahlots, are the oldest and purest race, of which the Maharana of Udaipur and Mewar is the premier. He is called the "Sun of the Hindus," and by virtue of his exalted family tree, planted by Rama, the deified hero of the Mahabharata, he takes precedence over all the maharajahs, princes, and chiefs of India and is the only one bearing the title of Maharana. In Sanskrit, Maha signifies great, and Rana was the title used by the old Sodha kings.

RAJPUTANA, THE COCKPIT OF INDIA

Rajputana was drenched with blood during the wars fought by the Rajputs to preserve their lands, purity of race and their women from the Mohammedans, who by this time had overrun nearly the whole of India.

James Tod has told the story in "Annals and Antiquities of Rajasthan," to whom Rudyard Kipling alludes in "Letters of Marque," saying: "If any part of a land strewn with dead men's bones has a special claim to distinction, Rajputana, as the cockpit of India, stands first. . . . The tangled tale of force, fraud, cunning, desperate love, and more desperate revenge, crimes worthy of demons, virtues fit for gods, may be found by all who care to look in the book of the man who loved the Rajputs and gave a life's labor in their behalf."

Mewar, though the most important of the Rajputana states, is the least known
KOMULMIR, CHIEF OF THE THIRTY-TWO FORTRESSES BUILT 300 YEARS AGO BY RANA KUMBHA.

Bastioned walls of enormous strength wind and double around the hill until they surround the Cloud Palace at the summit. Secret chambers, treasure vaults, and reservoirs for storing water are hewn out of the solid rock. Notable sieges and battles between Rajputs and Mohammedans centered here, as did also the episode of the "Rajput Nurse," immortalized in Sir Edwin Arnold's poem (see text, page 480).
THE TEMPLE OF EKLINGI, WHICH, ACCORDING TO A HINDU SAYING, "LIES LIKE A TONGUE BETWEEN THIRTY-TWO TEETH"; RAJPUTANA

This ornate structure represents the accumulative work of a long line of the "Sun Born" kings. The countless number of "lidded" pyramidal edifices are all of white marble, sumptuously carved, with no two alike, yet all conforming in general outline (see text, page 479).
The sculptor has depicted the great beasts with upraised trunks trumpeting to the rising sun.

to European travelers. Yet it contains some of the chief wonders of India. The white marble lake-palaces of Udaipur are unsurpassed. The sculptured ruins of its old capital city of Chitor, covering the top of a sheer rock ridge, four miles long and four hundred feet high, shaped like a monster dreadnought, are unlike any others, in a land where interesting ruins are common.

Locked away in the Aravalli Hills are marble palaces, temples, and fortresses set on their topmost peaks, with two artificial lakes held by great dams of pure white marble, which very few men and only two European women, according to local tradition, have ever seen.

You can travel from Bombay to Delhi without change, skirting the borders of Rajputana, but if you glance at a map you will notice that there is only one railroad in the state of Mewar. It is a single track, narrow-gauge line which branches off the main line at Chitor and runs to Udaipur, a distance of 60 miles. Apart from these two places, Mewar is inaccessible to travelers, except through the courtesy of the Maharana of Udaipur.
THE MARBLE ROOF LATTICE ON THE “WIND PALACE” OVERLOOKING JAI SAMAND

Here the ladies of the zenana (seraglio) could “eat the air” without their veils, and here Jai Singh used to sit and study the constellations. He built the “Pink City” of Jaipur, which also has a wind palace and a strange old astronomical observatory.

Each year His Highness makes a trip into the Aravallis to worship at the shrine of his ancestors, at Eklingi, and for the shikar, or shooting, accompanied by an entourage including bullock-carts and camels carrying tents and provisions, a small army of servants, and courtiers riding elephants, and the celebrated Arabian horses of Kathiawar, “with mouths that can drink out of a teacup.”

A VISIT TO THE “SEA OF VICTORY”

When my husband and I were state guests at Udaipur recently, we accompanied His Highness on such an expedition. We went first to Jai Samand (the Sea of Victory), or Dhebar Lake, an artificial body of water ninety miles in circumference, with innumerable lagoons winding among low-lying mountains.

This lake has been slowly filling and extending for two and a half centuries, ever since Jai Singh, the Rajput king who built the “Pink City” of Jaipur, imprisoned a mountain stream behind a colossal dam over 1,000 feet long, with flights of white marble steps extending the entire length to the water’s edge. Along the top are fairy-like pavilions, with a temple and summer-house at each end. On jutting buttresses six half-sized marble elephants, with ceremonial trappings, stand with raised trunks, as if trumpeting to the rising sun (see p. 472).

On a height of 700 feet overlooking the lake, Jai Singh set up a three-storied marble palace surmounted by open-arched pavilions. On the face of the three stories are exquisitely carved overhanging balconies, set so close that their projecting roof-slabs touch (see p. 474).

THE WIND PALACE, A PLACE OF SONG AND SCIENCE

On the crest of another mountain, situated where it cannot be photographed and accessible only on an elephant or on horseback, by a winding corkscrew road, is another three-storied white marble structure, that at once suggests what it is—a splendid royal zenana (seraglio), with an expanse of glistening walls set with small pierced marble grilles.

This is the “Wind Palace,” which Jai
THE WHITE MARBLE DAM AT JAI SAMAND

This artificial lake was formed two and a half centuries ago, when Jai Singh, the Rajput king, impounded the waters of a mountain stream. The marble palace, on a height 700 feet above the dam, is surmounted by open pavilions and projecting balconies. Jai Samand is over ninety miles in circumference, including its winding lagoons, and is one of the largest artificial lakes in the world (see text, page 473).
THE KING’S PALACE AT CHITOR

At the left of the foundation is partially visible the sealed opening to the subterranean rock vaults where thousands of Rajput women, at the third sack of Chitor, destroyed themselves rather than fall into the hands of the Moslems (see text, page 398). Legend says that when the city finally fell the infant son of the slain Raja was saved from destruction by his nurse, who loyally substituted her own child for him.

A JAIN TEMPLE AT CHITOR DOOMED TO DESTRUCTION BY A TREE

When the first twig of the sinuous Peepul (sacred Bo Tree) worms its way through the walls, a structure is doomed, as the rending power of its insidious growth is tremendous. This Jain temple, one of the oldest in Chitor, has a healthy parasite tree growing inside and already a portion of the beautiful pyramidal dome has been torn away, the destruction of the remainder being only a question of a few years.
Singh is said to have built for Rani Comala, his queen, but it is more probable that it was inspired by his romantic passion for a "nightingale-throated" Kashmiri girl and his researches in astronomy. The roof court of the Wind Palace is surrounded by a lofty open lattice, where the exclusive purdah ladies could "eat the air" without their veils—an ideal spot, too, for studying the constellations while listening to the sobbing music of the old-world zimswep by henna-stained finger-tips and to the soft swish of the silken screens flung outward to the night breeze.

It requires the poetic imagery of the East to depict these dream palaces, which, although swept and garnished by caretakers, have stood empty for a hundred years. Their wild, uninhabited surroundings, with range upon range of hills melting into a sapphire haze, and their ethereal situation between earth and sky, render detailed description flat and colorless. Seen from a distance, in the vivid radiance of an Indian moon, the lattice arches gleam like windows of carven pearl reflected and magnified in the pellucid waters of the lake.

Jai Samand, because she lures and tricks the beholder by phantom mirages, is called the "Face of Mewar"—a face that photographs itself forever on the memory.

RAJ SAMAND, A BEAUTIFUL COMPANION LAKE

Only twenty-five miles from Udaipur, yet a day's journey on horseback or by elephant across wastes of pink sand strewn with boulders of rose-veined marble and dusty thorn cactus, is Raj Samand, another artificial lake, the munificent work of Rana Raj Singh at a cost of $5,000,000, and this, too, at a time when labor was cheap and the material lay in convenient quarries. Like Jai Samand,
A PORTION OF THE TEMPLE TO BRAHMA AT CHITOR

This magnificent pile is recognized as one of the most beautiful specimens of pure Hindu carving in India.

its waters were gathered from a mountain stream, and, while not as large in area, it was a far more stupendous achievement.

The enormous pressure, due to the great depth to which the water would eventually attain, must have been foreseen, as the Raj Samand dam forms an irregular segment of a circle, extending for nearly three miles. It, also, is of white marble, endless tons of it, all faced and polished. It is buttressed by thick ramparts of earth, which, had the builder lived to complete the work, would have been planted with flowering trees to form a promenade.

Here three terraces of steps descend to the water. On the lower tier rise four graceful and elaborately carved Hindu arches, of a peculiar and distinctive design. Dividing the expanse of steps, six broad platforms enclose cool twilight spaces underneath. Marble terraces extend out over the water, supporting three twelve-pilared pavilions, where royalty used to sit after the bath (see page 468).

A walled fortress, with the dome of a white palace rising from the center, crowns a sloping flat-topped mountain above the dam. At its foot is the temple of Kankroli. Its position in the somber shadows of overhanging rocks detracts from its actual size and dignity, yet not from its importance as the shrine of Hanuman, guardian and protector of the dam, a startling four-faced and manyarmed statue of Agra marble highly decorated in gold and colors (see p. 478).

...BUILT TO RELIEVE A STARVING PEOPLE

Lake Raj Samand, including the temple, was a famine work which took ten years to build. But, magnificent, costly and useful as it is, it derives its chief beauty from the compassionate motive of the king to relieve the misery of a starving population, and to render impossible for all time another such visitation of famine and pestilence as swept over Mewar in 1661.* During the first years of Rana Raj Singh’s reign.

A literal translation from the chron-

* Those familiar with history will recall that during the years 1661 to 1665 plagues and pestilence raged in many parts of the world, notably the Great Plague of London.
icles of Raj Singh reads: "That instead of rain a pestilential vapor blew from the west. The streams dried up, fishes became extinct. Cities were depopulated, the seed of families lost. Trees were stripped of their bark and eaten. Foul things unknown as food were devoured. . . . Then the hope of all was lost, for man ate man."

Lake Raj Samand is not only a monument to the thousands who perished, but literally the water of life to the generations of the future.

The construction of these lake dams shows prevision and a knowledge of the difference between perpetual springs and heights, inclined planes were used, as in the case of the "wagon"-shaped stones on the top of the Dravidian temples of southern India, which were raised to their present position by inclined planes four miles long, constructed of stout bamboo.

This part of Mewar seems an enchanted region, for in the cold season—that is, cold at night and in the early morning—a curious phenomenon occurs, which the people call see keote, or "winter castles." The lakes, the marble dams, mountain palaces, temples, fortresses, and the blue tent-like Aravallis appear high up in the cloudless ether. The visions differ some-
what from the ordinary mirage, in that they constantly fade and gently reappear, as though on a slow motion-picture screen.

At all times there is something in the atmosphere here best described as elusive radiance, which makes panoramic photography disappointing. Objects at an appalling distance leap into the field of the camera, while those in the foreground seem to recede. Of course, the necessity of photographing at long range and from great heights anything so extensive as the marble dams and mountain fortresses would naturally distort the classic outlines of the one and greatly reduce the imposing effect of the other.

EKLINGI IS A SUMPTUOUS COLLECTION OF SHRINES

Temples in India are usually found near rivers or beside living springs, as water: for bathing purposes is an important phase of both the Hindu and Mohammedan religions; so that the waterless and most inaccessible portion of Rajputana is the last place where one would expect to find anything so sumptuous and altogether unusual as Eklung. In the words of a pertinent Hindu aphorism, it lies in a deep defile, “like a tongue between thirty-two teeth,” surrounded by a massive wall, which keeps the parasitic Candelabra euphorbia bushes at bay. Low mountains rise on all sides, with rock-scarped summits covered with black honeycomb, the habituation of millions of bees, the vicious little black Indian variety that will rout an army.

Eklung, like the dams of Mewar, is of white marble from the foundation stones up, immense and most elaborately embellished. It is difficult to convey a comprehensive idea of anything so complicated, for the temple as a whole represents the accumulated work of a long line of kings (see illustration, page 471).

Whenever one of the “Sun-born” won a battle, or through favor of the gods was blessed with an heir, he added a statue or shrine to Eklung, regardless of labor or expense, the ambition of each being to make his more elaborate and costly than the others. Grouped round

THE PILLAR OF VICTORY AT CHITOR

This is one of the most remarkable monuments of its kind in India, with a height of 122 feet and each of its four faces measuring 35 feet at its base. Its carvings represent every object known to Hindu mythology, yet in such fine detail that it can only be appreciated through field-glasses. Erected in 1451, it stands today firm and undefaced on its rock foundation.
the original edifice, or facade, there are innumerable separate structures, varying in size and no two exactly alike, although all conforming to the prototype.

A full-sized bronze Siva bull rests in solitary state among the sculptured columns of the square central temple, the roof of which, fronted above, appears as if covered with thousands of Lilliputian shrines welded into a solid mass and carved in fine detail. No one has ever been able to explain why such pains were taken with decorations where, apparently, no human eye was ever intended to see them.

Rana Kumbha's life work for the protection of Mewar was the building of thirty-two fortresses, chief of which is Komulmair, or Kumhhalgarh, on the "Hill of Kumbha," 800 feet high, with a great "cloud-capped" palace on the top. Walls of enormous thickness, strengthened by towers and battlements, embrasures and inside galleries, wind and double upon themselves round and round to the summit (see illustration, page 479).

As is usual in these defenses used for the protection of royalty, the hill is pierced with secret chambers, while huge cisterns in the solid rock were used for storing water.

Tales of romance and of "battles long ago" center round Komulmair. The infant Udaipur, later the founder of Udaipur, was carried to the fortress by his faithful nurse, after her escape through the underground passage at Chitorn, when the child was about to be murdered by his uncle. This incident is the theme of a poem by Sir Edwin Arnold, "The Rajput Nurse."

HOW THE TRAVELER VISITS CHITOR

Chitorn is easy of access, all that is necessary being to write to the private secretary of the Maharana at Udaipur, who makes arrangements for the accommodation of visitors at the dak-bungalow, or rest-house. The entertainment is somewhat primitive, but, being offered through the courtesy of His Highness, one accepts it gratefully.

Through trains from Bombay and Delhi meet at Chitorn in the early morning. Approaching through the gray of the "false dawn" peculiar to India, the gigantic walled rock, crowned with a dead city, looms afar as though frowning with unhappy memories on the surrounding plain.

Ganesh—venerable, hard-headed, with thirty years of accumulated elephantine malice toward all who want to be taken up the long, steep climb to Chitorn—will be waiting, with her mahout beside the morning cooking fire, under the sweet-flowering Chameleon trees, back of the white plastered, blue convolvulus-covered station, with its rows of trickling water hydrants.

THE THRONE OF A HUNDRED WARRIOR KINGS

Chitorn was once an impregnable fortress, the throne of a hundred warrior kings, the repository of vast treasure and priceless works of art. Along the zigzag ascent, bronze gates closed the seven great archways, which were high enough to admit the tallest elephant topped by a howdah.

Above all towers the majestic Pillar of Victory, begun in 1451 and finished some years later. Too great even for the despoiler, it stands firm on its rock foundation as when Rana Kumbha placed it as a "ringlet on the brow of Chitorn." No words can paint a picture of its carven imagery that entwines, from base to summit, every object known to Hindu mythology. The column stands 122 feet high, with each of its faces 35 feet broad at the base and more than 17 feet broad under the cupola. It has nine stories, with landings on a spiral staircase at openings in the face of each story. In the vaulted chamber at the top are black marble slabs inscribed with the genealogy of all the kings of Chitorn.

The carved exterior can only be appreciated with field-glasses, and even then none save the gray hawk-moths and pigeons ever see those at the very top. In photographing the whole with an ordinary camera, most of the fine detail is lost.

