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THE NATIONAL GEOGRAPHIC MAGAZINE

From America to Mecca on Airborne Pilgrimage

A Moslem Student at Harvard Business School Records Islam's Sacred Rites in Color in the Interest of World Understanding

By ABDUL GHAFUR SHEIKH

With Illustrations from Photographs by the Author

FROM every land, by every route, we came, driblets and droplets of humanity trickling down from distant mountains and from far-off ancient cities until over the whole scope of Islam our stream became in time a river, and our river a tide.

We flowed, at the command of the Prophet, toward Mecca. "Verily," the Koran says to us, "the first house founded for mankind to worship in is surely at Mecca, a blessing and a guidance to the worlds." To visit it at least once before we died, if at all possible, was our duty and our privilege.

We pilgrims numbered nearly 500,000; about a third were women. Some, trudging down dusty roads from Central Asia toward India, had already been a year or more upon the way. Others, journeying in the stifling holds of freighters and tramp steamers, made their slow passage from South America or the green islands of Indonesia (map, page 9).

Magic Carpet from New York

Still others, traveling by night under the desert stars, plodded eastward by camel from Meknès and Fès and the sandy wastes of Libya. Not a few still squatted on the wharves of Istanbul, Dubrovnik, Algiers, Gaza, Bizerte, Piraeus, waiting with haggard patience for a place on some crowded open deck.

But I, I came from America by magic carpet. Standing at the New York International Airport, I had uttered the pilgrim's traditional prayer: "Lord, roll up the earth for me!"

And it had been done. Oceans, countries, continents had fallen away beneath the wings of my Pan American Clipper until, on August 26, the sixth day of the Moslem month of Dhu 'l-Hijja, I stood at last before the Great Mosque of Mecca. I entered it by the Gate of Salvation and passed thence through the inner Gate of the Sons of the Old Woman.

Before the Black-draped Kaaba

The dawn sky above Mecca was pale, and the air under the archway dank and cold. Two pilgrims hastening to prayers brushed by me, padding on brown bare feet. I gave them greeting, pressed forward, and emerged suddenly within the courtyard.

There, beyond the wide, stone-set pavement, stood the House toward which all Mos-

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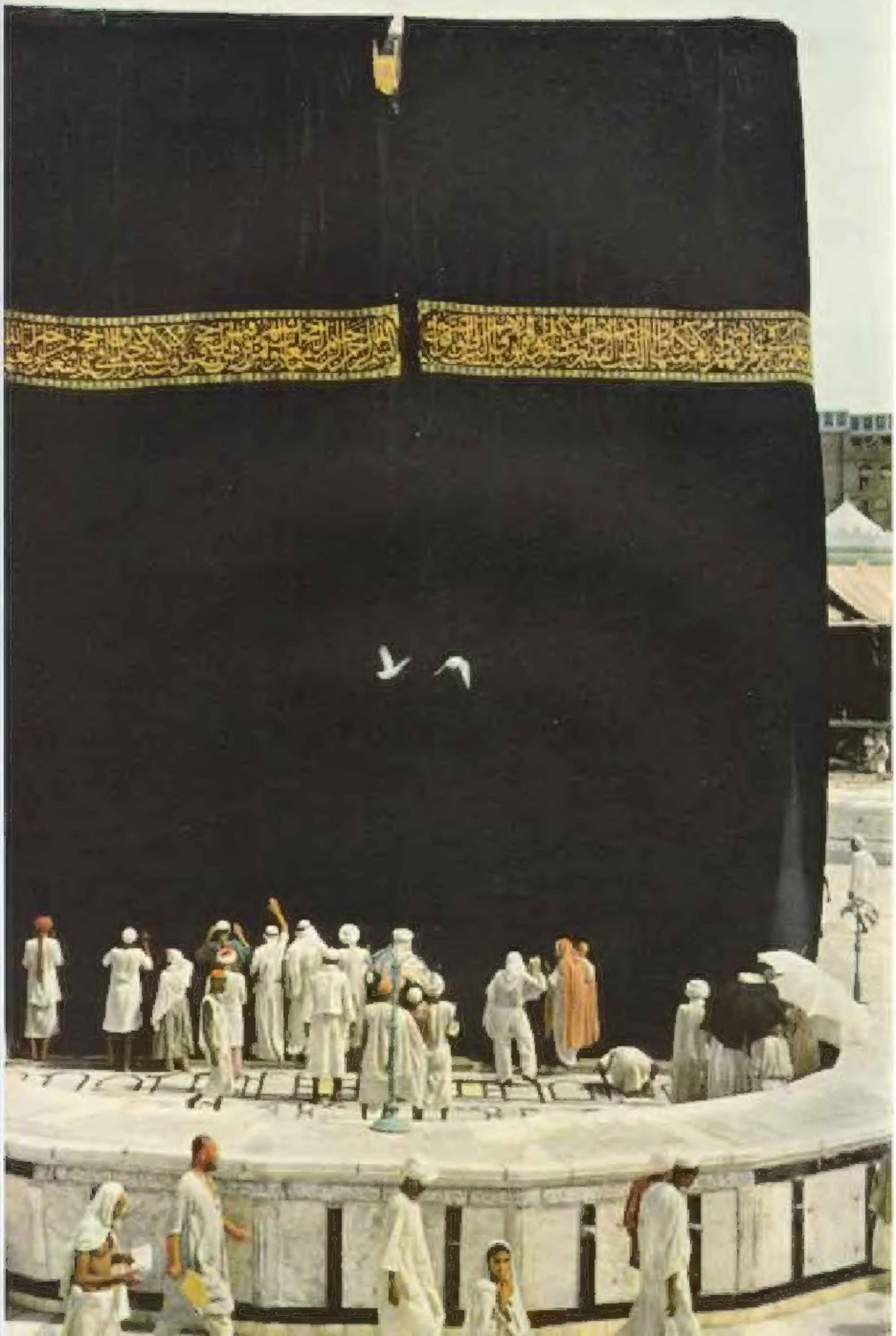
The Author

Abdul Ghafur Sheikh is the third son of a prominent East African businessman and philanthropist, Sheikh Fazal Ilahi, who came to Kenya in 1898 from what is now Pakistan. Prospering mightily, Sheikh Fazal Ilahi has set up the Sheikh Charitable Trust for welfare work in the Near and Middle East. To manage it he chose Abdul Ghafur and sent him to Dartmouth College and Harvard Graduate School of Business Administration.