Here may be seen the classic Hindû architecture in its original purity, the sculptured subjects being reposeful and rhythmic, with none of the sinister expression and grotesque posturing of mixed Dravidian-Hindû art. The exterior walls and fluted domes of half-ruined temples and other buildings are
A WOMAN OF NEPAL AT THE DARJEELING BAZAAR

Who does not long to see Darjeeling, guarded by Kinchinjunga’s snowy wall reared heavenward, and to enjoy in the market place a colorful display of gaily-clad Himalayan women, with heavy coin chains hung about their necks and nose rings glittering in the ardent sun?
THE MIRRORED MINARETS OF HYDERABAD

Before the Moslem prays, he stops beside some placid pool which serves as his baptismal font and there prepares to testify to the greatness of his God. The mosque tanks of Islam mirror the beauty of sun-bathed scenes which men of their creed are forbidden to paint.
WHEN ONE OF JAIPUR'S TINSELED GODS GOES VISITING

Paved streets, city water and gas lights cannot destroy the old-world charm of picturesque Jaipur, where the Maharajah has a thousand wives and a tank of crocodiles, and where the Hindu god is drawn through the city by bullocks blanketed in priceless coverings, while bright eyes, hid behind high latticres, look down in envy on a world of men.
A BULLOCK TRAIN IN LUCKNOW

Where Scottish pipes, playing "The Campbells Are Coming," ushered in the Relief of Lucknow, creaking wagons with wooden wheels and crude axles now chants the song of the open road, of peaceful trade and plenty.
WHERE CITIZENS ENJOYED THE RIGHTS OF ROYALTY

Until recently, when an excellent carriage road was completed to the ancient capital of Jaipur State, the Maharajah furnished elephants from his private stables to his guests for the ride to Amber, one of whose outer gates is here shown.
AN INDIAN WELL: NEAR DELHI

Water is won from the reluctant soil of a thirsty land only with infinite toil. The rent of India, like the shadoof and sakkich of Egypt and the Persian water wheel, is a contrivance born of sun-parched earth and cheap labor. A leather bag is the Old Oaken Bucket of India, against whose weight slow-footed bullocks pull. It will hold from twenty to forty gallons of water, part of which is carried away in shining vessels on the heads of graceful women.
HUMAN INTEREST ON THE NORTHWEST FRONTIER

To some, the romance of India's Afghan boundary consists in breakneck rides while snipers shoot from rocky ambush near the Khyber Pass. Others read romance in the stately tread of Bactrian camels, bringing down the treasures of Merv to exchange for the wealth of the Indies. But this old man of Peshawar, clad in his yellow paysa, sees romance in the trustful eyes of his gaily dressed grandson.
A TAMIL WOMAN PLUCKING TEA LEAVES

Once the drink of the nobles, tea has now become so cheap that all can afford the cup that cheers. For the first time in history, production has exceeded the demand and many estates are being neglected until the world's thirst for tea gains new impetus.
A MASULA BOAT GOING OUT TO THE SHIPS

India sadly lacks good harbors, as did Palestine of old. At Madras, the freight and passengers were formerly brought ashore in Masula boats—more crude than those the Jaffa boatmen use. The city has greatly improved its harbor facilities, but these heavy hulks are still pushed out through the high surf by men of bronze and propelled by rude oars with circular blades.
AFGHAN CAMEL BOYS AND THEIR COMMERCE CARRIERS OF CENTRAL ASIA

Less picturesque but more hardy than their Bactrian cousins, Arabian camels can stand heat as well as a considerable degree of cold. The dromedary, as one of the earliest of man’s servants has gained a dignity which the more clever donkey has not attained, in spite of the fact that a donkey leads most caravans.
Nowhere else can one find more varied forms of transportation than in India. Perhaps it is in the custom that an elephant, to the breed hand of a daily race, aged husband is conveying his youthful bride to her new home.
A QUETTA TAILOR WHO ALSO CORBLES

Specialization and division of labor are not common in Baluchistan. A tailor can drive his needle through leather instead of cloth without violating his journeyman’s charter. His hookah furnishes consolation for lack of such organization as would force him to look up his prospective task in a blue book before undertaking it or passing it on to another.
IT'S NO CIRCUS TO BE AN ELEPHANT IN JAIPUR

Why a pachyderm so splendidly draped should be forced to carry straw and why a step-ladder has supplanted the trunk as an elevator to the hurricane deck of the beast is inexplicable, except on the assumption that the "Unchanging East" is changing.
Like Bokhara, which it somewhat resembles, Peshawar is lacking in architectural beauty. The houses, built of mud, or sun-baked bricks, are unpretentious. But sections of the wall are imposing, and the street life at India's main northern gate is always lively and colorful.
PETRIFIED LACE ON THE JAIN HILL OF WISDOM

Mount Abu is the charming mountain retreat of bouncy Rajputana. Its brightest jewel is the Nakhi Lake, excavated in the sandstone plateau by the finger-nails of the Gods. There are two temples where the architect has transformed marble into diaphanous drapery and jewel chains. This is one of the Tirthankar cells, erected to the deified saints of the Jains in the temple of Vimala Sati.
deeply carved, the figures standing out free from the surface, held by a slender thread of stone or marble, the perfected art of Aryan chisel.

This is noticeable in what remains of the Temple to Brahma, which in its day must have been one of the most beautiful specimens to be found in India. Although now a ruin, strangely enough it was not defaced by the Mohammedans, whose fanaticism took the form of knocking off noses and ears from the Hindu gods. But, as the Brahma temple was dedicated to the Creator of all, it contained no "idols," either inside or out; so they passed it by (see page 477).

There is hardly an inch of plain surface on this temple. The figures are principally corophecies executing the "Dance of Joy." At the base is a procession of ceremonial elephants, each with its trunk curled around the tail of the one preceding. Another row portrays the heads of cats, or perhaps tigers. Intricately wrought medallions project like great cameos; small receptacles, or niches, pierced several inches into the marble, contain precious objects carved something after the fashion of Chinese puzzles, from the inside out—an ideal spot for nesting birds.

The Tower of Fame is more ornate than in good taste, with the exception of the first section, which redeems the whole by what are called true Hindu arches on each of its four faces. For the rest, here also there is not an inch of plain surface visible. It gives the impression that, having exhausted reproductions of every known object on the Pillar of Victory, the artists wound the Tower of Fame with sculptured bands resembling lace.

MANY OF THE PALACES REMARKABLY PRESERVED

It is not usual to find royal dwellings among ruins of the fourteenth and fifteenth centuries with much, if any, of their original architecture left; yet many of the palaces at Chitor present an imposing and almost inhabited appearance, until they are explored. At first, one might expect to hear women's voices, or see the flutter of a gay silken sari or gleam of golden ornaments from the upper balcony of an unmistakable old royal zenana, with sheer, unscalable walls.

Many conditions have contributed to the preservation of these buildings since man first laid them waste. In the first place, they were built of the hard Rajputana marble, limestone, and quartz, on a solid rock foundation that stands several hundred feet above the plain, in a hot, dry climate. Then, the life ambition of the Maharana of Udaipur is to restore the fallen capital of his ancestors on the old ground plan. For twenty years he has been engaged in repairing broken walls, in strengthening foundations, and in the herculean task of rebuilding the great city wall.

CHITOR'S AMAZING STORY OF HEROISM AND TRAGEDY

Following a rugged path through a tangle of custard-apple trees to a lonely spot in a deep cleft of rock, any one who has read Kipling's "Naulakha" would recognize the "Gau-Mukh," or "Cow's Mouth," where the "water trickles with a soft chuckle" from a grotesquely carved cow's mouth into a stone tank wrenched asunder by the "snaky roots of old mimosa trees." Here, too, is the entrance and also the exit to a series of subterranean galleries with secrets of their own.

Chitor has an amazing history of fine romance, heroism, and almost unthinkable tragedy, so strange that the few Indian writers who have said much about it have entrenched themselves behind chronological data. Yet these happenings are as much a part of Chitor as the stones themselves.

The royal fortress city, almost from its foundation, was an object of greed and lust. It was three times sacked by the Mogul kings of Delhi; whose armies swarmed into the states of Rajputana like ants to honey-pots. More than all else, they coveted the modest "lotus-eyed" Hindu women.

Princess Padmini, the "Hindu Helen," was the wife of Prince Bhensri, uncle and regent of the minor heir to the throne. The third and last sack of Chitor occurred when tales of her wondrous beauty reached Ala-u-din Khilji, then King of Delhi, who promptly set out with the sole object of capturing her.

After long and fierce resistance on the part of the Rajputs, Ala-u-din offered to remove his armies if he might be per-
mitted to look at the Princess’ reflection in a mirror. His request was granted, but he somehow enticed Prince Blemisi into ambush, as hostage for the Princess.

Torn between honor and safety for the prince, the Rajputs tried strategy, devised, it is said, by woman’s wits. Word was sent to Ala-u-din that Padmami would be sent to him, but, as befitted her rank, with all her maids and serving-women. She, in her splendid dooli, followed by 700 attendants, each supported on the shoulders of four men, filed slowly through the seven city gates down to the Moslem camp.

When Ala-u-din, exultant and arrayed as a bridegroom, advanced to part the curtains of the dooli containing his prize, a shout went up, armed warriors tore off enveloping women’s veils and fell upon the Moslems. In the confusion of the sudden attack the royal pair made their escape.

**THE WOMEN OF CHITOR CHOOSE DEATH**

Smarting with desire for revenge, Ala-u-din swore by Allah to enslave every woman in Chitor and lay the heads of the proud Rajputs in the dust. He increased his armies until they covered the whole plain, the men working day and night to raise a mound of earth to overtop the city walls at the one weak spot opposite the eastern gate, where the ground rose slightly—a conspicuous object to this day. They were paid first a copper coin, then silver, and last a gold piece for every basketful of earth.

At last, when the city was doomed and Ala-u-din with his guard was battering down the inner gate, thousands of women, princesses, and serving-maids, all who were young and fair in Chitor on that fatal day, veiled and wearing their jewels, mounted in swift procession the broad steps of the king’s palace, then descended to the vaulted chambers in the rock foundations, where a low, iron-clamped door swung open.

One by one all passed through; some carried lighted torches, others bundles of fagots. Last of all came Princess Padmami, carrying the precious two-edged sword of the Sun Born Kings.

Flames leaped up, wreaths of smoke curled outward... then the door was shut and barred.
The chaste Rajputnees were trained from childhood to choose death rather than fall into the hands of conquerors; so that wholesale self-destruction and immolation of women was by no means uncommon during the period of the Mohammedan invasion.

For nearly a hundred years the spot where the awful holocaust took place was shunned. To the Hindus it was sacred, and after the iron door rusted and fell away, the Mohammedans who ventured near declared they were menaced by a demon woman with a two-edged sword.

Tod, when he was the British official at Udaipur, spoke of having once stood before the open entrance to the rock-hewn vaults under the king’s palace. He confessed that “mephitic vapors and venomous reptiles did not invite inspection, even if official situation had permitted such slights to prejudice.”

The opening has long since been sealed, and is never shown to strangers unless they ask to see it. Golden sunlight now streams over the crumbling steps, and hundreds of peacocks strut about, complaining mournfully and roosting at night in the empty palace casements.

A pair of bronze gates, two alabaster elephants, and the great kettle-drums that used to lead the Chitor kings to battle, were carried off by Emperor Akbar and may be seen in the old Mogul palace at Agra.

To this day, “By the sack of Chitor” is the sacred oath of the Rajputs of Rajputana, while the citadel “sits an unveiled widow with face of sorrow, gazing over Mewar.”

OUTWITTING THE WATER DEMONS OF KASHMIR

BY MAURICE PRATT DUNLAP

With Photographs from the Author

PICTURE a lake of the clearest water nestling in a green valley and mirroring snow-capped mountains that tower above it to a height of 4,000 feet. You stand in a grove of chenar trees in a garden planned long ago by Mohammedan princes.

Across the water comes a fleet of boats rowed by dark-skinned men wearing bright turbans, who deftly cleave the surface with heart-shaped oars. They are evidently interested in certain objects in the water, and presently you see scores of swimmers making for the beach. They come ashore. There are nearly a hundred of them, and their firm, tawny, well-oiled bodies glisten in the early morning sunlight, as they sink exhausted on the grass after a three-mile swim across the lake.

Who are these people? They are young men of Kashmir, that queer nook of a kingdom to the north of British India, shut in from all the world by the Himalayas. They are young men from good Mohammedan and Hindu families, who were taught for centuries that swimming was an ungentlemanly art. Their elders for generations, in twisted oriental logic, argued thus:

“aristocratic children should not learn to swim, for if they learn they will often go into the water. If they often go into the water, they run a greater risk of being drowned than those that keep out of the water, because they cannot swim. Therefore they must not learn to swim.”

Why, then, do these young men now swim and enjoy it? Why do they every year save many of their superstitious countrymen from drowning in this land of lakes and rivers?

THE ARRIVAL OF AN ENGLISH TEACHER

Over twenty years ago a young Englishman, Dr. C. E. Tyndale-Biscoe, assumed control of the Church Mission School of Kashmir, in Srinagar, which was attended by some 200 young men, many of whom went merely to learn
AN OBJECT LESSON IN OUTWITTING THE LEGENDARY WATER DEMONS OF KASHMIR (SEE TEXT, PAGE 51.)

Before the establishment of the Church Mission School in Srinagar, it was considered "bad form" for aristocratic Hindu children to learn how to swim.
TEACHING BROTHERHOOD IN KASHMIR

Not only are the boys at the Church Mission School of Srinagar taught individual manliness, but also cooperation. Hindus, Mohammedans, and Christians all get along well with one another because each respects sincerity wherever he finds it.
enough English and mathematics to pass the state examinations for civil-service employment.

This opportunist attitude on the part of physically lazy students caused this young Englishman to feel that perhaps English, mathematics, and other mental exercises were not the peculiar gifts that the West had to offer the East.

Here were people whose ancestors had scorned gymnastics and all manual or physical labor for thousands of years. Here were people who, with all their age-old philosophy, did not know that physical courage, reserve, and self-restraint, bred in the muscle and bone, would do more than fanaticism to make them strong. But the Anglo-Saxon knew this; and radical methods were used to teach the all-wise Kashmiri something he did not know.

NO LONGER "RICE CHRISTIANS"

Today the school has 600 pupils; but their number is of relatively small importance compared with the transformation in oriental character which has been effected.
NOT A SWIMMING CLUB, BUT A MISSION SCHOOL

The Jhelum River is not only a prominent highway of Kashmir's capital, but also one of the athletic fields of Dr. Biscoe's school.

These young men no longer attend school to pass the state examinations; nor are they "rice Christians," fawning on the foreigner merely to keep rice in their stomachs and clothes on their backs; nor do the Hindu, Mohammedan, and Christian students each associate exclusively with those of their own belief, as they do in some mission schools. They come from all ranks and castes.

Statesmen and missionaries from all over India journey thousands of miles to visit the school and study its methods. The Viceroy of India comes and com-

mends, and so does the Maharajah, ruler of Kashmir's internal affairs, who represents the best and most powerful native element.

A UNIQUE SYSTEM OF GRADING PUPILS

No other one thing gives a better indication of originality of method than a glance at the "character form-sheet" that is made out for each pupil. A register is kept with a page for each boy, and three times a year his character is graded. The marks are classified in three divisions: Body, Mind, and Soul.
Anglo-Saxon ideals of manliness are transforming historic Dal from the Lake of Love to the regatta setting where future leaders of the Far East are being trained. In this topsy-turvy land, the men heretofore did the sewing, but now that the youths are giving more time to manly sports, the girls are being taught needle-work in schools of their own. They are also being taught to read and, what is much harder, to be clean. In the early days, the order that their heads should be washed once a month nearly caused a revolution.
Some of the subjects on which the pupil is tested are: gymnastics, boating, swimming, games, and manual labor; deportment, "absence of dirty tricks," self-control and cleanliness; obedience and honesty, pluck and unselfishness, esprit de corps, and duty to neighbors. English, mathematics, Sanskrit, Scripture, and other branches of study figure in the standings; but gymnastics count 400 points where English, Sanskrit, and mathematics count only 100 points each. "Pluck and unselfishness" count 300 points. Boating, swimming, deportment, cleanliness, and esprit de corps count 200 points each.

The teachers, most of whom are former pupils, try to bring out all the powers of each boy, so that he may not turn out merely a "swell-head," who, because he has passed examinations, thinks he is fitted to govern his fellow-men. No boy need go to the wall, for he has three strings to his bow: if he has not a good memory, he may excel in bodily prowess; and if he is physically weak or crippled, he can put forth his energy in excelling in soul subjects.

When a boy considers he has not been treated fairly by his teacher, the whole class is asked to decide the question. The resulting commendation or condemnation is thus the judgment of the boy's own fellows.

The subjects are not graded according to their relative importance, but according as a subject is popular or not with the boys. All the boys are as keen for mathematics as were their ancestors, but they inherit along with this keenness a distaste for gymnastics; so gymnastics count four times as much as mathematics.

**BEST MARKS FOR THOSE WHO TRY HARDEST**

In marking for athletic sports, the best marks are not necessarily given to those who excel, but to those who try hardest. In foot-ball, for instance, Ram Chand, a timid little fellow, who is never likely to become a star of the game, receives more marks than Tara Chand, who is on one of the school teams, because Ram Chand has lost his father, the bread-winner, and is dependent on his mother, who ekes out a livelihood by spinning. Hence Ram Chand is always underfed and puny, while Tara Chand, being the son of a state official, is well cared for and more is naturally expected of him, as he has everything in his favor.

We have already seen some of the boys taking an early morning swim in Dal Lake. Let us go back to town with them.

Comfortably reclining in a gondola-like boat under a thatched shelter, we sail down the main "street" of Srinagar, the capital of Kashmir. In this quaint old city of 130,000 inhabitants most of the streets are waterways. Temples, mosques, palaces, and balconied buildings with grass and poppies growing on their roofs line the canals.

**ALL THE BOYS SIT BAREFOOTED IN SCHOOL**

Here and there we have glimpses of rose-gardens and cool retreats in groves of chinar trees. One of the dilapidated structures with a goodly crop of hay growing on its roof is our destination. We disembark at a landing and ascend a steep flight of stairs.

On the veranda the boys leave their shoes—rows and rows of them, all sizes and shapes. This means that 600 boys are sitting barefoot within. No boy in Kashmir would think of entering his own home with his shoes on, any more than we would wear our hats in the house. It is an old Eastern custom.

But you will rarely meet this sight in other schools where the West is undertaking to teach the East. Too often the main idea in these institutions seems to be to graft our trivial customs on the oriental, making his exterior as occidental as possible, with the hope that his interior will follow suit.

The custom of leaving shoes at the door has one drawback in Kashmir: it gives an opportunity to the thief. The Kashmir people, who are noted for their comely features, their fine physiques, and their charm of manner, are also notorious for thievery. When a thriftily inclined boy comes to school with old shoes, he will sometimes leave early in order to take away a pair of newer ones.

If the boy is found out, his punishment fits the crime. The shoes are tied around his neck, so that he may have them always in view. At such tricks, the high-caste Brahmans seem to be the worst offenders.
The "Main Street" of the capital of Kashmir suggests a Venetian canal.

The winding Jhelum River is the principal thoroughfare of Srinagar and along its storied banks rise temples, mosques, palaces, and balconied buildings whose roofs bloom with grass and poppies. The spired building is the Shah Hamadan mosque (see also page 524). The citadel in the distance was built by Akbar, the Mogul emperor.
The boys are just answering roll-call as we enter the main assembly-room, which is most interestingly decorated. There is one religious picture, "The Light of the World," hanging over the dais that faces the pupils. Portraits of King Edward VII and the present King-Emperor hang near by, along with one of the Maharajah of Kashmir, who is the real ruler of internal affairs and whose imposing palace we passed as we came down the river (see page 510).

Above all is the school crest—a pair of heart-shaped paddles, crossed, and the words "In all things be men."

**THE TOP CLASS, NOT THE TOP BOYS, REWARDED**

Four honor boards are always kept before the eyes of these impressionable orientals. On one are the names of those who have distinguished themselves for pluck, skill, and endurance, such as those who have swum the most dreaded lake in Kashmir, five miles across. On another are the names of the two head boys for every year since Dr. Bisbee took charge. On the third are the names of sixteen lads who have risked their lives for others. On the last there is just one name, that of a boy who died saving his brother from drowning.

Familiarity with the oriental mind is revealed in the school attitude toward prizes. Individual rewards are not made, for the eagerness to appear better than one's fellows is so keen with the Kashmir youth that he will resort to dishonest tricks to attain his end.

Instead of rewarding the top boys of the classes, a prize is given to the top class of the school—that is, the class which obtains the highest average in all-round standing as revealed by the character sheets. The boys divide the prize among themselves or keep it for the community.

The orthodox custom of rewarding the top boys of classes does not necessarily result in the boy who works the hardest getting the prize.

Often, in the average school, the boy with natural gifts of memory, rather than the dull plodder who needs encouragement, gains the prize. With Kashmir boys, this tends to bring out undesirable traits, for the top boys may cheat, and even try to bribe their masters, to gain an individual reward.

At the Church Mission School the bright boys in a class know that their weaker fellows are likely to bring down the mark of the whole class, and therefore there is cooperation between the two groups. In this way esprit de corps is developed, and this in turn is recognized and a special mark given for it.

A Burmese gong booms to remind us that the half-hour recess for gymnastics has arrived. The Junior School of 300 comes out first; then the Upper School of 300, for the playground will not accommodate all at once.

Are these languid sons of the East we are watching, or an occidental class in gymnastics, exercising amid strange surroundings and in bizarre costumes? In twenty-five seconds all are assembled. The boys from the upper stories come sliding down poles like firemen responding to an alarm.

The school band strikes up a tune and in a few seconds the inclosure is alive with swinging, whirling, jumping, fencing, boxing boys.

**HOW BOXING WAS INTRODUCED**

Boxing was introduced under unusual circumstances. At first these young men always knew "a little more" about every subject than their instructors did. A professor was talking about Ceylon and happened to mention that his brothers had visited the island.

"That is impossible," stated a supercilious Brahmin. "Ceylon is the home of the Hindu gods, and the holy books teach us that no infidel may go there."

This cocksureness was too much for the Anglo-Saxon, to whom discipline in thought and in school administration were very dear. He produced two pairs of boxing gloves and suggested, "As you seem to know everything, you probably know how to use these gloves."

"Yes," said the all-wise youth, "I know."

"Why not give the class a practical demonstration of that truth?" the instructor suggested.

The gloves were put on.

"Can you prevent me from hitting your nose three times running?"

"Certainly," said the confident student.
A VICEROYAL WELCOME IN KASHMIR

Not content with cheers and crowds testifying to the sincerity of Srinagar's friendship, the school boys strung across the Jhelum River an 18 boy-power sign visualizing their greeting to the British Viceroy on his visit to the capital of Kashmir.
WELCOMING NATIVE ROYALTY TO KASHMIR'S FAMOUS SCHOOL

The arrival of the royal barge of the Maharajah of Kashmir and Jammu at the Church Mission School at Srinagar. The school motto, "In all things be men," is seen on the banner at the right.
THE SHER GARHI, PALACE OF THE MAHARAJAH OF KASHMIR AND JAMMU, WITH THE ROYAL BARGE IN THE FOREGROUND

Kashmir's ruler, a Dogra Rajput by caste and a Hindu in religion, is the chief of state in a province two-thirds of whose people are Mohammedans. His winter palace is in Jammu, 4,000 feet lower than Srinagar and 184 miles to the south.
"Are you ready?"
"Yes."
Bang went the teacher’s left to the nose of his pupil.
"I thought you could defend your nose!"
"Ye-es, I can."
The all-knowing Brahmin covers his face, leaving a chunk for one eye.
"Are you ready?"
"Yes."
The teacher makes a feint at his opponent’s stomach. Down comes the oriental glove to protect it, and a turbaned head comes forward so that a Kashmir nose meets an Anglo-Saxon fist. That is enough. The erstwhile omniscient student owns before the class that he does not know boxing and cannot take care of his own facial property.

Gymnastics being over, the boys form a squad and stand at attention while a prayer is said for the King-Emperor and the Maharajah. Crowds of handsome bearded men have been dropping in from the street to watch the performance, as they do daily throughout the school year. They seem both impressed and interested, as the band breaks forth in another march and the boys file back to their class-rooms.

**A THRILLING REGATTA**

There is to be one of the frequent regattas in the afternoon, so we go back to the beautiful lake where we saw the early morning swimmers. It is a gay sight. There are more than 100 boys in all manner of craft. We go out in a little boat of our own, reclining at ease on a Kashmir rug, while lithe-limbed boatmen pole the craft along.

Suddenly every boat except our own turns turtle. But the boys don’t seem to mind. They are splashing about the water in lively fashion. Then they turn the boats right side up, bale them out, jump back in, and paddle toward the city. It is all part of the game, to teach them how to act in the real emergencies that happen so frequently on these mountain lakes.

The Kashmiris in general, except the boatman caste, not only do not learn to swim, but think that if they are upset in a squall water demons will catch them, whether they swim or not. What these young men have learned has gone a long way to convince the people of Kashmir that a high-caste gentleman does not necessarily need to drown merely because he falls into the water. The rule is that every boy must pass a swimming test before his fourteenth birthday.

When compulsory swimming was first introduced, more than 100 boys were withdrawn from the school.

Besides parental objection, the boys themselves were timid. It was six years before a crew of aristocratic youths in a racing boat sculled down the main "street" of Srinagar, and every rower had a blanket tied around his head to disguise himself from the jeering crowds that lined the bridges.

Now, however, things have changed. The school has turned out thousands of swimmers who are not only competent to save life, but also to teach others to swim.

Twenty years ago the picture was quite different. Some 200 dirty, evil-smelling human beings squatted on the hall floor with mouths open and with vacant expressions. They all wore the holy marks of the Brahmin, a great smear of red paint across their foreheads, but were busy devouring the wisdom of the West, for this wisdom meant state employment, and that meant rupees. The salary might not count for much, but the opportunity to squeeze out bribes in other ways, as their forefathers had done, was more attractive.

These creatures, some of whom were 20 years old and had black, bushy beards from ear to ear, were called “boys.” Jelly-fish would have been a more appropriate term.

The boys of the school no longer belong to the jelly-fish type, and the fame of the school is no longer confined to Kashmir. It is known throughout India, among the workers who are striving for the regeneration of the East.

These workers—both British and American—travel into this remote country during their vacations to learn wherein the success of this school of Srinagar lies. It was with two of these educational missionaries that the writer made a journey to Kashmir. One result of such pilgrimages is that athletics are being more generally emphasized in the mission schools of the Ganges Valley.
A CURVE IN THE JHELUM RIVER: KASHMIR

Most westerly of the "five rivers" from which the Punjab derives its name, the Jhelum combines placid peace and torrential haste along its varied course. When it reaches British India, it is put to work. More than 1,800 miles of irrigation canals and ditches are fed by its waters.
A PILGRIMAGE TO AMERNATH, HIMALAYAN SHRINE OF THE HINDU FAITH

By Louise Ahl Jessop

Far up in the northwestern part of India lies the Kingdom of Kashmir. It includes Baltistan in the north, Ladakh in the east, Gilgit, Hunza, and Chitral in the northwest, Jammu in the south, and the beautiful Vale of Kashmir in the southwest. The kingdom has an area of 80,000 square miles and a population of nearly 3,000,000, of whom about three-fourths are Mohammedans, a fifth Hindus, and the rest Buddhists and Sikhs. It is ruled by a native prince under British protection.

The history of the country goes back for many centuries, and at one time it was one of the two most powerful kingdoms in northern India, but later suffered from invasion after invasion and was conquered and reconquered. It was reduced by Akbar, the great Mogul emperor, and its lovely Vale became the favorite summer resort of his son Jahan-gir and his queen, the beautiful Nur Mahal. Their pleasure in this Garden of Eden, as portrayed in "Lalla Rookh," has made it famous the world over.

"Who has not heard of the Vale of Cashmere,
With its roses the brightest that earth ever gave,
Its temples, and grottos and fountains as clear
As the love-lighted eyes that hang over their wave?"

And who that has read the musical "Lalla Rookh" has not had a desire to see this land of romance and of song? To many this desire has been but a passing thought, because of the seeming impossibility of accomplishing it from faraway countries; to others it has been a dream to be realized, perhaps in the distant future; comparatively few actually enter the enchanted land.

When, therefore, it was finally decided that we could spend our holiday in Kashmir, all dreamers can imagine better than I can describe our feelings of anticipation and delight. With guide-books and maps we set about the interesting task of tracing routes and deciding upon how we could crowd into the brief space of five weeks what should require double that time.

Soon from the jumble of strange towns, mountains, and camps, Amernath, one of the Meccas of Hindu pilgrims, stood out as our objective point and as the most desirable thing to see. Thus our trip was planned to lead us to that rock cave as a fitting climax to the whole.

FROM CALCUTTA TO KASHMIR

Kashmir, spelled with a "K" today, is a far cry from Calcutta, and one travels many hundred miles even before standing upon its threshold. Our way lay toward the northwest, up through Bengal, the United Provinces, and the Punjab, past the sacred city of Benares, Cawnpore of Mutiny fame, Agra with its royal Taj Mahal, and Delhi, the old-new imperial capital, on to Rawalpindi, the largest military cantonment in India.

Here we left the railway and started on our long drive of 260 miles to Srinagar, the capital of Kashmir.

The vehicles were waiting for us at the Rawalpindi station, as was the wily creature to whom they belonged and with whom we tried to make as iron-clad a bandhust (contract) as was possible. Needless to say, there was a vulnerable place therein, as is usually the case out here, and it cost us a long parley on our return journey.

To the uninitiated Westerner, who travels mostly in trunks and neat leather suit-cases, it is hopeless to attempt to picture our party of five as we started off in a landau and two tongas with our twenty-nine pieces of luggage. Our British cousins are right; this was luggage, not baggage.

The three ladies occupied the landau, which, with its skinny horses, wobbly wheels, shabby top, and general tumbledown appearance, looked as if it were a relic of the days of Warren Hastings. In front of us, behind us, around us, and, I was going to say, on top of us were
A DAUGHTER OF NOAH ON DAL, LAKE: KASHMIR

Conservative, clever, contented, the Kashmiris have remained unchanged amid successive invasions. The boatmen and their wives lay claim to inherited skill in their craft, naming that Ancient Mariner, Noah, as their ancestor. Srinagar is subject to periodic floods, and the story of the Ark sounds more familiar to its people than to the Rajputs of the barren plain.
AN ANCIENT HINDU TEMPLE ON SOLOMON'S THRONE: KASHMIR

Two intimate hills look down on Srinagar and frame the view of mountain and lake beyond. The higher one is known as the Throne of Solomon, upon which stands this, the oldest temple in Kashmir.
THE START FOR KASHMIR!

If variety is the spice of life, a half-starved horse, a "one-hoss shay" tonga, and a Kashmir mountain road form a rare combination. Anything may happen and almost everything does (see text below).

packed huge bedding rolls, rain cloaks, tiffin baskets, and cameras.

The gentlemen and the remainder of the twenty-nine varieties, including two boxes of tinned provisions, occupied the tongas, which, for their size, are marvels of capacity. They are two-wheeled vehicles capable of accommodating four persons, each two sitting back to back, and boxes are stowed under the seats and under the feet, while bedding rolls and lighter articles are tied to the sides and on the top.

THROUGH A COUNTRYSIDE RESEMBLING PENNSYLVANIA

At last, about 9 o'clock, all the numerous details were arranged and we were off for Tret, 25 miles on the way and our next stopping place. The first 10 miles were across a level valley, with green grain patches and plowed land stretching back to the hills on either side. It might have been a country scene in part of my own Pennsylvania, except for the thatched mud huts and the eastern dress of the natives.

Further along the road enters low hills and the view is pleasantly varied.

As we went careering along the road mile after mile, around bends, up hill and down hill, the light tops swayed, the wheels creaked, and at times the harness gave way, so that we often wondered whether our journey would be completed without serious mishap. It was, however, in spite of the fact that a passing tonga caught the wheel of our landau in too close an embrace and loosened the iron from its hub.

The accident caused us the loss of a precious hour or more while the drivers tinkered it to hold with rope. Plenty of rope and five-gallon kerosene tins will carry one through almost any crisis in India.

Three miles from Tret the main ascent begins and we climbed a spur of pine-clad hills to the dak-bungalow, 4,000 feet above sea-level.

Dak-bungalows are rest-houses built by the government and situated every 12 or 15 miles along roads away from the railway. They vary in size from two to five or six rooms and are in charge of a caretaker. Those on much-traveled highways also have caterers, and meals can be ordered at short notice for a small
sum. Any one may stay 24 hours upon the payment of a rupee (32 cents), which entitles him to a room and bed, usually with mattress and pillow, but no sheets or blankets.

The bungalow at Tret was most comfortable, and the warm baths, which we had for a few annas extra (at normal exchange an anna is worth about two cents), were very refreshing after our hot, dusty journey. A servant, whom we took along for the sake of economy, cooked our food all during the pilgrimage, effecting quite a saving with a party of five. On the railways, a servant's fare is about a third of a cent a mile.

CARAVANS OF CARTS LADEN WITH KASHMIR FRUIT

The road from Tret to Kohala, 38 miles away, lay through beautiful pines, and at a turn a mile or two up we had a wonderful view of the hills—those in the foreground bare and brown, those behind fresh and green, with the bungalow we had just left nestling at their feet.

We passed many caravans of ox-garries, piled high with baskets of fruit from Kashmir. Pieces of matting or canvas supported by a pole in the center form a gable roof over such precious cargo, protecting it from sun and rain and helping to insure its delivery in good condition to the markets of India, even after such a long, slow journey.

The ascent in the next 11 miles to Sunnybank, two miles below Murree, was over 2,000 feet. Progress was slow with our lumbering vehicles and we walked part of the way to stretch our legs.

Murree, one of the popular hill stations of the Punjab, we did not enter, but as we began the long descent of 27 miles from Sunnybank we saw it straggling along the crest of a pine-covered hill which farther down was cultivated in terrace after terrace of growing grain.

Our road on the left of the valley wound around high cliffs, out of which it was cut. To the right, the hills, sparsely covered with scrub trees, stretched away, seamed and gullied and rolling like the waves of the ocean, to others behind, jagged and peaked, the whole by some mysterious action of the sunlight wrapped in a haze of palest rose.

At each turn in the road the scene changed in a kaleidoscopic manner, and we admired the same hills from a different viewpoint. About six miles from Kohala the Jhelum River, a rapid rushing stream fed by the snows, came into view, and we scarcely lost sight of it until we left Islamabad, many days later.