Last year 21-year-old Abdul Ghafur came to the National Geographic Society's headquarters in Washington and announced his intention to go on *hadj* to Mecca during his vacation. He wished to make a photographic record of the pilgrimage as a means of interpreting Islam's sacred rituals to the West. Though he had had little experience in color photography, he sallied forth with two small cameras lent by The Society and returned with the extraordinary photographs which illustrate this article.—Editor.



lems, the world over, turn their hearts: the Kaaba—black-draped, severely square, immense. Unforced, the words of the *Talbiya* came to my lips:

"Here am I, O God, at Thy command! No equal hast Thou; here am I."

A breeze filtering down from the barren hills moved the skirt of the Kaaba's covering and let it billow and ripple in gentle folds. I felt a deep sense of humility. Part was that humility natural to any Moslem standing before the Presence: in the belief of Islam, Abraham built the Kaaba at the command of God. But part sprang from another source—the knowledge of my mission in this place.

For I had set myself a task with few precedents in the long history of Islam: to take in color, if I could, a full pictorial record of my religion's sacred rites.

Permission from a High Official

My purpose was simple and clear—to bring the West a richer knowledge of Islam, its high festivals and their meaning. To more than 370 million Moslems, the *hadj*, or pilgrimage, has a central, living significance. Surely, I thought, if I can convey to the outer world in words and photographs some measure of that great pageant's importance to men of my faith, I shall have advanced, by at least a little, man's understanding of man.

I had been careful, of course, to obtain the permission of a high Meccan official. Until fairly recent times such permission would have been almost impossible to obtain, and zealots among the faithful who flock to the sanctuary might have attacked me.

Why would zealots have considered my photography impious? First, because Mohammed banned all representation of the human form—sculpture, painting, murals—so the Arab would not return to the worship of images as idols. Second, because to bring a camera into a shrine of Islam would, in their eyes, defile the holy place.*

From beneath my *ihram*—the two seamless sheets which make up the pilgrim's garb—I drew my light meter. As I had surmised, the day was yet too young, contrast in color still too faint. Later in the day, when the sun was higher, I could return and commence the thorough photographic coverage of the mosque which I desired.

Now, however, I must resume my role of pilgrim. I stepped out into the courtyard to begin my own *tawaf*—the sevenfold circuit of the Kaaba which each *hadji* must perform on at least three occasions: when he first reaches Mecca, when he returns from the Stoning at Mina, and when he says farewell to the city on his last day (page 28).

Three laps of the tawaf must be accomplished at a trot, the other four walking. I knew not the special prayers which the guides recite for their followers, but I offered those phrases which welled most naturally to my tongue. The circumambulation, an old custom, is a means of turning the thoughts of pilgrims upon the soul's own seeking after the Lord. For such a journey, I thought, no paid guide was truly necessary.†

By this time, however, many thousands of eager, early-rising pilgrims had entered the square and with ecstatic indifference to those around them were jogging past the shrine, some chanting, some weeping, some struck dumb in contemplation of this, the "navel of the world." Caught up in this throng, crushed shoulder to shoulder, cheek to jowl, I was soon no longer capable of independent motion but surged forward like a chip on a racing tide.

← The Kaaba: "Navel of the World" Photographed in Full Color by a Devout Moslem

Moslems believe that Abraham built this cube of basalt blocks at the command of God. The curtain's gold embroidery cites verses from the Koran in Arabic.

To pay homage at this holy of holies forms one of the five basic obligations of Islam. The other four: to observe the fast of Ramadan; to recite the belief that "There is no god but God, and Mohammed is His Prophet"; to pray five times a day; to give to the poor one-fortieth of one's wealth.

Moslems confronting the Kaaba weep, wail, and prostrate themselves; they kiss its mantle and drench it in costly perfumes; or merely stand in awestruck contemplation. On rare occasions, when rain pours from the Kaaba's gilt Waterspout of Mercy, pilgrims vie for each drop of the heaven-charged moisture.

No planes are permitted to pass over the Kaaba. Even the doves (on the devout report) fly around but never above it. (See also pages 26-33.)

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* Editor's Note

Some years ago pilgrims would have thought it sacrilegious to photograph the Kaaba and other sacred shrines. Indeed, zealots might have attacked anyone displaying a camera. But today comparatively few Moslems believe a photograph breaks Mohammed's ban; even to go abroad on a hadj they must have a passport photograph.