How good the Kohala dak-bungalow seemed that night, with its refreshing baths, comfortable beds, and excellent dinner of six courses, although we did read afterward in the guest-book unfavorable comments on the dinner, written by two cranks.
Each night we planned to leave early the next day, and each morning, struggle as we would, we were late getting off. The start always meant, besides breakfast, putting up the bedding rolls and seeing that the twenty-nine pieces of luggage were carried down a steep hill and repacked on our conveyances.

There was often a dispute about reloading, and the stronger drivers would try to bully the weaker ones into carrying more than their share. So if the sahibs hadn't given some rather peremptory orders, the day would have been well advanced before the start.

**Following the Course of the River Jhelum**

The morning was bright, clear, and warm, for Kohala is only 2,000 feet above sea-level. After securing permits, we crossed the fine new suspension bridge over the Jhelum and passed into Kashmir.

There was a drive of 55 miles ahead of us, as we wished to reach Chakothi that night. The landau led the procession, and our driver was determined that we should stop at Garhi.

When an Indian _gari-walla_ (driver) makes up his mind to a thing, a mem-sahib's (woman's) protests are of little avail. Either the ascent or descent is too steep, or the horses will give out, or, as a last resort, he grows most solicitous about the condition of the animals and must stop frequently to feed and water them.

It is astonishing, however, how quickly the horses revive and all adverse conditions disappear upon the offer of bakshaish. The only difficulty about this plan is that, used indiscriminately, it means being held up constantly for extra pay, and it becomes expensive as well as annoying. However, by a judicious mixture of sternness and bribery from the sahibs, we accomplished our purpose.

It was a long day, but very interesting. After crossing the suspension bridge, the valley is very narrow, little wider than the river, which is here a mountain torrent.

The road winds along the left bank of the Jhelum and is cut out of the side of precipitous hills, down which landslides often come. Indeed, near the bridge is a sign, "Danger! Beware of boulders!" which is rather amusing, for who can
A PILGRIMAGE TO AMERNATH

stop a boulder, even if he does beware? In many places so lightly are they poised that it seems as if a passing tonga would dislodge them. In other places the bank is a cliff of almost solid rock and one passes through several picturesque rock tunnels (p. 517).

Farther on, the valley widens into a cultivated plain. Much Indian corn grows in Kashmir, and I remember one patch in which it entirely surrounded the cultivator's hut and was higher than its roof.

A MOUNTAIN HIGHWAY THAT COST MANY LIVES

Near Chakothi the valley becomes very narrow again and the road is a dizzy height above the foaming torrent. Night came on as we wound around high cliffs to our right, with dangerous precipices to our left, and we clung to each other as we crossed bridges over some of these terrible khuds.

After leaving Chakothi one passes some of the most stupendous cuttings in India, the road in places being dug out of the solid rock, with sheer cliffs 250 feet high overhanging it on one side and a dizzy drop of the same distance to the river on the other. This road from Koltula to Baramula, 98 miles, is considered a wonderful feat of modern engineering. It was begun in 1880 and formally opened for traffic ten years later. It cost many lakhs of rupees and many lives. In one section alone, in the course of four years, 54 men were killed. This is now one of the best mountain roads in the world, and many tourists are attracted to Kashmir, which means great prosperity for the country.

At Baramula we were greatly interested in the pretty Kashmir-Swiss cottage type of house, usually two stories high, sometimes four. The upper stories often project over the lower, being supported by piles, and the fronts are quite elaborately carved. The latticed casement windows are covered with paper in the winter to keep out the cold, for only a few of the richest can afford glass.

Here the road leaves the river and the

THE CRYSTAL FOUNTAINS OF A KASHMIR GARDEN

Near Srinagar there are three famous formal gardens—the Nishat Bagh, pictured above; the Shalimar Bagh, beloved of Nur Mahal, and Nasim Bagh, across Dal Lake from the first two. Few scenes are lovelier than the terraced pools separated by the lace of falling waters and embroidered with the pearls which constantly drop from the fountain spray.

Photograph from M. M. Shoemaker
A SNOWY TEMPLE BesIDE STILL WATERS

It is no wonder that the Moguls from the dusty plain around Delhi and the rough mountaineers from the crags of Kashmir regarded Dal Lake as the peaceful heart of Happy Valley (see also Color Plate IV).
A SUSPENSION BRIDGE ACROSS THE JHELUM RIVER

Between Baranula and Donel the only bridges over the Jhelum River are frail affairs made of birch twig ropes spread apart by V-shaped cross-pieces. It's no pleasant pastime for those who are not sure-footed to cross a turbulent river in this way. Sometimes a line of rude cable, over which a man is drawn ferry-wise, supplements the swinging bridge to the right.
valley widens until the hills are indistinct masses of blue haze. Most of the 35-mile road to Srinagar lies between rows of tall poplars planted very close together.

Baramula is the gateway to the Vale of Kashmir, where one’s thoughts so often bridge the gap of the years to

... "the magnificent son of Achar, When from pow’r and pomp and the trophies of war, He flew to that valley, forgetting them all, With the light of the harem, his young Nourmahal."

This valley of blissful memory is an oval basin 80 miles long and 20 broad, extending from southeast to northwest. "It is girt by mighty mountain ranges, many of the peaks of which are higher than Mont Blanc. These are the pearls which encircle the emerald valley."

RAHIM KAHN, PRESIDING GENIUS OF THE PILGRIMAGE

We reached Srinagar, the capital, after a drive of three days and a half, although this distance can be covered in two by mail tonga or motor.

At the post-office we were met by Rahim Kahn, the presiding genius of our destinies for the next three weeks, and escorted to the house-boat which was to be our home, off and on, for that time.

He at once took us in charge, bought for us, cooked for us, made our bund-bust, guided us—in short, managed us, usually at a considerable profit to himself. He was cheerful, deferential, faithful, and fertile in resources and always made a show of carrying out our wishes, although when differences of opinion occurred things usually worked out according to his program in such a roundabout way that we could only guess the process and wait for results.

His hissabs (daily accounts) were marvels of increase in the cost of living, and when we firmly objected to being charged Calcutta prices, his air of injured innocence made us feel like petty tyrants and often won the day for him.

He was, in short, such a polite and comfortable rascal that we overlooked much and forgave more. He got his chits (letters of recommendation) and the Rs. 18. for his last hissab, which was presented a minute before we started.
back to Rawalpindi, although we could never quite figure it out.

IN A VENICE OF THE EAST

Upon the charm of Suryya Nagar (Srinagar) I cannot dwell. This Venice of the East, with its fascinating water life, its beautiful embroideries, silverware, beaten copper, carved woodwork, papier-mâché done after old Persian designs, its brass, silk, and precious stones, casts over one a sort of spell from which it is hard to escape.

"I will away," we say and in the same breath plead with ourselves for further delay. The temptation is strong to give up the mountain trip and laze away the days in this interesting City of the Sun.

We must harden our hearts if we are really to reach Amarnath and reluctantly the order is given to go up the river to Islamabad. How peaceful and restful those three days were, as we were towed and poled up that quiet, sluggish stream, with nothing to do but eat and sleep, read a little, write a little, and lie back in a comfortable chair on the top of the boat, looking at the native craft and their life, the passing villages and the changing hills!

Following the great curves of the river, the original of the Kashmir shawl pattern, the distance to Islamabad or its port, Kanbal, is about 47 miles. The distinctive features of the scenery in this part of Kashmir are the kurewals, or alluvial plateaus. These are often continuous with the foothills, but are sometimes isolated, having low-lying ground all around. On the lower slopes are terraced rice-fields, with Indian corn growing higher up and wheat on the top.

MAN, WOMAN, OR CHILD TOWED THE HOUSE-BOAT

Life in a house-boat would soon become confined and tiresome, were it not for the frequent stops for food and water and in order to see interesting ruins along the way. Our cooking was done in a separate boat, supposed to be attached to the stern of the one we lived on, but more often it was far behind, sometimes in the dim distance, if the meals were not ready
THE SHAH HAMADAN MOSQUE, SRINAGAR'S PRINCIPAL MOSLEM SHRINE

Constructed of beautifully carved deodar wood and containing a Hindu idol in a niche in its stone foundation, this spired ziarat of Kashmir little resembles the domed mosques of the Near East.
The truth about Kashmir may be learned by combining the alluring accounts given by the poets with the scandalous tales of the boatmen. The *hanjis*, or boatmen, are almost miscellaneous; but, like Jack ashore, they lose something of their picturesqueness and distinctive character when they reach dry land.
on time. We always had to tie up along the shore to have them served.

We stretched ourselves by walking along the path in front of the man, woman, or child who happened to be towing the boat. It is customary for the boatman's family to live in the cook-boat and to take turns in towing or poling.

Never shall I forget the wonderful sunset of that first evening out. It was the Sabbath, and it seemed to us, as we stood on the bank of the river, looking up and down and across to the mountains that shut us in, that an especial peace pervaded nature in the heart of this heathen land.

In the west, above the distant blue haze of the mountains, spread a fiery glow, which, as it extended upward, changed through all the shades of rose and pink to palest mauve at the zenith. In the east the moon shone full over the nearer hills, whose billowy tops caught wonderful opalescent tints and whose hollows were full of bluish shadows. Seen through a purplish haze which softened the whole, the picture was one which any impressionist would have given years of his life to reproduce.

At Bijbharra the two men left us to walk the last four miles to Kanbal, which they could do faster than the boat could go, to arrange for ponies for our trip through the mountains.

Unfortunately for us, our going was coincident with the return of people from the hill stations to Srinagar, and horses were very hard to get. After considerable trouble, eight pack ponies and three riding horses for the ladies were engaged, but the men had to trust to luck to get their own mounts at Eishnakam, our next stopping place, 16 miles away. So we slept the sleep of the just that night, the last to be spent in our home on the water for nearly a fortnight.

The next morning we were up early, sorting out what we wanted to take from the boat, and setting our belongings out on the river bank that all might be in plain sight and each pony have its proper load.

There were bedding rolls and suitcases and bags with personal belongings,
two boxes of tinned stuff, three tents for ourselves and two for the servants, a leather-covered basket with enamel dishes, a collapsible table and two chairs, besides numerous small articles.

A NUMEROUS RETINUE

One coolie carried the cameras and another our tiffin basket. Everything else went on the ponies' backs, and a considerable amount of time and breath it took to adjust loads, for each syre (groom) tried to shift the undesirable portions to the other syre's pony. Besides, what did it matter to them when we started! Time is of no account in this country, as a guard once told me on one of the trains, and I am sure it isn't—to the native.

When preparations were under way we heard sounds of mourning from the region of the cook-boat, and upon investigation learned that one of the women was weeping and wailing because her husband had not been chosen to go on the trip. The Kashmiri is very emotional, and even men cry like children when dis-appointed or when they wish to arouse the sympathies of the hard-hearted foreigner.

At last our cavalcade was ready and we set our faces toward Amernath, the goal of our desire. The ladies led off on their ponies, each with a syre at its head. The men followed on foot with the camera and tiffin coolies, while behind, in Rahim's charge, came the eight pack ponies with their syces, our servant, the bhisti (water-carrier), and mehtar (chore boy), the lowest servant of all.

Westerners will wonder at the numbers required in a simple camping trip; but the East isn't the West. No man here will look after another's horse, nor will the bhisti do the mehtar's work, and the cook will do the work of neither. The sahib and men-sahib lose caste and the respect of all classes if they do anything for themselves, and so it goes. Besides, the labor problem is not so serious when a riding pony, saddle, and syre cost only a rupee a day and a pack pony with his care-taker one-half as much.
A MOHAMMEDAN SHRINE IN THE HINDU STYLE

The Moslems of Kashmir are said to be Hindus at heart and for them the abstract religion of the Prophet has little appeal. Their shrines are brightly decorated and contain much of the fine wood carving for which the artisans of northern India are famed.

Our way lay through Islamabad, up the side of a steep barewah to Martand, down again to Bawan, and on up the valley by a wide level cart-road, on either side of which were stretches of heavy-headed rice ready for the sickle, on to Eishmakam.

Islamabad is the second town in Kashmir, with 20,000 people. Quaint as it is, with its latticed windows and overhanging balconies, it especially interested us as the place where gubbas are manufactured. These are curtains embroidered chiefly in chain stitch, of various colored wools, on a red, green, or blue wool background, with a border of contrasting color. They sell in New York for $12.00; in Islamabad the same size and quality can be bought for $1.00.

Three miles from Islamabad, over the rice-covered top of a barewah, on the slope which joins it to the mountain behind, stands the temple of Martand, the finest and most picturesque ruin in Kashmir. It interested me personally more than Amernath, because of a beautiful description I had read, and I looked with longing eyes for the first glimpse of its gray walls in the distance.

The temple proper is situated in the center of a quadrangle about 250 feet long and 150 feet wide, inclosed by a beautiful colonnade of pillared arches and fluted columns with Doric capitals, 84 in number. The northwest corner of this colonnade is now a mass of loose stones. The northeast corner is best preserved. The main gateway is on the west, but all that remains of it are two thick walls of stone from which the carving has been almost obliterated.

The temple originally included a central building consisting of two rooms joined by a thick arch, which have been
likened roughly to nave, choir, and sanctuary of a cathedral, and two side chapels, one to the north and the other to the south. Of these latter only a small portion of two walls remains.

Steps on the west formerly led up to the entrance to the nave of the main temple, which was surmounted by a magnificent trefoil arch. The steps are now little more than a mound of earth. On the other sides of the temple are similar trefoil arches with huge closed doorways below.

The interior walls of the nave and choir are richly ornamented with carvings of gods, lotus flowers, and other designs. The pediment is considerably in evidence.

On the left wall of the nave, as you enter, are carvings of Kali, Brahma, and Vishnu; to the right, Suraj, Lakshmi, and Surati. A carved frieze probably three feet wide surrounds it. The inner room, or sanctuary, where the sacred lingam used to be, is quite bare. Water was originally brought from the hill at the back for the purposes of worship, and the drain which carried it off can still be seen on the outside.

BUILT BY A RACE OF GIANTS, SAY THE KASHMIRIS.

The gray walls rise 40 feet above the foundation and are open to the sky. It is believed that Martand in the beginning had a pyramidal roof, and that the whole was nearly double its present height. Some stones in the walls are from three to eight yards long, one to five wide, and one yard thick. Is it any wonder that the Kashmiris insist that a race of giants built this famous shrine: for they say, "How else could such huge blocks have been raised so high?"

How, when, by whom seem to be matters of conjecture. Some say, as early as 3000 B.C., Ramadeva founded a large city called Babul on the plateau of Martand, in which there were eleven lakhs of houses (a lakh is 100,000), and that he built a temple at this time.

The present structure is supposed to date from the first half of the fifth century A.D., while the cloisters were erected 300 years later. How, when, or by whom? What difference does it make, when one is under the spell of the beauty and majesty of this magnificent ruin? For the moment the present ceases to exist, and the mind wanders back to the dim ages of the past, when this plateau was the scene of a busy life and devotees crowded to the shrine to sprinkle water on the sacred symbol of Siva and crown it with a garland of flowers.

Today the temple stands like a lonely sentinel overlooking the silent fields—"a monument of Hindu taste in what it was
IN THE HIMALAYAS

The Vale of Kashmir has long been praised; but more impressive than the elevated basin in the center of which lies Srinagar are the steep valleys which gash the mountain walls and lead the icy waters from the glacier fields on the roof of the world to the dusty plains of the thirsty Punjab.

and of Mohammedan iconoclasm in what it is.” Only the natural beauty of the surroundings remains the same—the hill to the east rising behind, the valley smiling below, the range to the north with a wonderful mauve coloring, while the higher ones to the west and south are almost hidden by a blue haze.

And so I rode away slowly, reluctantly, trying with many a backward glance to impress this stately pile upon my mind, so that I might call up a perfect picture in later years, when the past means so much more than the future.

FISH TANKS SACRED TO VISHNU.

At Bawan we had tiffin in a grove of splendid chinar trees and visited two tanks of crystal water sacred to Vishnu, in which fish are kept. The great interest of this spot is to feed these fish, and obliging natives provide material, expecting baksheesh in return. The fish come up in shoals when food is thrown in, and
LEAVING THE BEATEN PATH AT PAILIGAM

Here the resolute traveler leaves the easy road and the lure of lazy contentment to climb the rugged path that leads to the cave of pilgrimage at Amarnath, 24 miles away and nearly a mile higher up the mountain wall.

...even a large chapati (a wafer made of dough and baked) is almost instantly consumed with a smacking noise, as if the feasters were calling for more.

We reached Eishmakam about 4 o'clock. Upon reaching camp, our first thought was always for tea, crackers and jam or cheese, and while we were thus refreshing ourselves the coolies put up the tents and laced the beds together. Sometimes this was a long and tedious process and required much urging and considerable sternness before it was accomplished.

THE PEASANT COSTUME OF KASHMIR

Our simple housekeeping duties, baths and changes of garments from the dusty ones of the day, usually occupied us until dinner was ready—any time from 7 to 9 o'clock. The humbardar of the village always paid his respects as soon after our arrival as possible, bringing as a gift a small basket of apples or walnuts. For this he expected something in return—the everlasting baksheesh. We usually gave a rupee, for it was through him that we obtained milk, eggs, wood, and oil as we went along.

These village head men were usually elderly, of a patriarchal aspect, large and benevolent-looking, and dressed in the unattractive garb of the peasant, the principal garment being a kimono-like phiran, of grayish brown wool. Under this, in cold weather, is held the kungr, an earthenware pot about six inches in diameter, protected on the outside by wicker-work and containing live charcoal. It is the Kashmiri stove and means comparative comfort to the poor.

Baggy trousers of white cotton, cut off just below the knee, are a part of the costume, and pointed shoes. Püttes (a word which the Western world has borrowed from Hindustan) of narrow wool cloth, wrapped bandage-fashion from the ankle to the knee, are often worn. A white turban completes the whole.

The ordinary Kashmir villager is very dirty. His phiran is of cotton, his sandals of plaited rice straw, and his head covering is a greasy red or gray skullcap.
rries, and grass- and iris covered roofs present a very picturesque appearance. This shrine was built in memory of Zain-ud-din, a disciple of the greatest of Kashmiri saints. We were told that when he felt his end approaching he sent all his disciples away and told them to build a tomb for him where his staff was found. It was discovered in the cave over which this memorial is built.

Our way from Eishmakam lay up the Liddar Valley, along a good cartroad and through a beautiful forest much of the way, to Pahlgam, our next stop. Here, at a height of 7,300 feet, many people from the Punjab and the lower valleys of Kashmir camp through the summer months. They were all gone when we arrived, and the little church and country store were closed for the season.

We pitched our tents about two miles above the native village, on a grassy level, with a mountain behind, a mountain in front, and the rushing river at our feet. After the sun set it was very cold and damp and we were glad to go to bed early. Here one of the ladies of our party remained with two servants for five days, while the four of us made the trip to Amarnath and back.

When we left Pahlgam we departed from the beaten track. Through forests and over barren hills, we followed a mere trail, which was often only a sheep's path, not always too well defined.

The scenery above Pahlgam is beautiful beyond description. Our path on the
right bank of the stream for a time wound around an almost bare hillside, which swept up in long stretches to a massive rock-crowned top. The left bank was dark with firs—tall and symmetrical, like the play-trees of our childhood’s Noah’s ark—while the river between the hills gleamed far below like a silver band.

Sometimes the trail lay between huge boulders, which also blocked the bed of the river, and the water broke into masses of foam and spray as it dashed madly on its way.

**A HORSE ESCAPES**

While we were having tiffin at Tanin, 10,500 feet up, our *xyres* took a siesta and allowed one of the riding ponies to wander off. The Kashmiri *xyre* seems fond of his horse, although he is lazy and will have a chance on getting through somehow without unduly exerting himself. Because of failure to hobble the horses at Eishmakam, one of our pack ponies wandered off and we never found him. For a bad half hour we feared the same thing had happened here, which would mean that the men must take turns on foot for five days. Fortunately, the animal was found and we proceeded on our way.

Just after leaving Tanin the river cuts through what looks like a bridge of marble, and I exclaimed at the wonder of it. Huge symmetrical blocks were lying at one side, as if carefully quarried for some splendid building. It was difficult to believe that it was a snow-bridge.

**TIMBER-LINE ON THE AMERNATH TRAIL**

The valuable deodar extends from 5,000 to 9,000 feet above sea-level. The blue pine occurs at 6,000 feet and reaches to 10,000 feet. Above this height the silver fir is found, but above 11,000 feet only dwarf rhododendrons and junipers are to be seen.

From here our path wound up, zigzag after zigzag, the almost perpendicular side of a mountain which rises 1,500 feet above the river. Progress was slow for the poor pack ponies and scarcely faster for us.

The men walked much of the way to the top, and every now and then we rested our ponies by changing to theirs. The change was not a particularly comfortable one, for we ladies had English saddles and the men Kashmiri ones. The latter are made of wood covered with leather, curved very high at the back and front, somewhat after the fashion of
CROSSING A 15,000-FOOT PASS IN THE HIMALAYAS.

Here is little to suggest the loveliness of the vale of roses, dotted with peaceful lakes and hiding quiet gardens where fountains softly play. From this vantage point six snow-capped peaks can be seen. One of the ladies of the party had remained in camp at a lower elevation, being unable to undergo the hardships at three miles above sea-level.

IN CAMP AT PUNJITARNI; ELEVATION, 13,000 FEET

Here the travelers found a great luxury in the form of firewood, which the Maharajah of Kashmir has sent up from the valley each year since he made his own pilgrimage to Amarnath.
those used by the Western cowboy. The feeling is of being on a rocking-horse, and later in the journey, in making a sharp descent, I held on for my life, in deadly fear of pitching over the horse's head.

A PIGEON SHOT FOR THE CAMP LARDER

The path from the top of Pisu (the hill we had just climbed) wound round a steep, grassy slope and overlooked a canyon more than a thousand feet deep, at the bottom of which we could see the river, like a tiny thread, dividing the hills. Along the way grew wild strawberry vines, buttercups, snapdragons, and purple thistle with big fluffy tops. Every now and then several snowy peaks appeared over the hills across the river.

Now, in our party was a Nimrod, enthusiastic if not mighty, and the coolies took a great interest in his gun. They came to him in great excitement this day over some game they thought they saw. Our sportsman was lured to the edge of the cliff to shoot a poor, lone pigeon, which the coolies clambered down to get. We divided it among the four of us next day for tiffin—a choice morsel if not very satisfying. It was the hunter's only bag, except a chicken which strayed from us at Pahlgam and which was hit right in the neck. How many other parts were hit first was always a tender subject, for every piece of that unlucky fowl seemed to be peppered with shot.

Zojpal, our next camping place, 11,300 feet up, is a grassy meadow by the side
of the river. How gloriously the rays of the setting sun lighted up the snows of the encircling peaks and the few clouds which floated above, changing them from a brilliant gold to rose, and then to the pinkish mauve which is so often seen in the Kashmir sky and rock tints.

Along our pilgrimage we passed a big herd of cattle and many flocks of sheep. One shepherd was holding a four-day-old lamb in his arms, and immediately the beautiful simile in Isaiah of God's care for his people came to my mind: "He shall feed his flock like a shepherd: he shall gather the lambs with his arm, and carry them in his bosom."

**Shepherds Bring Their Flocks to the Heights in Spring**

Perched high up on the slopes of the hills, all over the country, one sees rude huts made of boughs. They belong to the Gujars who, in the spring, bring their flocks through the passes from British India, and hillside after hillside is covered with their sheep, goats, cattle, and buffalo, as well as with those of the regular Kashmiri shepherds.

It is the presence of these herds-people that makes the water of the mountain streams in Kashmir so unsafe to drink, for their habits are filthy and the reek of the ground may sometimes be recognized at a distance of half a mile. Some flocks number over a thousand. We saw only a few, our visit being too late for much grazing, as it was also for most of the beautiful flowers for which Kashmir is famous.

Zojpal was very cold and we had a roaring fire, before which our rickety dinner table was set. Soon a hot meal was served, and we gathered around to do justice to Rahim's dinner. From somewhere he always produced milk and eggs and often chickens. We carried with us tinned stuff—pork and beans, tongue, fish, vegetables, etc. This evening he had bought or stolen a lamb; I don't know which. His story to us seemed straight, and we paid him Rs. 2-8-0 (80 cents) for it and enjoyed the tidbits, while from the coarser parts the servants had a curry feast.

The following morning at 9 o'clock we were on our way again—the final lap, as
THE NARROW DEFILE THAT LEADS TO THE SIND VALLEY

Although summer has gone, snow-fields still cling to the precipitous slopes and barefoot pilgrims find the path a severe test of their faith.

it were, for the next camping place would be our last before reaching Amernath. Another frightfully steep hill had to be climbed, over such a mass of rocks and loose stones that for some distance the path was quite undefined. A stream trickled and then tumbled down the height. Our path zigzagged up almost perpendicularly, wound over another spur, and then round and round a barren rocky hilltop, covered in spots with juniper. We were above the tree-line now, and continued so for two and a half days.

To our right rushed the river, in a succession of rapids, and farther along we saw two tiny lakes, the upper emptying into the lower. Above both lay Lake Shisha Nag, a beautiful sheet of water about one-third of a mile in diameter. The color is of a dark green with a peculiar bluish tinge, sometimes seen in glacier-fed pools of great depth. The water sparkled like diamonds in the sunlight.

Shisha Nag is surrounded on three sides by an amphitheater of limestone rock seamed by watercourses and rising almost sheer from the surface of the lake. When we saw it the tops of three of the peaks were covered with snow. Earlier in the season the snow extends down the steep slopes and ends in ice cliffs, which break off and float on the water like miniature icebergs. The lake is covered with ice until June.

The climb from Shisha Nag was over a snow-bridge through a sort of meadow, where there were remains of fireplaces and trenches for tents—no doubt a pilgrim camp. It was inclosed by an amphitheater of mountains.

On our right the long moraine slopes were capped by horizontal strata of solid rocks, from which jagged minaret-like
AMERNATH CAVE AS SEEN FROM THE CREST OF THE SNOW-FIELDS

The steep ascent to the cave's mouth can be plainly seen. To foreigners this final climb in the rarified air is a proof of pluck. To the pilgrims the heart-breaking scramble is the prelude to a spiritual enthusiasm born of two ice mounds hidden in a dark cave.

peaks jutted up into the sky. To the left of the defile we followed little more than a sheep's path trodden over the steep side of a mountain, while between, at a giddy depth, the stream cut through rocks in a series of beautiful waterfalls.

On up we went, through another meadow inclosed by towering domes and minarets of solid rock, past the source of our mountain river, and finally emerged on the top of Punjaitarni Pass, 14,000 feet above sea-level. Here we picked eidel-weiss and had a nice tiffin of canned tongue, hard-boiled eggs, tea from a thermos flask, and our precious pigeon.

How good it all tasted and how refreshing! But who could linger long over a mere meal, with the everlasting hills in every direction? Looking back down the ascent that we had just made, outlined sharply against the sky, we could see eight peaks, six of which were snow-capped.

From the top of the watershed, looking forward over the way we had yet to travel, the Amernath Mountain rose ahead of us in barren grandeur. Two of the three rock peaks were covered with snow. To the right of us we had again the long moraine slopes crowned with horizontal rock strata, the top ones bulged in a curious way, as though pushed out by some disturbing force before they were quite cool.

To the left were the head-waters of the Sind River, and beyond them rose mountains in rounded domes, where earth and rock of softest reds, browns, and grays blended into an exquisite coloring impossible to describe. The path, for some distance scarcely distinguishable, led down a grassy slope, past patches of snow, said by our guide to be the remains of a storm of the week previous, over the stream several times, and up, down, and around the grassy hill.

Sometimes we looked down a precipice to the torrent below; at others we simply crossed the hillside.

Just before reaching Punjaitarni, there is a steep descent; at the right of which is a big rock with loose stones on the top
A PILGRIMAGE TO AMERNATH.

and piled high on the sides. It is a place of worship for the pilgrims. Beyond this we crossed a river bed, at this season of the year mostly sand and stones, but earlier, when the snows are melting, full of water.

On the far bank, in a meadow, at 13,000 feet, we pitched our tents. Being above the tree-line, with nothing but juniper, which is scarce, we might have fared badly had we not found some wood left by pilgrims. It seems that in the last two or three years, since the Maharajah of Kashmir made the pilgrimage, he has sent to Punjitarani each year a supply of fuel which the pilgrims can buy. They had left rude scales, made of the branches of a tree, by which the wood could be measured. It was probably sold by the half or quarter maund (80 pounds) and perhaps by the seer (2 pounds), for Indians can do more cooking with a few light twigs than any other people I have ever seen.

Neither we nor our servants practiced any such economy, for on each of the two nights we spent at this place we had a roaring fire, and so did our followers. What glorious blazes they were! Such a comfort and such a pleasure, and how loath we were to leave them for our chilly beds!

It was cold on the first of October, and even with all we could pile on in the way of underclothing, blankets, and eiderdowns, we were not thoroughly warm at night. Not much wonder that such was the case, with only a camp cot in a tent set on the grass. Each morning there was a white frost over everything. As soon as the sun rose, however, every one thawed out and was happy.

The first morning we were awakened by the sound of great lamentation—a coolie, lifting up his voice in loud wailing, as they do in the East in case of mourning. We could think of nothing dire enough to cause such audible sorrow except the death of a man, and I must confess to a fearful sinking of the heart.

Photograph by William Jessop

LOOKING OUT FROM THE MOUTH OF AMERNATH CAVE

The goal has been reached, the holy scene made real to those who have long dreamed of the pilgrimage. Now comes the backward look to the arduous trail whose conquest has been completed. The swiftly beating heart is moved by a spirit of glad triumph.
INSIDE THE SACRED CAVE OF AMERNATH

In this rocky recess the devout pilgrims strip off their clothes and throw themselves naked on the blocks of ice which here form lingams, phallic emblems symbolic of Siva, the re-creator. The ice mound to the right is covered with the clothing of the pilgrims.
Great was our relief to learn that it was only a pack pony that had died.

No doubt the owner felt badly enough, as it was half his living, and we were sorry for his loss: but our sympathy would have been greater had he treated the animal with more care. The second day out from Pahalgam on this trip we learned to our dismay that no food had been brought for the horses, although money was given for the purpose before we left.

The zebras were even too lazy much of the time to lead the animals to water before we started in the mornings, trusting to luck that we would let them drink at the first running stream. They rarely troubled to relieve the animals of their saddles after a hard day's journey, until they were made to do so, sometimes by no gentle means. So long has the Kashmiri been accustomed to rough treatment that he pays little attention to a quiet command; if it happens to be contrary to his own desires.

How those ponies ever lived for four days on the short grass, most of it dry at that time of year, will always be a mystery.

At Tanin, on the way back, the first point from which a bazaar was accessible, the servants were told that they could have no food until some had been bought for the horses, and that they should be fed in our presence. Knowing that we were very angry and fearing that their baksheesh might be lessened, they walked two extra miles and brought back in triumph a bag of ground grain. This was mixed with water and rolled into cakes.

Never shall I forget the sight that followed. The ponies were lined up on the grass in the light of our camp fire, with the portion of food for each in front of it, and we stood guard until the last morsel had disappeared, thus satisfying ourselves that the starved little beasts had had one proper meal, and that it had not been stolen by their keepers.

After the trip was over, the man who lost his pony was paid for it. We remembered what Westerners are too prone to forget, that these Eastern servants are just grown-up children, with about the same amount of judgment and foresight. We dared give no intimation beforehand of our intentions, however, or more casualties among the pack animals would have followed.

In a roundabout way we learned from the head zece that a good pack pony was worth about four sheep; but he added scornfully, "This one was old and ready to die; two sheep would buy it."

As we had paid Rs. 2-8-0 for a sheep, we decided Rs. 5/- would be sufficient compensation. Judging from the smiles of pleasure with which this sum (equivalent to $1.60) was received, our valuation was correct. At any rate, the bereaved owner went away satisfied, which is rare with that class in India.

THE LAST FIVE MILES TO AMERNATH

From Punjirani to Amernath is five miles, the last three of which must be traveled on foot. For the first two miles the path winds around the hillside, beside the stream we had crossed to reach our camp.

As we looked up we could see a number of snow-bridges, and our way led past the spot where one had been carried away. The wall to our right still remained intact, a perpendicular surface, like purest marble, 30 feet high. Blue flowers very like our hepaticas grew here and there along the roadside.

Presently the path became too steep for our ponies, and we left them on the lower slope of the hill, to be happy with what grass they could find, until our return.

Now it was our turn to work, for our winding path could be traced up the almost perpendicular side of this spur, more than 500 feet to the top.

I had to take the climb in short stages, with many rests, on account of the fearful pumping of my heart. To none of the party was it play, at 13,000 feet. From the top, looking back, was a magnificent pile of mountains, the central one a sharp ridge, descending at each side in long, bare, rocky slopes, while to the left and right rose snow-capped peaks.

The path followed the hill to the right for some time, then that to the left across snow-fields, over loose stones, among which the trail was almost lost, and finally up the last steep ascent over rock masses to the entrance of the cave.

The snow-fields interested us greatly. They were masses of snow, drifted in from the winter storms, over the streams,
The melting snow from the hillsides and spring rains carried earth and stones on to them, and alternate thawing and freezing made solid fields, often many feet in thickness. The largest in this defile was about a half mile in length and 80 feet across at its widest, and was a succession of hills and hollows.