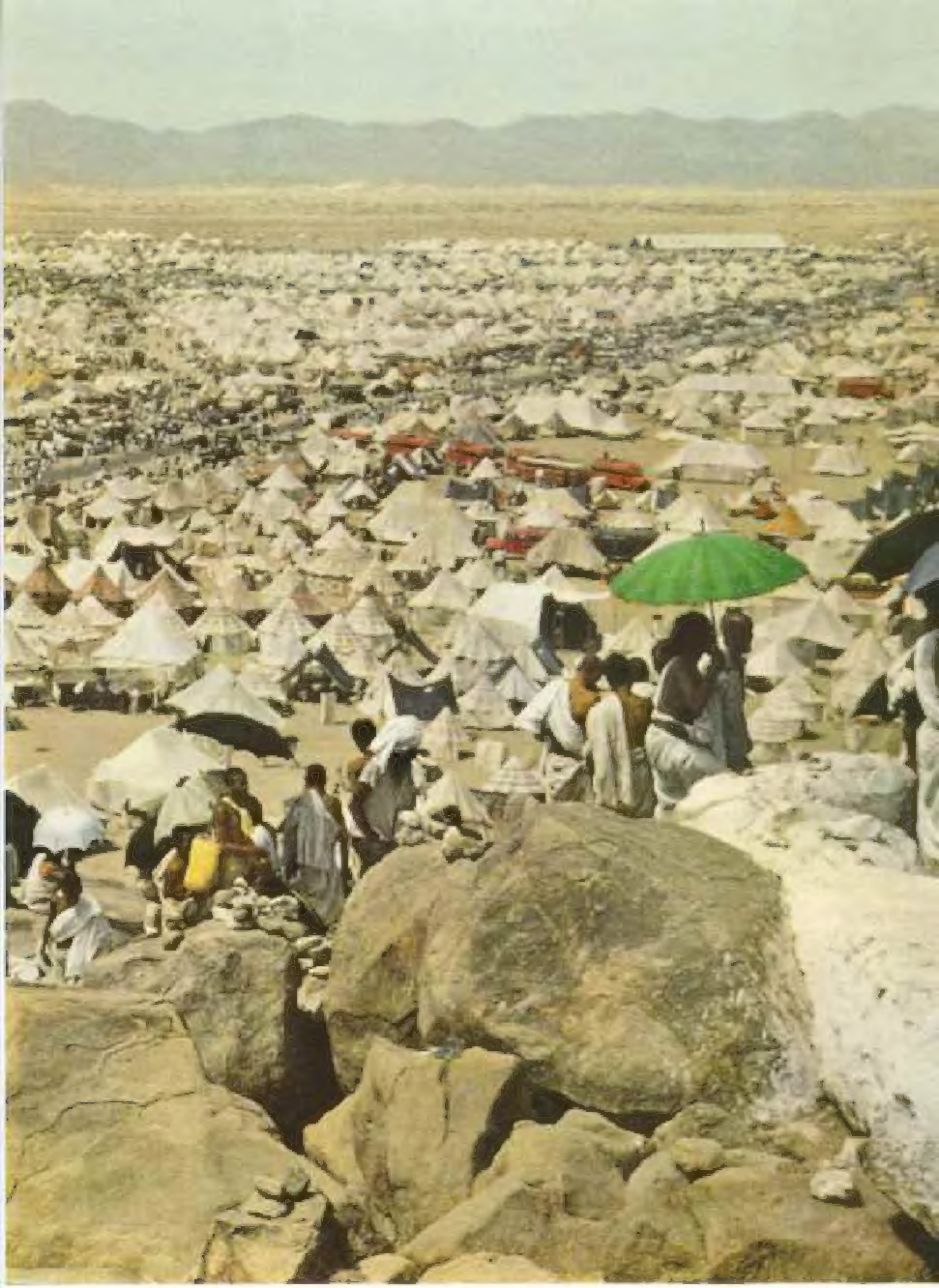
With increasing frequency, approved Moslems are permitted to record the hadj on film. In fact, the great pilgrimage is lavishly illustrated in Arabic language newspapers, and souvenir photographs are available in shops near the gates of Mecca's Great Mosque.

Nevertheless, scenes such as the ones which accompany this article are still rare in Western publications. This reverent and fully illustrated record of the great pilgrimage to Mecca was made possible when one of the progressive officials of the Saudi Arabian Government granted Abdul Ghafur Sheikh permission to make the photographs.

† See "Pilgrim's Progress to Mecca," 22 illustrations in duotone, National Geographic Magazine, November, 1937.

On the Tented Plain of 'Arafa, 14 Miles from Mecca, 500,000 of the Faithful Convene

No Moslem can truly say he has made the *hadj*, or sacred pilgrimage, unless he has stood at 'Arafa before sunset on the appointed day. At twilight the throng breaks camp and rushes pell-mell for the road to Muzdalifa.



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Kodachrome by Alfred Ghatar Sheikh

Here Mohammed Prayed on His Last Pilgrimage. The Devout Repeat His Steps and Prayers

Moslem legend holds that Adam and Eve met on this spot after expulsion from Eden. Goal of a Standing, or gathering, is an attendance of 600,000. If fewer appear, angels are supposed to descend and make up the difference.

I was fortunate in one thing: before me ran a gaunt Moroccan reciting verses from the Koran in a voice at once majestic and exquisitely tuned. Arabic, and most particularly the Arabic of the Koran, carries the pitch of poetry with ease and emphasis, and on the lips of a gifted declaimer it can weave a rare enchantment. So, as the great crowd bore me onward in our counterclockwise rotation, I drank in my companion's words as one athirst.

Such pleasure served to offset in part the pain given me in another quarter. Being in a mosque, of course we wore no shoes. I was glad that all pilgrims must pare their nails before beginning the hadj, for with each stride the Bedouins behind me trod on my bare heels with their calloused feet. Before I had finished my sixth lap and kissed the Black Stone embedded in the Kaaba's eastern corner (page 27), my feet were painfully bruised.

Eventually I limped from the mosque by the Safa Gate and began the ritual of running between the hills of Safa and Marwa. Here, in Moslem legend, Abraham left Hagar in the desert with her son Ishmael. Rushing frantically from one spot to another, she searched for water, until the angel Gabriel led her back at last to a spring which bubbled up miraculously near the child's feet.

That same spring, Moslems believe, now feeds the well of Zemzem within the Great Mosque. By their "running," pilgrims commemorate each year the mother's anguish and her amazed discovery.

Dhahran to Jidda—by Air

The route of Safa-Marwa flanks one side of the mosque and intersects the city's most turbulent bazaars (page 56). It was still early when I commenced my seven courses to and fro, but already men thronged the coffeehouses and merchants hawked their wares. With burning lungs and aching feet I flung myself into the crowd and was buffeted at every step.

I made my devotions as best I could, though compelled to concentrate as much upon keeping my balance as upon maintaining a humble and attentive heart. When I had sidestepped the last gesticulating merchant and had uttered my culminating prayer, I withdrew, panting, to the waiting chair of a barber for the ceremonial trimming of hair which follows the Safa-Marwa.

Much I had to ponder, and not least the question of where I was to lay my head that night and for the nights to come. My father was to have joined me in the city this day, flying from Damascus to Jidda, Mecca's Red Sea port, and driving inland by car. He kept a house in Mecca; but I had knocked upon its door and found it locked, unoccupied, and I feared he had been grounded and his application rejected by airlines swamped with insistent hadjis.