It was from the top of this immense bridge that we had our first glimpse of the famous cave—an opening 150 feet long, wide and deep, in a huge mass of gypsum rock. Extending from the snows on the right down past our field to the other end of this defile rose a rock-crowned hill, with its long moraine sides, and on the left a hill just as high, capped with jagged gray rock minarets, scarred and scarred, jutted up against the blue of the sky.

In the crevices snow had resisted the summer suns and was still lying, giving a peculiar streaked appearance to the rocks, visible many miles away.

Near the cave a cold, crystal stream tumbled down the mountain side in a series of beautiful cascades. From it we took our only drink of unboiled water in Kashmir, for no shepherd could perch his filthy hut on these steep slopes.

To complete the picture, we should have seen the pilgrims hurry along the valley toward their Mecca, sometimes as many as six or seven thousand of them. When they reach the last steep ascent, the most zealous of the men and women cast off their clothing, and clad only in a scant attire of birch bark, toil up the hardest part of the slope, chanting as they go.

We were too late, however, for this pilgrimage, which occurs at the full moon of the month of Sawan, in our July or August. Hindus come from all parts of India, some barefoot and only half clad, and if snow falls, as is sometimes the case, or the weather is inclement, many die on the way. In 1900 and 1901 cholera followed their visit and ravaged the Happy Valley in a most cruel manner.

The interior of the cave is very disap-pointing. At the back of it are some springs, whose issue forms a dome-shaped block of ice somewhat like the lingam or symbol of Siva. This ice is clear as crystal. At certain seasons it is about two feet high and covers an area of three or four square yards. When we were there the block was much smaller and the lingam quite indistinct. Siva is supposed to enter this symbol in some miraculous way; hence the adoration lavished upon it.

A few flowers still remained on and around the ice, and we found a number of butties (small clay lamps) lying on the floor of the cave—sole remains of the worshipful throng that had been there but six weeks before.

**THE MEANING OF AMERNATH CAVE TO THE HINDU**

At the earnest request of one of his clerks, a member of our party laid a garland of flowers on the icy symbol of the "great destroyer," most popular of the Hindu trinity—Brahma, Vishnu, and Siva. The full merit to be acquired by taking the trip was out of his power, but he thus made his offering by proxy at this very sacred shrine, and so lay up what righteousness he could.

We had not realized what a visit to this cave means to a Hindu. The Christian has his Jerusalem, but he goes there as to a historical city. One sacred spot after another is viewed with feelings of indescribable interest and awe, and a holy calm comes over him as he realizes that, in some instances at least, he is actually treading the path that his Master trod. That is all.

But to the Hindu pilgrim, Amarnath was the first abode of his god Siva, the destroyer who ushers in another life, and the word means life that never ends; so that the devotee who enters the inclosure treads upon holy ground and receives the gift of everlasting life—a goal before which all toil, all hardship, even the death of the body, sinks into insignificance.

---

Notice of changes of address of your Geographic Magazine should be received in the office of the National Geographic Society by the first of the month to affect the following month's issue. For instance, if you desire the address changed for your January number, the Society should be notified of your new address not later than December first.
NATIONAL GEOGRAPHIC SOCIETY

GEOGRAPHIC ADMINISTRATION BUILDINGS
SEVENTEENTH AND M STREETS NORTHWEST, WASHINGTON, D.C.

GILBERT GROSVENOR, President
JOHN OLIVER LA GORCE, Associate Editor
HENRY WHITE, Vice-President
O. P. AUSTIN, Secretary
GEORGE W. HUTCHISON, Associate Secretary
FREDERICK V. COVILLE, Chairman Committee on Research
EDWIN P. GROSVENOR, General Counsel

EXECUTIVE STAFF OF THE NATIONAL GEOGRAPHIC MAGAZINE

GILBERT GROSVENOR, EDITOR
JOHN OLIVER LA GORCE, Associate Editor
WILLIAM J. SHOWALTER, Assistant Editor
RALPH A. GRAVES, Assistant Editor
FRANKLIN L. FISHER, Chief of Illustrations Division
J. R. HILDEBRAND, Chief of School Service

BOARD OF TRUSTEES

CHARLES J. BELL
President, American Security and Trust Company

JOHN JOY EDSON
Chairman of the Board, Washington Loan & Trust Company

DAVID FAIRCILD
In Charge of Agricultural Experiments, U. S. Department of Agriculture

C. HART MERIAM
Member National Academy of Sciences

O. P. AUSTIN
Statistician

GEORGE R. PUTNAM
Commissioner U. S. Bureau of Lighthouses

GEORGE SHIRAS, 3rd
Formerly Member U. S. Consul in China, Former Naturalist, and Wild-game Photographer

GRANT SQUIRES
Military Intelligence Division, General Staff, New York

WILLIAM HOWARD TaFT
Ex-President of the United States

C. M. CHESTER
Rear Admiral U. S. Navy, Formerly Capt. U. S. Naval Observatory

FREDERICK V. COVILLE
Botanist, U. S. Department of Agriculture

RUDOLPH KAUFFMANN
Managing Editor The Evening Star

T. L. MACDONALD
M. D., F. A. C. S.

S. N. D. NORTH
Formerly Director U. S. Bureau of Census

JOHN OLIVER LA GORCE
Associate Editor National Geographic Magazine

ALEXANDER GRAHAM BELL
Inventor of the telephone

J. HOWARD GORE
Prof. Emeritus Mathematics, The George Washington University

A. W. GREELY
Arctic Explorer, Major General U. S. Army

GILBERT GROSVENOR
Editor of National Geographic Magazine

GEORGE OTIS SMITH
Director of U. S. Geological Survey

O. H. TITTMANN
Formerly Superintendent of U. S. Coast and Geodetic Survey

HENRY WHITE
Member American Peace Commission, and Recently U. S. Ambassador to France, Italy, etc.

ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

TO CARRY out the purposes for which it was founded thirty-three years ago, the National Geographic Society publishes this Magazine. All receipts are invested in the Magazine itself or expended directly to promote geographic knowledge.

ARTICLES and photographs are desired. For material which the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelope and postage.

IMMEDIATELY after the terrible eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. Four expeditions have followed and the extraordinary scientific data resultant given to the world. In this vicinity an eighth wonder of the world was discovered and explored — "The Valley of Ten Thousand Smokes," a vast area of steaming, smoking forests. This area has been created a National Monument by proclamation of the President of the United States.

THE Society organized and supported a party, which made a three-year study of Alaskan glaciers.

GEOLOGISTS were sent to study the Mt. Pelée, La Soufrière, and Martinique disasters.

AN expense of over $50,000 The Society sent a notable series of expeditions into Peru to investigate the traces of the Inca race. Their discoveries form a large share of our knowledge of civilization which was warning when Pizarro first set foot in Peru.

The Society also aid the honor of subscribing a substantial sum to the historic expedition of Admiral Peary, who discovered the North Pole.

NOT long ago The Society granted $25,000, and in addition $5,000, was given by individual members through The Society to the Federal Government when the congressional appropriation for the purchase was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people and incorporated into a National Park.

The Society is conducting extensive explorations and excavations in Northwestern New Mexico, which was one of the most densely populated areas in North America before Columbus came, a region where prehistoric peoples lived in vast communal dwellings whose ruins are ranked second to none of ancient times in point of architecture, and whose customs, ceremonies, and names have been engulfed in an oblivion more complete than any other people who left traces comparable to theirs.

Copyright, 1921, by National Geographic Society, Washington, D. C. All rights reserved. Entered at the Post-Office at Washington, D. C., as Second-Class Mail Matter. Acceptance for mailing at special rate of postage provided for in Sec. 1103, Act of October 3, 1917, authorized July 1, 1918.
The Watch of the Greatest Mileage

This is a country far excelling all others in railroad mileage. The pre-war railroad mileage of the United States was 249,852 miles—more than twice the totals of Canada, the United Kingdom, France, and Germany added together.

That the Hamilton Watch should be the most popular timekeeper over the world's greatest railroad mileage is a fact worth thinking about when you buy a watch.

Patrick J. Landy, the efficient conductor shown here, runs out of Chicago on the Fast Mail—No. 9 on the C. & N. W. He brings back the Iowa-Dakota Express. His service with the C. & N. W. began in 1879. He bought his Hamilton Watch "in the nineties." He is still running trains by it.

For a gift, a Hamilton is highly prized because of the rigidly accurate time it keeps, also because it is a watch whose owner can feel proud of its good looks.

There are many models—ladies' bracelet watches, and thin models for men as well as sturdy railroad timekeepers. Prices, $40 to $200; movements alone, $22 (in Canada, $25) and up. See them at your jeweler's.

Send for "The Timekeeper," an interesting booklet about the manufacture and care of fine watches. The different Hamiltons are illustrated, and prices given.

HAMILTON WATCH COMPANY, Lancaster, Pa.

"Mention The Geographic—It identifies you"
A Vision of Your car skidding

You have neglected to put on Weed Tire Chains. You anxiously view the slippery turn ahead and have a mental picture of your car skidding into the school children. Stop nursing anxiety and coaxing calamity. For Safety's sake—for your own peace of mind fully equip your car today with

Weed Anti-Skid Chains
THE ONLY REAL SAFEGUARD AGAINST SKIDDING

Safety demands that all tires be equipped with Weed Chains. It doesn't require the gift of second sight to see why this is true. Rubber slips—never grips. Rubber will agree to anything the road has to offer. It is the weaker element. It slides on wet pavements like a cake of soap rubbed on the moistened hands. Rubber lacks the bite-and-hang-on ability to prevent skidding.

Weed Tire Chains are diamond hard—many times harder than their opposing element—the pavement or road. Wheels equipped with Weed Tire Chains automatically lay their own traction surface. They grip without grinding—hold without binding. No matter how muddy or slippery the road, they hold on like a bull-dog, prevent side-slip and drive-slip.

AMERICAN CHAIN COMPANY, Inc.
BRIDGEPORT CONNECTICUT

In Canada: Dominion Chain Company, Limited, Niagara Falls, Ontario
General Sales Office: Grand Central Terminal Bldg, New York City.
District Sales Offices:
Boston Chicago Philadelphia Pittsburgh Portland, Ore. San Francisco

THE LARGEST MANUFACTURERS OF CHAIN IN THE WORLD

"Mention The Geographic—It identifies you"
What will your car be worth a year from today?

DODGE BROTHERS
MOTOR CARS
The joy and satisfaction of your new Face Brick house is only enhanced by the years. Time mellows its beauty, weather cannot mar it, and age does not undermine its strength. It will serve you a lifetime and be a heritage to your children.

Costing but a little more than less beautiful and less enduring materials, it becomes in a few years the most economical house you can build; for the Face Brick house depreciates almost imperceptibly, requires no repairs and little painting around doors and windows, and saves money in fuel costs and insurance rates.

"The Story of Brick," an artistic booklet with numerous illustrations, discusses these matters in detail. It has much helpful information for all who intend to build. Sent free.

"Face Brick Bungalow and Small House Plans" are issued in four booklets, showing 3 to 4-room houses, 5 room houses, 6-room houses, and 7 to 8-room houses, in all sixty-four, each reversible with a different exterior design. These designs are unusual and distinctive, combined with convenient interiors and economical construction. The entire set for one dollar. Any one of the booklets, 25 cents, preferably in stamps.

We have the complete working drawings, specifications and masonry quantity estimates at nominal prices. Select from the booklets the designs you like best and order the plans, even if you are not going to build now, for their study will be not only interesting and instructive, but helpful in formulating your future plans for a home.

You may want "The Home of Beauty," fifty designs, mostly two stories, representing a wide variety of architectural styles and floor plans. Sent for 50 cents in stamps. We also distribute complete working drawings, specifications and quantity estimates for these houses at nominal prices.


"Mention The Geographic—It identifies you"
Make Your CRANE Visit Part of the Plan

for your new home. The complete resources of Crane Branches and Exhibit Rooms the country over are at your disposal when you need equipment for any phase of plumbing, sanitation, heating or kindred service.

It will pay you to call with your architect at the nearest Branch or Exhibit Room and profit by Crane co-operation. You can see the various articles as they appear in use, select exactly the types and sizes you desire, and rest assured that in all details you are protected by uniform Crane quality.

We are manufacturers of about 20,000 articles, including valves, pipe fittings and steam specialties, made of brass, iron, ferrosteel, cast steel and forged steel, in all sizes, for all pressures and all purposes, and are distributors of pipe, heating and plumbing materials.
The Apache Trail

Forty years ago a handful of nameless, blue-clad troopers won for you the site of one of the wonders of the modern world—won it from the merciless Apache by tracking him down and fighting it out, hand to hand.

Stop off a day in Arizona on your "Sunset way" to California and see the marvels of this Apache Trail—the thirty mile, man-made lake beneath whose waters are buried the windings of Geronimo's last war trail—the famous Roosevelt Dam, whose foaming cascade overtops Niagara.

Ride in a comfortable motor car over the most ancient highway on our continent—see cliff dwellings older than Babylon—glory in gorgeous vistas of mesa, peak and canyon more vivid than any painting.

Take the Sunset Route to California

Every mile a scene worth while

New Orleans  San Antonio  Los Angeles  San Francisco

SUNSET LIMITED

A mild, sunny route all the way with Observation Car; Through Dining Car and other comforts of modern travel. Daily Through Tourist Sleeping Car Service between Washington, D. C. and San Francisco. Tri-weekly Sleeping Car Service to Globe, Arizona, for the side trip to ROOSEVELT DAM on the APACHE TRAIL.

For Information and Literature address

SOUTHERN PACIFIC LINES

New York 165 Broadway Houston Southern Pacific Bldg.

Tucson, Arizona Score Building

New Orleans Pan-American Bank Bldg.

San Francisco Southern Pacific Bldg.

"Mention The Geographic—It identifies you"
The Raymond-Whitcomb
Mediterranean Cruise
Sailing February 14, 1922

The Route
The most interesting ever planned, including historic and romantic places—many of them off the usual routes of travel. Among others are the Azores and Madeira, Cadiz, Algiers, Palermo, Naples, Constantinople, Athens, Jerusalem, Cairo, Corfu, the Riviera and Corsica. Generous and extensive shore excursions are included.

The Date
Ideal for winter cruising in southern waters.

The Ship
The great liner, "George Washington"—one of the largest and most sumptuously appointed steamships afloat.

A Special Feature
the entire Cruise of two months—from New York back to New York—will be made on this one great ship.

Rates, $625 and upward
Send for our Mediterranean Booklet

Other Tours and Cruises to California, the West Indies, Hawaii, Florida, South America, Japan-China, Europe, Arabian Nights Africa, Round the World, Egypt and the Holy Land.

For booklets address Raymond & Whitcomb Co., Beacon and Park Streets, Boston.

Other offices in New York, Philadelphia, Chicago, San Francisco and Los Angeles

RAYMOND-WHITCOMB
TOURS & CRUISES

"Mention The Geographic—It identifies you"
Luxurious and Fascinating West Indies

WINTER CRUISES

on Splendid White Star Liner
to Lands of Sunshine and Romance

The West Indies, Panama Canal and South America: The Panama Canal—the center of all interest, the Mecca for the traveler. Venezuela, and the marvelous panoramic ride from La Guaira to Caracas. The West Indies—a cluster of brilliant, turbaned, tropical playgrounds in sunny waters. All these, within easy reach of New York, and yet as distinct, as foreign, as diverting, as places on the other side of the globe.

The cruises made by the White Star liner Megantic are noted for their holiday atmosphere, health-giving, and lazy days at sea, and admirably conducted trips ashore. This itinerary is: Cuba, Jamaica, Panama, Venezuela, Trinidad, Barbados, Martinique, St. Thomas, Porto Rico and Nassau.

First Cruise ................... January 17
Second Cruise .................. February 16
Third Cruise .................... March 18

White Star Service, known the world over as the utmost in ocean comfort.

Fill out attached coupon today for beautiful color booklet and detailed information.

What autolock?

A most important question with National Geographic Readers. The majority of you own cars.

"WHAT AUTO LOCK?" is the name of a very interesting and informative booklet on this subject.

It analyzes the need for the auto lock—shows up the auto theft industry as told to Simplex executives by an ex-auto-thief, and, of course, describes fully our Simplex Theftproof Auto Locks, which offer the following advantages:

Convenient
Right under the wheel
Just turn the key
No soiling hands

$15
for all cars except Fords

Installed in 20 minutes
No mechanical change
No laying up of car

$7
for Fords

Underwriters' approval
Secures 15% reduction on insurance premiums

Car can't be steered
Yet movable short distances
Complies with local ordinances

Ornamental
Guaranteed for life of car

Write Today For "WHAT AUTO LOCK?"

Don't attempt to select a lock without the information in this booklet. Don't be content with the lock you have, without reading it. Perhaps you haven't thorough safety. The booklet is freely offered, without obligation. Glad to send it.