I myself had reached Jidda only through the timely help of Aramco, the Arabian American Oil Company, which had found me, its guest, stranded in its headquarters town of Dhahran. With kind efficiency the company's officials had hustled me aboard a plane carrying cargo and assorted pilgrims southwestward into the Hejaz, the coastal Arabian province along the Red Sea.

Airborne Passengers Jubilant

We were a jubilant lot. Gazing down upon the coppery rock and sand, the camel's-thorn and fields of outcropped lava, we blessed our prop-drawn steed for the discomfort it was sparing us, the hours of tedium and torment which had been the fate of earlier caravans.

Most of my fellow passengers had changed into the ihram, and they upbraided me for laxity. "For this," they decreed, "you must sacrifice an extra goat at Id al Adha"—the day of sacrifice which we should celebrate, later in the hadj, at Mina.

We found Jidda hot with the damp, vindictive heat of the Red Sea, stifling, devitalizing; and the hordes of pilgrims which each ship or plane loosed upon its dusty streets seemed to raise the city's fever another degree (pages 20, 21).

There was little to tempt one to prolong his stay in Jidda. Most pilgrims, and I among them, hastened to procure passage for Mecca, 45 miles away. In the courtyards of old hostelries I could hear the cameleers helping their passengers climb aboard the rickety bamboo-framed litters in which they would ride to the holy city, and then the sharp "Yahh! Yahh!" as the guides kicked and prodded their beasts upright.

Many such caravans filed out into the desert and were lost to our sight in the haze, and not a few pilgrims set out stubbornly on foot because they thought that they gained in favor by walking the entire distance. But for the most part the hadjis traveled by bus and by car.

No Non-Moslems Allowed

I was fortunate in this, that an official of Mecca sent down his own car for me and for my friend, Hadji Fateh Mohammed. Jidda we left in darkness, but the driver knew the route like the back of his brown hand, and he guided us unerringly to the several places of visitation along the way where the Prophet had rested during his travels. Here we washed and prayed and drank little cups of coffee and went on.

Again and again our car pulled to a halt

A Moslem Kneels in Prayer; Another Tells His Beads

The great hadj, or pilgrimage, to Mecca fell last year within the period of August 28th to September 2d—the 8th to the 13th of the Arabic month of Dhu 'l-Hijja. In the preceding weeks the author traveled through Turkey, Syria, Lebanon, Iraq, and Iran, watching the vast movement toward Islam's central shrine get under way.

◂Here at the Baghdad tomb of Sheikh Abdul Kadir Gilani a worshiper prostrates himself in awed humility. In other, more rigidly orthodox areas of Islam, such prayers to saintly intercessors would be frowned upon: Allah, and only Allah, would be petitioned.

▾A Pakistani visiting the Sheikh's tomb faces Mecca as he counts his prayer beads. Rug, inkwell, tea glass, water jug, blanket, sacred book, and Koran stand (left) are all his worldly possessions.

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Looking More Like an Arab than a Harvard Student, the Author Nears Mecca

Few non-Moslem travelers are known to have penetrated Islam's holiest sectors. First European to enter in disguise was Ludovico di Varthema of Bologna in 1503. Best known was Sir Richard Burton, the English explorer. The present author, a Pakistani Moslem born in Nairobi, Kenya, here stands beside a sign midway between Jidda, port of entry for pilgrims, and Mecca, Islam's holy city.

at check points, and Saudi guards peered in the windows and examined our credentials. The guards' aim seemed largely to make certain no non-Moslem should penetrate the restricted sector.*

For three hours we traversed the straight and level way, and then, topping a ripple of low hills, we saw abruptly the lights of Mecca. Shadowy the city might be, but in my mind's eye bright with the luster of history. For, long even before the coming of the Prophet, Mecca was renowned as a key point upon the myrrh and frankincense route which caravans followed from Palmyra to Sheba. Here came spices and fruits from Yemen, ivory from Ethiopia, fair women from Damascus, slaves from Egypt. Here too stood the images of sundry gods worshiped by the tribes, and a strange cubical building, the Kaaba, around whose origins clung many a legend.

Now, in the wavering light of weak oil lamps stationed at the street corners, I could make out on either side of the car the ragged outlines of tin-roofed shacks, the hovels of the poor. A half mile beyond appeared an encampment of guns, tanks, trucks, jeeps—display window of the King's armed might in the Hejaz.

Into the Ancient Holy City

In another moment, clearing the last guard post, we plunged into the narrow, twisting, bazaar-flanked streets of the city proper and fought our way toward its heart (pages 24 and 25). Ancient houses, fretted with projecting wooden balconies, leaned over us at a tipsy angle. A policeman walked ahead, rapping on the hood of our car with his stick and crying "*Yallah, yallah!* Get out of the way!" to pilgrims slumbering on the cobbles, slack-jawed obstinate camels, men pushing carts.

* See, in the National Geographic Magazine: "An Unbeliever Joins the Hadj," by Owen Tweedy, June, 1934, and "Mecca the Mystic," by Dr. S. M. Zwemer, August, 1917.

The Moslem World

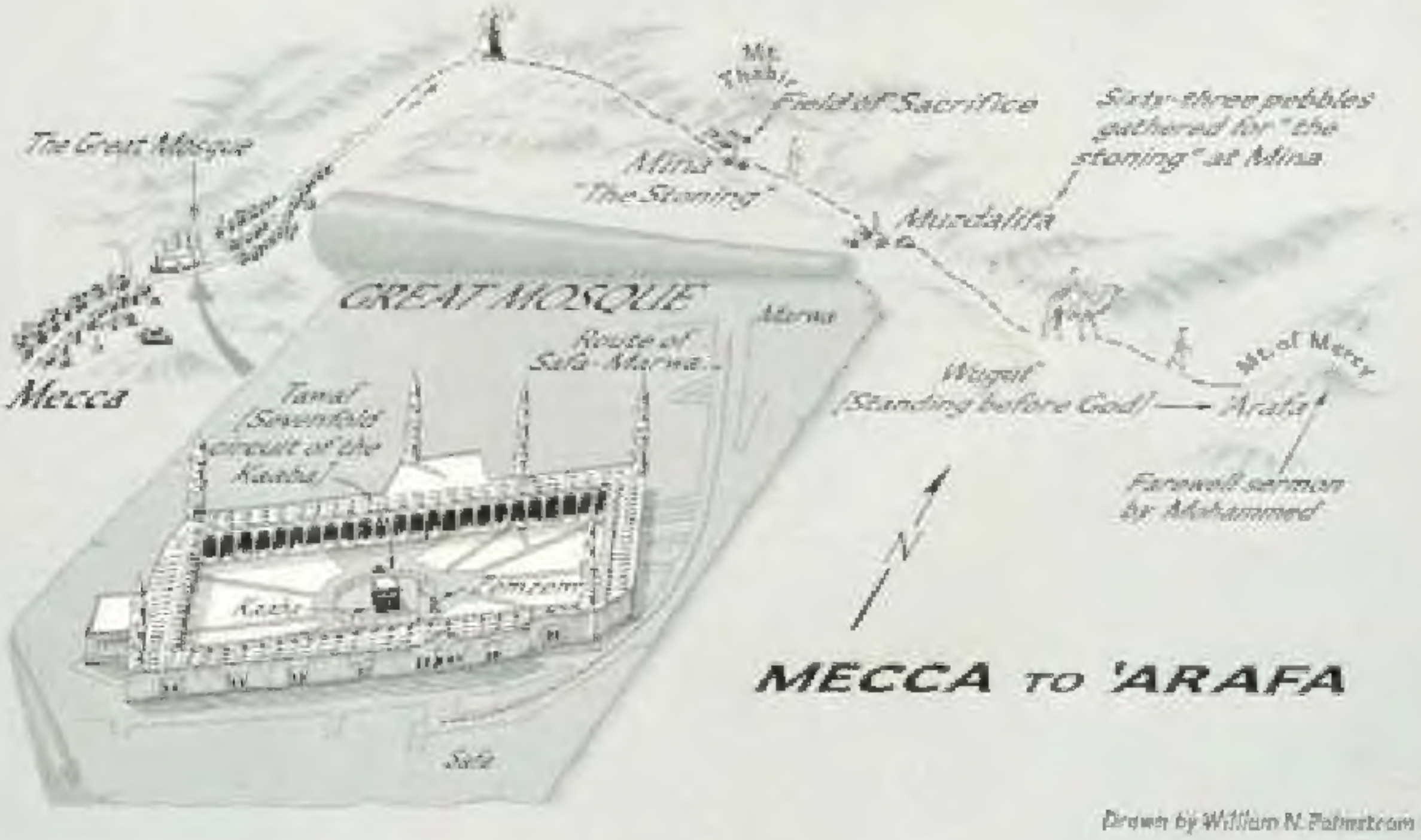
From the Near East sprang all three of the world's great monotheistic religions: Judaism, Christianity, and Islam. Born in Arabia's capital, Mecca, more than 13 centuries ago, Islam at first met strong opposition and won few followers. But, today, with some 370,000,000 adherents, the Moslem religion exerts a powerful influence through a vast area.

Story Area

"Verily, the first house founded for mankind to worship in is surely at Mecca, a blessing and a guidance to the worlds," says the Koran. Devout Moslems honor this city of the Prophet's birth, hope to visit it at least once in a lifetime, and face toward it for prayers five times daily.

Mecca to 'Arafa

Goal of every Moslem pilgrim, after visiting the Great Mosque in Mecca, is to trace the 14-mile route to the Mount of Mercy at 'Arafa. Here the faithful pray on the spot where they are reminded of the Day of Judgment when they must stand before Allah.



MECCA TO 'ARAFA

Drawn by William N. Palmstrom

Thus I had come at last to the Great Mosque that morning and had said goodbye to my friends of the journey and entered to perform my tawaf. And thus, too, my hair freshly trimmed, I found myself now standing by the main gate, searching the faces of the crowd for one I might recognize.

Reunion in Mecca

The sun was warm on my face before there came by a young man I had known in Pakistan. He hailed me, and I inquired after my father; but he knew nothing of him. One thing he gave me, however: directions to the house of the friends with whom I had ridden from Jidda. I was about to set forth when a gleaming car drew slowly past our portal, stopped, and a tall, bearded man in a snowy turban stepped out. It was my father.

"*Salaam alaikum*," he said gently. "Peace be upon you."

"And upon you, peace," I replied.

He looked frail, but his stance was as uncompromisingly erect as ever. A philanthropist and an international trader in sisal and timber and other things, he keeps his headquarters in Kenya; but he has returned more times than I can remember to Mecca, for this is his spiritual home.

We rode back together to the family house. At once orders flew like sparks from a struck anvil. One servant rushed to the market to buy bread and dates for breakfast; another went to tell my father's friends of his arrival; a third cleaned and aired the sleeping chambers.

In a little while the hall and courtyard grew clamorous with venerable men from a dozen countries, eager to splice the threads of old acquaintance.

Drowsy with the forenoon's growing heat I dozed, then roused myself for a midday prayers and a prolonged stroll with my cameras around the mosque. I returned in the evening to find my father still surrounded by his grave contemporaries.

Seated cross-legged on their carpets as the glasses of chilled yoghurt went round, these men from Pakistan and Indonesia, Turkey and Fez Riff questioned me with a flattering insistence. Their concern, however, was less with learning about the United States than with discovering if I had strayed from the true way.

"O son of a merciful man, you have lived among strange men who worship strange gods," said one. "I trust you have not forgotten the glories of Islam."

"How could I do that?" I asked.

But the elder was not so easily to be diverted from his lecture. He reminded me of how, in less than a century after the death of the Prophet, Moslem banners had waved over an empire greater than the Romans', from Cadiz to Cathay, from the Pillars of Hercules to the steppes of Tartary. He spoke of the universities which the conquerors planted at Seville, Granada, Cairo, Fès, Córdoba, Baghdad. He dwelt at some length upon the achievements in medicine, chemistry, agriculture, mathematics, astronomy, and philosophy which Moslem savants bequeathed to a still largely backward Europe.

He had discoursed in this vein for some time before a trimly bearded Syrian at my left broke in quietly.