Simplex Corporation
2212 South Michigan Avenue, Chicago
Distributors Everywhere

"Mention The Geographic—It identifies you"
LAST THOUGHTS AT BEDTIME

THEIR busy little hearts and minds, and growing bodies cease.
Their energies to find in dreams a time of healing sleep.
Then comes the mother-influence that leads to growth and rest.
She knows that bedtime thoughts must be purest and the best.

JOHN MARTIN'S BOOK

A MOTHER'S STATEMENT

"JOHN MARTIN'S BOOK and our bedtime prayers start the children off to their blessed
Dreamland. Thank you, John Martin, for Your Book and all it means to me, a mother.
You are helping to shape the happiness and characters of my children and have made bedtime
thoughts beautiful, pure, and happy.—In these chaotic days of feverish reconstruction what
would we do without your help and guidance?"

THINGS TO DO AND TO MAKE

Every house of JOHN MARTIN'S BOOK contains a
treasure store of pages devoted to things to do and make.
Those who love and know the child's endless
activity of mind will appreciate what this feature alone
means to the busy mother and teacher. Countless
amusing and educational pages will appear as the merry
months come and go, leaving impressions and benefits
of unending good to the child.

FOR CONVALESCENT DAYS

Oh, the pathetic boredom of these leaden hours! Sympathetic
mothers and nurses know that they are harder
to bear than pain. JOHN MARTIN'S BOOK is a
constant resource and joy; and for long journeys by
land or sea JOHN MARTIN cures boredom and builds
self-reliance.

A SURPRISE

Every little Subscriber will receive a pretty CHRIST-
MAS CARD and a merry introduction Letter from
John Martin himself, if the attached coupon is used.

[AN IDEAL GIFT THAT LASTS FOURTEEN
MONTHS AND LIVES A LIFETIME]

SPECIAL OFFER TO THOSE USING THIS COUPON

JOHN MARTIN'S BOOK ROOM FOR YOUR CHILDREN

is a charming spot where the BEST
BOOKS, not all books, are honestly
and intelligently selected. It is—
A NATIONAL CENTER
for advice to earnest parents about truly
formative literature for children of all ages.

RECORD YOUR NAME
in the beautiful new "Children's Book Pages"—
and receive without cost, "John Martin's
Best Book List."

33 West 49th St., NEW YORK
"At the fifth little tree!"

FOURTEEN MONTHS FOR $4.00

JOHN MARTIN
33 West 49th St., New York

This offer expires December 31st, 1921,
and is for new subscribers only.

I am interested in your SPECIAL OFFER. Attached you will
find $1.00 (Canada $1.50) for John Martin's Book (The Child's Magazine) which please send to
Child's Name: ________________________________
Address: ____________ [Street, City, State],
Address: ________________________________
Donor's Name: ________________________________

N. G. M. Box 1315

[Signature]
To the
MEDITERRANEAN

Under Our Exclusive Management
the S.S. "Caronia" of the Cunard Line
will sail from New York on

JANUARY 28th NEXT
RETURNING MARCH 30th

The exceptional itinerary of sixty-one days
of luxurious travel, prodigious yet leisurely
sightseeing and perfect recreation includes
visits to MADEIRA, SPAIN (Cadiz-Seville
—Granada), GIBRALTAR (Tangiers),
ALGIERS, MONACO (Nice and Monte
Carlo), NAPLES (and environs), ALEXAN-
DRIA ( Cairo and Nile), PALESTINE
(Jerusalem, Bethlethem, etc.), CONSTAN-
TINOPLE, ATHENS, ITALY (Naples and
Rome). Stop-over privileges in Europe—
with return passage by Aquitania, Maure-
tania, Berengaria or other Cunarders.

THE CRUISE IS STRICTLY
LIMITED TO 350 GUESTS

Immediate application for accommodations advisable. Full information and descriptive literature on request.

THOS. COOK & SON
New York Boston Philadelphia Toronto
San Francisco Los Angeles Montreal Vancouver

COOK’S CRUISE DE LUXE

NEW STROMBERG Does it!

WHEN you see a big car
grinding easily up one of
those endless hills, it’s almost
true that a new Stromberg
Carburetor is under the hood.
The Stromberg is vital equip-
ment of the motor car today.
It gets more mileage out of a
gallon of gas—increases pow-
er—cuts down gas bills,
which means economy.

If your car is not equipped
with a Stromberg, write us
for literature. Give name, model and year of your ma-
chine.

Stromberg Motor Devices Co.
Dept. 1299
64 E. 9th St. Chicago, Ill.

Salt Mackerel
CODFISH, FRESH LOBSTER

FOR THE CONSUMER

NOT THE DEALER

FOR YOUR OWN TABLE

FAMILIES who are fond of FISH ought to get theirs DIRECT from GLOUCESTER, as an inland dealer anywhere else can possibly be in a position to offer you goods as perfect and wholesome as we can.

We sell ONLY to the CONSUMER DIRECT, not through pro-
vincial or markets. We want to supply YOU, so matter how small your requirements.

We have done a mail-order fish business for thirty years, sending the goods RIGHT TO OUR CUSTOMERS' HOMES, EXPRESS
PREPAID EAST OF KANSAS, and guaranteeing complete satisfac-
tion or money refunded.

If you are interested in good fish, won’t you drop us a postal card, and

rense us for further information?

Our SALT MACKEREL are tender, choice filets—baked or breakfast they are delicious. SALT CODFISH selected and prepared by
our method is unequalled.

Much of the fresh fish you buy in the market is at least several days old. OUR CANNED FISH, being STEAM STERILIZED, is
ABSOLUTELY FRESH.

Our FRESH LOBSTERS, in parchment-lined cans, go through no
process except boiling (no preparation of any kind being need). Delivered
and packed solid in whole pieces as soon as taken from the water, they
retain their crispness and natural flavor. CRABMEAT, SHRIMP
and CLAMS have likewise a perfectly natural flavor.

Our SALMON, TUNNY and IMPORTED FISH DELICACIES
are always the best possible.

A selection of our FISH PRODUCTS should always be in your
STORE-ROOM for daily use and for the preparation at a moment's
notice of dishes of daintiness or substantial dishes.

Send for Descriptive Price List

Frank E. Davis Co., 65 Central Wt., Gloucester, Mass.

“Mention The Geographic—It identifies you”
Accuracy

Waltham Main Wheel Accuracy Insures Dependable Time-keeping

The jeweled main wheel is the container and support of the mainspring, and these together transport the motive power to the watch.

Great accuracy is demanded in the making of this important part. Waltham, therefore, created gauges of such accurate measuring capacity that existing errors of variation in the mainspring and jeweled main wheel bearing were eliminated.

This is a technical factor in Waltham Watches that is unknown to the purchaser, but is a vital reason why Waltham Watches have won a world-wide reputation for dependable time-keeping.

With good care and a minimum cost of upkeep, a Waltham Watch will last a lifetime.

This story is continued in a beautiful booklet in which you will find a liberal watch education. Send free upon request to the Waltham Watch Company, Waltham, Mass.

Waltham
The World's Watch Over Time
Where you see this sign they sell Waltham Watches
For
Sportsmen
—as reliable
as
a good guide—

Facts About "A·B·A" Cheques
— universally used and accepted
— your countersignature in presence of acceptor identifies you
— safe to have on the person because they cannot be used until they have been countersigned by the original holder
— safer than money, and frequently more convenient than Letters of Credit because the bearer is less dependent on banking hours
— issued by banks everywhere in denominations of $10, $20, $50, and $100
— compact, easy to carry, handy to use

RECOMMENDATION FOR MEMBERSHIP
IN THE
NATIONAL GEOGRAPHIC SOCIETY

The Membership Fee Includes Subscription to the
National Geographic Magazine

PLEASE DETACH AND FILL IN BLANK BELOW AND SEND TO THE SECRETARY

To the Secretary, National Geographic Society,
Sixteenth and M Streets Northwest, Washington, D. C.

I nominate

Business or Profession

Address

for membership in the Society

Name and Address of Nominating Member

(If it is suggested that you inform the Nominee of your recommendation and of the benefits of membership)
In the midst of things

The Continental and Commercial Banks
Chicago

Complete Banking Service
More than $55,000,000 Invested Capital

"Mention The Geographic—It identifies you"
What's Coming This Winter?

Money rates—up or down? How about bonds—tax exempts and industrials? What's ahead in the stock market?

**Babson's Reports**

Barometer Letter—"The Winter Outlook," answers these questions and outlines coming developments in the investment world.

With this information you can see what's ahead and govern yourself accordingly.

**REPORT ON REQUEST**

This Barometer Letter and booklet—"Getting the Most from Your Money"—will be sent to interested investors without charge. Clip out the Memo—near—and hand it to your secretary when you dictate the morning's mail.

_Merely ask for Bulletin No. L-12_

Roger W. Babson's Statistical Organization
Wellesley Hills, 82, Mass.
(Founded in Boston)
The Largest Organization of Its Character in the World

---

**MEMO For Your Secretary**

Write Roger W. Babson, founder of The Babson Statistical Organization, Wellesley Hills, 82, Mass., as follows: Please send me Bulletin L-12 and booklet "Getting the Most from Your Money"—gratis.

---

**How to Grade Investments**

A **BOOKLET** that tells how to grade and classify investments in regard to their safety—

A booklet that explains the first principles of investing money in plain and simple language—

Such is our booklet "Common Sense in Investing Money". It will be valuable to you. Write for it today, and specify

**Booklet K-1108**

S.W. STRAUS & CO.
Established 1851. Incorporated
Straus Building - New York
Straus Building - Chicago

Offices in Fifteen Principal Cities

39 years without loss to any investor

---

**JUDGE US BY OUR RECORD OF 26 YEARS**

For 26 years we have paid 6% on Two-Year Time Certificates and for 20 years we have paid 5% on Certificates payable on demand. Back of every Certificate we issue there is the best security in the world—first mortgage on improved real estate. If you have save as little as $25 you ought to know all about us.

Write for booklet, "6% and Safety!"

The Calvert Mortgage Company
877 Calvert Building
Baltimore, MD.

---

**Hawaii**

_The Year Round Playground_

For Your Next Vacation


Ask your nearest railway, travel, tourist-employment agency for the new Hawaii Booklet, just out, or write direct to

_Hawaii Tourist Bureau_
Honolulu, Territory of Hawaii, U. S. A.

"Mention The Geographic—It identifies you"
When you are in New York

There are many ways that we can serve you. We can help you transact your business; we can make your stay more pleasant.

If you are going abroad, we will furnish you with our Dollar Letter of Credit, and after you reach Paris, the Travel Service Bureau of our Paris Office will help you arrange your itinerary, assist you in passport matters, purchase railroad and steamship tickets, obtain hotel accommodations, arrange motor, airplane and sightseeing trips, relieving you of all details.

Perhaps you never thought of making a personal call on a big New York bank. If you will come to see us on your next visit to New York, we believe you will begin a friendship that will be as valuable as it will be pleasant. Our Uptown Office, Madison Avenue at 45th Street, is very convenient to your hotel.

The Equitable Trust Company of New York

37 Wall Street
Uptown Office: Madison Ave. at 45th St.
Colonial Office: 222 Broadway

London—3 King William St., E.C.4
Paris—23 Rue de la Paix

"Mention The Geographic—It identifies you"
Look under the lid!

The picture "His Master's Voice" is a registered trademark of the Victor Talking Machine Company and identifies all Victor products. The word "Victrola" is also a registered trademark and applies to the products of the Victor Talking Machine Company only.

To be certain the instrument you buy is a Victrola, be sure to see the Victor dog and the word "Victrola." Look under the lid!

Victrola instruments $25 to $1500.

Victor Talking Machine Co.
Camden, New Jersey

"Mention The Geographic—It identifies you"
Bounding health

How much it depends on the food we eat! One simple rule will add as much downright pleasure to your eating as it will bring unfailing benefit. Eat good soup every day! Do it yourself and insist that your children gain the strength and vigor that soup gives.

Campbell’s Tomato Soup

is a shining example of how good soup stimulates appetite, energizes digestion, nourishes and constructs the body tissues. Pure tomato juices, creamery butter and granulated sugar are skillfully spiced and blended with the other ingredients to produce this tonic, healthful, delightful dish. You never tire of it.

21 kinds  12c a can

"Mention The Geographic—It identifies you"
Vigilance

THE VALUE TO THE PUBLIC of the Bell System service is based on the reliability, promptness and accuracy of that service.

As quality of service depends upon the economic operation of all telephone activities, vigilance begins where work begins. Science and engineering skill enter into the selection of all raw materials; and into the adapting and combining of these materials to the end that the finished product may be most efficient in operation and endurance, and produced at the least cost.

A series of progressive tests are made at every step during the transformation of these materials into telephone plant and equipment. And when all these complicated devices, with their tens of thousands of delicately constructed parts, are set in operation they are still subjected to continuous, exhaustive tests.

As the best of materials and the most complete machinery is of little value without correct operation, the same ceaseless vigilance is given to the character of service rendered in providing telephone communication for the public.

Such constant vigilance in regard to every detail of telephone activity was instrumental in upholding standards during the trials of reconstruction. And this same vigilance has had much to do with returning the telephone to the high standard of service it is now offering the public.

"Bell System"

American Telephone and Telegraph Company
And Associated Companies

One Policy, One System, Universal Service, and all directed toward Better Service

"Mention The Geographic—It identifies you"
"I Hear . . ."

Millions of dollars each year are needlessly lost because of the whisper—

"I hear it is a good investment."

Through our 50 offices we "hear" thousands of such reports. Many are worthless.

Hearsay offers a broad road to mis-investment and loss.

To guide investors who want carefully weighed information, we maintain offices in the leading cities of the country and 10,000 miles of private wires.

Today, liberal returns may be had from well chosen securities. Look for them on our current list. Sent on request for AN-170.

The National City Company
National City Bank Building, New York

"Mention The Geographic—it identifies you"
A Significant Fact

When the United States Air Service wanted a super lens of microscopic definition for aerial photography, the organization that makes the Kodak Anastigmat found little difficulty in meeting the necessarily exacting requirements.

And it is a significant fact that, due to the super-exactness of our optical equipment, the government inspectors availed themselves of the unusual facilities in our Research Laboratory even to the extent of using them to test lenses that were not of our manufacture. To the use of such equipment, equipment that detects the slightest error, is due the growing success of the Kodak Anastigmat lens.

"About Lenses" is a little booklet that impartially describes all types of lenses. It will help you to a better understanding of your camera and this means better pictures. It's free—and we should be glad to send it to you.

The KODAK
ANASTIGMATS

f.7.7 f.6.3 and f.4.5

Eastman Kodak Company
Rochester, N. Y.

"Mention The Geographic—It identifies you"
EACH package of sweets in Whitman's Quality Group has a "personality" all its own. It is an individual conception, distinct in its assortment and appearance. Whether your selection is the Sampier or the Pleasure Island or the Fussy Package or any of the others, it will be unlike any other candy package in the world, yet true to the Whitman's standard of quality—famous since 1842. At the store that shows the Whitman's sign.


"Mention The Geographic—It identifies you"
Jamaica, loveliest of the West Indies

Here you will find two delightful resort hotels - The Myrtle Bank at Kingston and The Titchfield at Port Antonio, both owned and operated by the United Fruit Company.

On your Great White Fleet Cruise you may motor across Jamaica, stopping for a brief space at these hotels or remain aboard ship - whichever suits your individual taste.

Twenty-three days of complete change and relaxation visiting Cuba, Jamaica, Panama, Costa Rica, Colombia and Guatemala - depending on the Cruise selected. No passports or sailing permits required from American citizens.

Great White Fleet ships are specially constructed for Cruise Service. The newest and finest vessels sailing to the Caribbean. Unexcelled in appointments and cuisine.

From New York and New Orleans. Only one class - first class.

Write for free illustrated booklet "Following the Conqueros through the Caribbean," cabin plans and fare information.

Address Passenger Department
UNITED FRUIT COMPANY
Room 1638, 17 Battery Place, New York
General Office: 33 State St., Boston, Mass.

On Your
GREAT WHITE FLEET
CARIBBEAN CRUISE

"Mention The Geographic - It identifies you"
Beethoven's Genius—

What would the musical world give to know the master's own interpretation of his immortal sonatas! Today, the works of composers as well as the interpretation of the classics by living masters are preserved to posterity through the Apollo Reproducing Piano.

A perfect pianistic reproduction, giving every shade of tone color and interpretation, is accomplished. The Apollo brings to every home a deeper musical understanding through the inspiration and refining influence of the best music exactly as played by the greatest artists.

The Apollo mechanism, limitless in its range of pianistic expression, plays a roll personally recorded by the pianist on a special recording piano. Reproduction of the artist's exact interpretation is thus accomplished.

Catalog on Request

Booklets describing the various styles of the Apollo and giving important FACTS of great value to those considering the purchase of a reproducing piano, player piano, or piano will be sent, without obligation, on request.