"You know," he said, "I think that our most notable accomplishment was none of these. I think it was this: that under our empire Christian and Jew and Moslem could live and worship and prosper in peace. Look at the Jews who held high state positions under several caliphs. Or the Christian grandeurs in Baghdad. And as for Sicily under the Aglabite Moslems from Tunisia—

Where Legends Say Adam Met Eve

Around and around my head the talk buzzed, and as the date-barked shafts of sunlight which filtered through the latticed blinds the old tales of Islam seemed to dance and weave hazy memories of splendors long past. I roused myself in a moment, pleading our need to plan the forthcoming trip to 'Arafa (page 4).

This plain of 'Arafa lies some 14 miles east of Mecca, and it would be here, on August 29, ninth day of the month Dhu 'l-Hijja, that the *wuquf*, or Standing before God, would take place.

We could not miss this ceremony, for it is the crux of the whole Hadj; indeed, he who has not stood bareheaded at 'Arafa before sunset on the appointed day has not truly made his Hadj at all.

Why 'Arafa? It was at 'Arafa that Mohammed mounted his she-camel, preached from the Mount of Mercy a farewell sermon. And it is there that Moslems are reminded of the Day of Resurrection. According to our legends, Adam met Eve at 'Arafa after their

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Karbala's Gold-domed Minaret Calls Faithful to Prayer

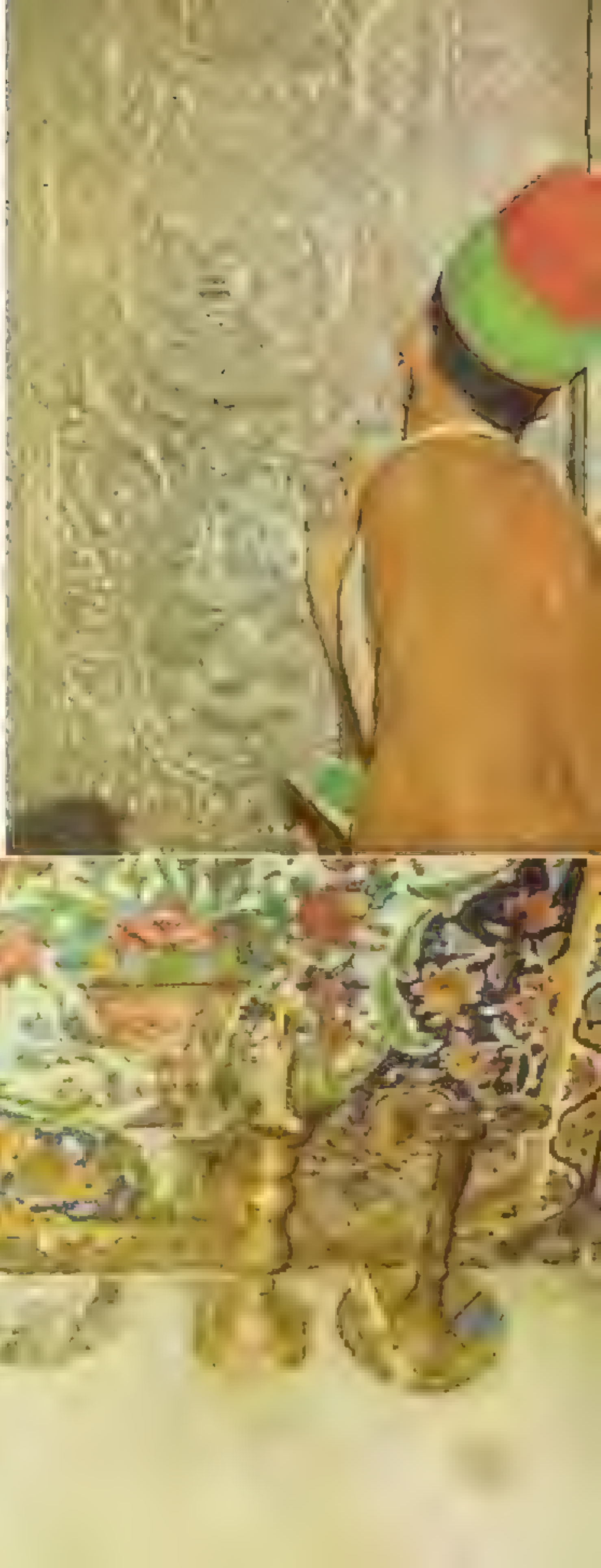
Muezzins chanting "Come to prayer!" from spires like this one visit in Karbala, Iraq, are appointed by a mosque committee. A learned elder called an imam may lead the prayers, but defers to anyone in the congregation he considers more worthy. The minaret towers from a mosque housing the tomb of Hussein, grandson of Mohammed.

For more than 13 centuries Islam has spread over the globe with no clergy, no priest and want it any. Its caliphs, even at the apex of Arabic power, were temporal rulers only.

(Second Installment Follows)

12

Imam in Karbala Presenting Sisters the Tomb of Hussain, Grandson of the Prophet



expulsion from Eden and their separate wanderings over the face of the earth.

My father had arranged seats in the plane on a bus, but I objected: it would be crowded and would give me no chance to stop where I liked along the route and take pictures. So I urged on him the luxury of a hired car, even though for these few miles it would cost us nearly $200.

In the three days before the Standing we bungled and argued, made plans and changed them as I made it on again, in a fashion time-honored within my family.

In between these forensic bouts I slipped out into the city for several hours each day with my camera.

Then I was arrested. I was taking a picture near the Station of Abraham when a guard suddenly grasped my shoulder and demanded "What have you there?"

With a firm grip on my arm he led me to the police station. There I met a volley of questions from the guards, who, incidentally, are accomplished linguists, for each lady brings to Mecca a babble of tongues from a hundred lands.

Eventually my interrogators released me, still in possession of my camera lenses and light meter.

How the Telephone Came to Arabia

Next day we drove down the eastern road to Mina on our way to 'Arafa. Here the Prophet had halted overnight to rest his camel, and so by tradition, did our great throng of several hundred thousand pilgrims. Mina, of course, could not hold us: a few houses, a few shops comprise the village. The hadj spread out over the narrow valley under Mount Thabir in a blanket of tents.

My father's tent was pitched upon a slope he had frequented in years past, and hardly had the smoke of our cook fires ascended before friends down the line began to arrive with gifts of food and cooling drinks. It was like the first night in some summer resort to which the same group of enthusiasts returns each year from their scattered places of winter work.

Often the talk veered to the impact of the West upon Islam, and there was much viewing with alarm and shaking of aged heads. But not all the innovations that worried them were untinged by humor. One sheikh, for instance, told how wily King Abdul Aziz al Saud introduced the telephone into Saudi Arabia.

"You must understand, O enlightened ones, that the religious leaders around the king, the *ulema* are strict in their ways. When the ulema heard that certain infidel things were foisting upon His Majesty an odd black instrument which spoke, they felt sure the Devil was at work.

"So the king (may Allah grant him a long life!) called the ulema to his palace at Riyadh and when they had gathered he held out the receiver to the chief among them and told him to put it to his ear. Trembling, the old man obeyed, and in a moment a beatific smile dawned on his face. For from the instrument came a voice chanting the first chapter of the Koran.

"'In the name of Allah, the Compassionate, the Merciful, praise be to God, the Lord of ...'

"And the King, who had stationed the speaker at the other end of the line in Mecca, turned to the ulema and said: 'Is this the voice of Satan?'

"And as the man of the elders cried, 'Nastaghfirullah-Allah!' 'We beseech God's forgiveness!'

Then spoke a man on my right. "But were the ulema wrong? Verily, at times when I have tried to complete a call between Mecca and Jidda, I, too, have thought this an invention of the Devil!"

A merchant from Jidda joined in the laughter. "I know well what you mean," he said. "But service has improved a little. For a time it seemed impossible to get through, for the operators would sip their coffee and tell you again and again: 'We are sorry, but Prince Faisal is on the line.'

"This was all very well, until one day Prince Faisa himself tried to telephone. They told him, 'Pardon, the line is engaged. Prince Faisal is talking.' The Prince strode down to the telephone exchange and roared out to them: 'Look! Here is your Prince Faisal!' And he gave them a tongue-lashing that left them trembling.

"As I say, the service has now improved somewhat."

I suspect the story is apocryphal, but it shows the Moslem sense of humor.

Islam Marches to 'Arafa

We broke camp at Mina after the morning prayers, and the whole entourage moved toward the plain, nine miles away. On this, the appointed day, Mina and Mecca itself would be ghost towns, for all who could walk, and some who could not, would find their way to the Standing.

In truth, we were not a nation on the march but a community of nations—slant Chinese with little goatees; huge turbaned mountaineers from Afghanistan; knife sharpeners from Turkistan with their grindstones strapped to their backs, elfin chiefs from Uganda; neat, debonair bored Javanese; bearded Egyptians; Lebanese emigrants from

(Text continued on page 19)

Lake o' Cloud's Sand Castle, Sunsetta's Ramped Minaret Spirals Skyward

Swords Clash in Damascus Along the Street Called Straight

"Ah, Give Me Strength!" Cry Mussolini-quibbling Executives of the Bank of Italy

Drapes Lose in Movies Lands Not Follow a Different Path

Business Wants on Hospitality in Damascus —It's Always Coffee Hour in Islam

"Where Am I, O God, at Thy Command?" Cry Pilgrims Arriving in South America by Airplane or Ship

Rewards Poor, Honest and Wise Perhaps Their Pilgrimage as Equals

Tier on Tier Mecca's Houses Rise Above the Great Mosque

Merchants Crowd the Streets of Holy Mecca — By Night Thousands of Pilgrims Cook, Eat, and Sleep on Sidewalks

A Pilgrim Watch as Egypt's Gift, a Rich Mantle for the Kaaba Drops into Place

Barefoot on the Burning Marble, Pilgrims Shuffle Counterclockwise Around the Kaaba

Pilgrims Shrouds, Sprinkled at Holy Well of Zemzem, Dry in Strips on Mosque's Paving

4 Guides Chanting Verses from the Koran Lead Their Pilgrim Parties Seven Times Around the Kaaba

Behind the Kaaba's Rarely Opened Door Lies a Sanctuary Lit by Gold and Silver Lamps

91

Impressed Pilgrims Touch and Kiss the Sacred Kaaba Mantle

Prince Faisal of Saudi Arabia and the Author Study His Photographs

arets I wore beneath my [illegible]

When the guides had gathered the camels and donned Lands and Ihram (page 44), I joined the group as the camels moved off. Soon we were passing the ruins of the Jewish fortress of Khaibar, scene of the bloody battle between Mohammed and the Jews (page 43). Then we were riding through the rocky, desolate Harrat Rahat, a region of black lava and ash. Here and there were the tents of Bedouins, each with a flock of camels, established at sunset in their lonely encampment.

Hour succeeded hour as we rode on and on. [illegible]

The Road to Muzdalifa

[illegible]

The Mosque Founded the Prophet

[illegible]

Mercenaries or Dissidents Cost Lake Lacustrine Its Grace

Pebbles Pls Plus Pillar Is Stoned at Mera

taken the Prophet, an hour or more to reach this way station on the route to Mina. In theory, the cars and buses would easily overtake them; in practice we knew well that so many hundreds of thousands pouring through one bottleneck out of the plain would produce a stoppage of monumental proportions.

Unburned, we lay on our carpets and scanned the early stars, grateful for the winking out of God's great diurnal lamp.

Not until one o'clock in the morning did the choked lines of traffic unravel sufficiently for us to proceed, and even then we did not dare keep to the road but cut through the hills on tracks the guide claimed he knew.

At Muzdalifa we paused long enough to gather, as custom dictates, the pebbles we should need for the Stoning at Mina—63 pebbles apiece. We tried, too, to find something to quench our parched throats; but this was not so easy. At length I came upon a party of Yemenites who had an oil drum of water.

"For the love of Allah," I cried, "give me to drink!"

They looked at me and saw only a sweat-stained, dirty beggar, and they shouted: "Yallah! Begone!"

I went. But I came back when their attention was diverted elsewhere and drained a jar full of water from their tank. It smacked of oil, but it was at least wet.