THE APOLLO PIANO COMPANY
Department 1558, De Kalb, Illinois

Pacific Coast Branch: 985 Market Street, San Francisco
A $5.00 Gift for a Boy or Girl—
but the Value of it is Priceless!

No finer gift can be imagined than a year's subscription to St. Nicholas. It brings delight twelve times a year. It is a gift of the mind and the heart.

The regular St. Nicholas subscription price is $4.00 a year. As a special $3.00 Christmas offer we will add to St. Nicholas one of these splendid books:

THE LOST PRINCE, by Frances Hodgson Burnett.

This story is a classic of youth. It is the fascinating tale of adventures of a boy prince who, in his wanderings, finds a lost and never-merry land of childhood.

Stories of the Great West, by Theodore Roosevelt.

Trilling tales of frontier life, related with the appreciation which this great President had for the early pioneers and their struggles against the Indians. A book every American boy and girl should read. Regular price, $2.

EITHER OF THESE TWO WONDERFUL BOOKS and
ST. NICHOLAS Magazine
FOR ONE YEAR for $5.00

What a gift this is for any boy or girl who loves to read. St. Nicholas has been the favorite magazine of American youth for fifty years. In 1922 it will be better and brighter than ever before. It will contain a wealth of stories by the most popular writers for boys and girls. In each issue, besides, will be articles on travel, sports, camping, nature, science, adventure, sports, the day—everything for the mental development of youth.

Reading St. Nicholas makes better-informed, broader-minded young men and women. It is a real magazine, written and edited especially for boys and girls up to 18 years of age.

St. Nicholas should be in every home where good reading is appreciated. Subscribe for it this Christmas for your boy and girl. Take advantage of this special offer and mail a splendid book to the gift.

Please send your subscription as soon as possible so there will be plenty of time for the book, the first issue of St. Nicholas and the handsome Gift Card to reach before Christmas Eve, the boy or girl to whom you are sending them.

COUPON

St. Nicholas Magazine, Subscription Dept. J-24
353 Fourth Ave., New York

For the enclosed $5 please send St. Nicholas Magazine for one year to:

Name
Address

Send (book selected) and Gift Card to

Name
Address

(If subscription alone is wanted, enclose only $4)

THE artistic design and structural durability of Harrison memorials combine dignity with a sympathetic expression of your deepest feeling and regard.

Write for Booklet B
HARRISON GRANITE CO.
200 Fifth Ave. New York
601 Fine Arts Bldg., Chicago
1921 Exec. Bldg., Detroit
407 Osage Ave., Philadelphia
Works: Harrisville, VT.
Member of Memorial Crafts Institute

HARRISON MEMORIALS

PATENTS
TRADE-MARKS

We shall be pleased to have you consult us relative to protecting your inventions or registering your trade-marks. Booklets on either or both of the subjects will be sent gratuitously, upon request.

MUNN & COMPANY
Patent Attorneys
617 Woolworth Bldg., New York City
Washington Office: 625 8 St. N.W.
Chicago Office: 801 Tower Bldg.
San Francisco Office: 582 Market St.

Georgia Paper Shell
ARISTOCRAT PECANS

large, full-flavored, easily cracked, nutritious nuts fresh from our Groves to you.

A THANKSGIVING TREAT
Pet Your Palate with this Southern food-delight—sold as a confection—served with meals or used to enrich and flavor salads and other dishes.

THE CHRISTMAS GIFT
FOR FRIENDS

Prize: 1 lb., 65¢; 5 lbs., $3.75; 10 lbs., $6; 15 lbs., $9.50; 25 lbs., $22.50. (Delivery prepaid.) Money back if not satisfied.

FLINT RIVER PECAN COMPANY
ALBANY, GEORGIA

"Mention The Geographic—It identifies you"
All Races are learning a new way to clean teeth

This new way to clean teeth is spreading all the world over. Leading dentists everywhere advise it. To millions of people it is daily bringing whiter, safer teeth.

Everyone should make this ten-day test. See and feel the benefits it brings. Compare the new way with the old.

To fight film

That viscous film you feel on teeth is their chief enemy. It clings to teeth, enters crevices and stays. It dims the luster, spoils the beauty and causes most tooth troubles.

Film is what discolors, not the teeth. Film is the basis of tartar. It holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay.

Millions of germs breed in it. They, with tartar, are the chief cause of pyorrhea.

Much stays intact

The ordinary tooth paste does not effectively combat film. The tooth brush, therefore, leaves much of it intact. So teeth discolor and decay despite the daily brushing. Very few people escape.

Dental science has long sought ways to fight that film. Two ways have now been found. High authorities advise them. Many careful tests have proved them.

Both are embodied in a dentifrice called Pepsodent. And this modern tooth paste, nearly all the world over, is bringing a new dental era.

This pleasant ten-day test

We supply a pleasant ten-day test to everyone who asks. That test is most convincing. The results are a revelation.

Each use fights film in two effective ways. It also brings three other effects which authorities deem essential.

It multiplies the salivary flow. It multiplies the starch digestant in the saliva to digest starch deposits that cling. It multiplies the alkalinity of the saliva, to neutralize the acids which cause tooth decay.

Thus every use immensely aids the natural forces designed to protect the teeth.

Send the coupon for a 10-Day Tube. Note how clean the teeth feel after using. Mark the absence of the viscous film. See how teeth whiten as the film-coats disappear.

Watch the five effects. Repeat them for ten days. Then let the clear results show you what this method means, both to you and yours. Cut out the coupon now.

10-Day Tube Free

THE PEPSODENT COMPANY,
Dept. 141, 1104 S. Wabash Ave., Chicago, Ill.
Mail 10-Day Tube of Pepsodent to

Only one tube to a family
Too Good for Poor Printing

When your printer advises Old Hampshire Bond, he is suggesting the finest business letter paper he knows —a paper so good that your letterhead is certain to print better and look better on it.

Sample Book on request

Hampshire Paper Company
South Hadley Falls, Massachusetts

New Furniture For Old—

This FREE BOOK Tells How

Explains how to refinish old furniture to conform with the vogue for enameled and stained effects—how to make your home artistic, cheery and inviting. Tells how to finish inexpensive soft wood so it is as beautiful and artistic as hard wood. Tells just what materials to use—how to apply them—includes color card—gives covering capacities, etc.

We will gladly send this book free and postpaid for the name of your best dealer in paints. And for 2c we will also send you a can of Johnson's Prepared Wax.

S. C. JOHNSON & SON, Dept. N.G.1, Racine, Wis.

"The Wood Finishing Authorities"

YOUR electric lights give you one hundred per cent convenience only when controlled by DIM-A-LITE. Pull the cord to regulate the intensity of light. DIM-A-LITE screws into any socket—fits any lamp—saves current. It is useful in every room.

WIRT COMPANY, Philadelphia, Pa.
Next time you see an Electric Shop think of

DIM-A-LITE
For Sale Everywhere

$1.40

"Mention The Geographic—it identifies you"
APPRECIATION of Nobility of Character has been enhanced by the World War. There are deeds to be commemorated, ideals to be perpetuated, and heroic names to be graven in granite.

The heart of the memorial is the granite of which it is made. It must be a stern and rugged material that will resist the action of weather and retain its beauty indefinitely.

It is here that ROCK OF AGES Granite serves so completely. A lovely gray in color, and fineness in texture give it an unusually effective polish. Even the minutest pores are closed, thus defying the elements.

It is America's finest monumental material—the pride of Vermont—Quarries in Barre.

Boutwell, Milne & Varnum Company

The intimate story of Rock of Ages sent on request. Refer to Dept. E

QUARRIERS
Montpelier, Vermont

When ordering ask your dealer for our Certificate of Inspection.

"Mention The Geographic—It identifies you"
We want you to buy the first pair of Shawknit Hosiery. You yourself will want to buy the succeeding pair, if our efforts to please you prove successful. And for more than forty years now we have pleased particular people.

SHAW STOCKING CO.
Lowell, Mass.

LIMITED TIME OFFER
Only $1,650, f. o. b. Brooklyn

This beautiful home represents remarkable value at the price. It would cost a great deal more if built by the time-consuming, expensive, hand-labor method on the site.

By fabricating it at our plant—cutting all parts to exact measurement by machinery—we save you money on labor costs and provide you with a more perfect building.

We ship this house in sections so all you need do is to assemble the parts. Expert workmen are not necessary.

The Bossert house shown here has a 15' x 12' living room, two 9' x 12' bedrooms, a 6' x 9' kitchen, bath, and two closets.

Write us today—or send 25c for catalogue showing our many styles of houses.

LOUIS BOSSERT & SONS, Inc.
1313 Grand Street
Brooklyn, N. Y.

THE modern housekeeper no longer scrubs the closet bowl. Sani-Flush keeps it spotlessly white for her without any of the unpleasant labor of dipping out of water, scrubbing and scouring. Sprinkle a little Sani-Flush in your closet bowl according to the directions on the can. Flush. All the rust stains, markings and incrustations will disappear, leaving the bowl and hidden trap sparkingly white and so clean after Sani-Flush has been used that disinfectants are unnecessary.

Sani-Flush is sold at grocery, drug, hardware, plumbing, and house-furnishing stores. If you cannot buy it locally at once, send 25c in coin or stamps for a full sized can postpaid. (Canadian price, 35c; foreign price, 50c.)

The Hygienic Products Co., Canton, O.

Canadian Agents:
Harold F. Ritchie & Co., Ltd., Toronto

Sani-Flush
Cleans Closet Bowls Without Scouring

"Mention The Geographic—it identifies you"
This Attractive Booklet Sent to You Free

It reveals the wonders of Nature, beautifully illustrated with many color plates, sample pages, halftones, etc., from The Nature Library. It contains a vast amount of other information about the great outdoors that will be of interest to you. The Booklet comes to you free and without obligation. But you should act quickly, as the supply is limited. You need only to send the coupon.

There is no other subject that creates such popular interest as Nature. It makes everything around you interesting. As you go thru the country in your car—or strolling along on foot, no matter which way you look, your eye is attracted to things that fascinate you. It may be a mountain in the distance, covered with autumn foliage, a hillside dotted with flowers, or the beautiful trees nearby. It may be a small animal hurrying across your path, or the birds flocking for their long trip South. Nature in some form or other lures you and makes you happy that you are in the country. Imagine how much more pleasure you would have if you knew more of the outdoor world.

THE NATURE LIBRARY

will open your mind to these great wonders. The greatest naturalists, John Burroughs, Neltje Blanchan, W. T. Holland and many others tell you, in their interesting way, the things that you should know, and that you want to know. Hours of their lives have been spent in finding out about these things for you. No other series of volumes on Nature subjects is so generally consulted and quoted. It stands alone in authority and in its style of presentation. The sale of these books has gone into the hundreds of thousands of copies. Think of the many delights these volumes contain.

It is Nature that takes Edison, Firestone, Ford, and this year Pres. Harding on their famous annual camping trips.

Why Do They Go Back to Nature?

They are men of large affairs, and they are very busy. But these great men know that Nature gives an inspiration that can be had nowhere else.

Through The Nature Library thousands of facts covering almost every subject in the great outdoor world are much known to you. It is the most complete series that has ever been published and has been prepared in such a simple style that it will interest your children. Every one that is worth which loves Nature. The Booklet that we have prepared will interest you.

Mail the coupon now, today, while you have this opportunity.

DOUBLEDAY, PAGE & CO.
GARDEN CITY  NEW YORK

---

Please send me free and without obligation the beautiful sixteen page booklet, containing full page color plates, sample pages, etc., from The Nature Library.

Name:  
Address:  
City:  State:  

---

DOUBLEDAY, PAGE & CO.
Garden City, N. Y.

Please send me free and without obligation the beautiful sixteen page booklet, containing full page color plates, sample pages, etc., from The Nature Library.
Go to California this winter
Go on the Santa Fe—choice
of four trains—a quick trip
in comfort—the scenic way

THE CALIFORNIA LIMITED is all
that the name implies. Very best for
best travelers. Finer than ever this sea-
son. You will like the Fred Harvey
dining-car service, and the through
Pullman via Grand Canyon.

The Missionary also has Pullman for the Canyon.
The Navajo, Scout and Missionary carry tourist
as well as standard sleepers. They provide Fred
Harvey dining-room service at artistic station
hotels. Many travelers prefer to get off the
train for their meals.

Never have you eaten a better meal for the
money than on the Santa Fe.

Never have you seen anything comparable to
Grand Canyon National Park—or more interest-
ing than the Petrified Forest or Indian pueblos.

Ask for illustrated folders: "To California the Santa Fe
Way," "California Picture Book," and "Grand Canyon
Outings."

The Outdoor Books for Fall Reading

The Book of Birds—Two hundred and fifty full-color paintings of birds by Louis Agassiz Fuertes and 58 other illustrations enable even a child to identify as many varieties. The three principal sections are by the gifted ornithologist and facile author, Henry W. Henshaw, former Chief, U. S. Biological Survey. In his chapters, Common Birds of Town and Country, Game Birds and American Warblers, he has caught the whirr of wing and note of song and lets one into their winged secrets. Other pages tell how to attract and photograph birds and feed them in winter and describe their wonderful fall and spring migrations.

200 pages. Bound in Buckram, $3.00, postpaid in U. S.

Scenes from Every Land—(Fourth Series). This world-neighborizing volume by Gilbert Grosvenor (through 200 full-page illustrations and 20,000 words of text), enables us to picture many of the peoples taking part in the Armament Conference or who now figure in our foreign trade, relief and other activities. Its humanizing text and color plates transport us to curious human groups, strange lands and cities, and reveal the beauties and glories of ocean, desert, waterfall, plain and mountain. It gives mental rest, change of scene and refreshment, and yet equips us for more neighborly decision of many world questions. Children never weary of this travel book.

Cloth, $2.00, postpaid in U. S.

Ideal holiday gifts for children and adults
Wild Animals of North America—This veritable zoological garden
within covers contains 127 paintings in full-color by Louis Agassiz Fuertes and 86 remarkable photographic studies of intense value and interest to all friends of animals, sportsmen, teachers and children. The delightful text is by Edward W. Nelson, Chief of the U. S. Biological Survey, who here, with the art of the born narrator, gives one the results of forty years of intimate contact with American Wild Life.

240 pages. Bound in Buckram, $3.00
postpaid in U. S.

The Book of Dogs—One hundred dog portraits in full-color by Louis Agassiz Fuertes—showing accepted examples of each breed—make this book a Bench Show in itself and an invaluable guide for all who intend to purchase dogs to exhibit or as playmates of children or home guardians. Its authoritative discussions of points, traits, character and history of leading breeds make it indispensable around the kennels. Its instances of dog sagacity, affection and self-sacrificing heroism delight child and adult.

Buckram, $2.00, postpaid in U. S.

NATIONAL GEOGRAPHIC SOCIETY, WASHINGTON, D. C.
We had supposed, that, as time went on, we should lose inevitably a little part of the earnestness with which we began our work. We had believed that as one car after another met our hopes and left our hands, the edge of our first concern surely would be somewhat turned by confidence, and by the familiarity that enters all accustomed tasks. We know now we were mistaken. Perhaps no other thing in this world is so well able to kindle and intensify a sensitive scruple in men as the good opinion and the firm faith of friends. What has been said about the car we build, by our own people, and more particularly, by those who own it, has acted upon us all as at once an encouragement and a solemn charge. More than at the very beginning, if that were possible, we seek now to make our product increasingly fine. It is a simple thing to say that every day we are trying to make our car, good as it is, a little better. But to us who know how profoundly good it was in the very beginning, and has been constantly since, it is far from being a simple thing to do.

You too will say this when you have known the admirable character of its quiet service. Nothing excelling its fine utility has so far graced the roadways of the world.

LA FAYETTE

LAFAYETTE MOTORS COMPANY
620 S. HILL
INDIANAPOLIS
Elgin's First Watch
and Elgin's First President

B. W. RAYMOND, Whig patriot, far-sighted pioneer and third mayor of Chicago, was the first president of the Elgin Watch Factory. Elgin's first watch, produced in the little frame factory in 1867, was named in his honor.

Its completion marked the end of the ancient tradition, "the broken watch must go back to the maker of the broken part." For the Elgin working principle is "all parts interchangeable." From that day forward, jewelers all over the world have carried repair stocks of standardized Elgin parts, each one the precise replica of the broken part so quickly and perfectly replaces.

Cave-Man's burning grass rope, Babylon's Sun-Dial, Egypt's Water Clock, King Alfred's Time Candle—all down through the ages, old Father Time has seen the world's timepieces slowly but steadily drawing nearer to the timekeeping marvels of our own day—

Elgin Watches

Press of Judd & Detweiler, Inc.
Washington, D. C.
Old Dutch cleanser keeps stoves clean and bright.

Old Dutch polishes and cleans the nickel trimmings, porcelain sides and drip-pan, etc. Makes cooking utensils shining and spotless. Economical—Efficient—Sanitary.