Stones Fly in Scorn of Satan

At Mina we settled at our former campsite, and in the morning before the sun was high we sallied forth to the Stoning. According to one Moslem legend, Ishmael encountered the Devil three times at Mina, and each time he rejected Satan's enticements, refusing to combat his father Abraham's purpose of sacrificing him to the Lord. In remembrance now the faithful, too, spurn the Devil at Mina by throwing stones.

There are three stone pillars marking the spots where Ishmael (in the Bible, Isaac) was tempted. At each in turn the pilgrims [illegible] *Allahu akbar!* God is most great!" and flings seven pebbles in succession [illegible]

We threw ours with a will and dodged as best we could those coming from the other side of the pillar. There was much laughing and shouting by the crowd and a genial sense of solidarity.

The Prophet had recommended this rite so that his followers should learn that, though each was weak and armed only with a pebble, together as brothers in Islam their collective strength was great.

I hoped that, for my generation, it would be a reminder of how all Moslem nations must unite if they are to defeat their common enemies: poverty, disease, ignorance, and communism.

From the Stoning we went to the Field of Sacrifice. Here, for three days, the feast of Id al Adha would be celebrated; but not only here, for all over the world Moslems would be observing this annual holiday. We at Mina felt ourselves at the ceremony's epicenter, however, in that it was here Abraham is believed to have offered his son as a living sacrifice to God, and here that the angel produced as substitute a ram.

Bleating Flocks Await Slaughter

In commemoration, Moslems today choose a beast for slaughter—a sheep or a goat or a camel—and give most of its body to the poor. Those who have sinned against Koranic law in some respect often sacrifice a second or a third animal in expiation.

The field was thick with flocks when we came to it, and loud with the bleating of the huddled victims (page 52). I watched as a friend of mine bought a sheep from a wiry bedouin, pointed its head toward Mecca, murmured "In the name of Allah, the Compassionate, the Merciful," chanted "Allahu akbar," and drew the knife across its throat. The hot and thirsty sand drank up the blood; the sacrifice had been fulfilled.

Before the evening of the third day of Id al Adha, the pilgrim must journey back to Mecca and make his second tawaf around the Kaaba. My family urged me to accompany them in a hired car, but I insisted on walking—not from an excess of piety so much as from a desire to take pictures along the way.

Dust Storm Wraps the Road to Mecca

As I plodded along the Mina-Mecca road, another dust storm swirled up from the alien desert and wrapped our straggling column in choking, stinging clouds of grit. By the time it had bedeviled us enough and danced off across the dun-brown plain, the light had begun to fail.

Truly anxious now lest I miss my tawaf, I hailed a passing truck. For five *riyals* (about $1.50) the driver let me ride beside him, and we jounced into Mecca at a good clip. In the Bazaar of the Kebir he let me descend and, dusty and disreputable, I hobbled through the dotted streets to the mosque.

I had come in time, and the day was not yet spent before I completed my circumambulation, jogged the seven long laps between Safa and Marwa, and submitted once more to the ritual haircropping. Numb, exhausted, I stumbled back to my father's house, savoring in my mind its hospitable serenity.

Hospitable I found it; but hardly serene.

(Text continued on page 44.)

We shape our Mosque at Kobe Face Mecca as Muslims Do the World Over

Mirage Style Mayor Medina Tehan's Second Choice City

Mirage Style Mayor Medina Tehan's Second Choice City

Rank or Rank, Some Bows in Prayer

Rank or Rank, Some Bows in Prayer

Cornelius Carr Grace
a Lady of Sterling Worth
from 'Arabia the Mecca

13

"*Ye Shall Not Die, But Live*" Cries a Tenement on Mount of Mercy

A Pilgrimage or Fiery Plum of Mecca Cannot Live Its Fastness Alone

[illegible]

[illegible]

[illegible]

Hadrian on the Mount of Moreh Stood Beheaded in the Blazing Sun Until Evening

Holding Pilgrims on Hadj Once Formed the Bedouins' Favorite Outdoor Sport

States, and we hadjis were all the guests of Prince Faisal (page 351), Viceroy of the Hejaz, obliged by the laws of hospitality to await official permission before leaving the city. Authorities were apparently withholding [illegible] until [illegible] to cope with the returning hordes.

I asked our guide to secure a special pass from the authorities so that I might have at least a day's grace before the floodgates were unlocked. But he replied only with a shrug of resignation and the advice: "Wait, wait. You Americans must do everything today, or, if possible, yesterday. Tomorrow will do."

"Tomorrow!" I cried. "Your tomorrow is a pregnant woman. Who knows what it will bring forth? I am more interested in today."

But he would do nothing. So in the end I left him, from office to office myself, badgering sleepy bureaucrats, parrying excuses, outwaiting those "in conference." I still had a slip of paper on which a Jidda official [illegible] had jotted down Crown Prince [illegible] and an hour at which I might see him. The conference had long since taken place, but I saw no need of stressing this fact. At last I found a desk holder so impressed by the urgency of this royal audience that he scribbled me a permit to leave Mecca at once.

Airline Besieged by Pilgrims

When I returned, triumphant, to my father-in-law's house, I found myself immediately embroiled in a family argument as to whether I should go alone or whether they would all permit or none, accompany me. The dispute dragged on like a wounded snake, getting nowhere, until I tired of it and, shouldering a great bag of silver riyals, declared I was going to Medina and would meet them there when and if they ever arrived.

Easier said than done. In Jidda I found the airline willing enough to sell me a ticket to Medina, but in no hurry to give me a reservation on a particular flight. Hundreds of applicants indeed were already besieging the airport [illegible] day and night in the lobby and asserting squatters rights to positions near the counters. When, a short while after I had come, officials released the hadjis from Mecca, this army reserved for-midable reinforcements.

I might be waiting yet to break through this cordon if it had not been for the help which my brother, Rashid, in an odd way provided me. The previous year he had hopped across the Red Sea to Jidda in his little private yellow plane and hammered on every door for permission to fly on to Medina. This was firmly refused, of course, for airborne sight-seers are not permitted above the holy city. But in the course of his stubborn petitioning he had charmed as well as astonished every official in Jidda, and when I came in my turn to plead with them, they greeted me with courtesy interlaced with considerable curiosity. And, in due course, I received my reservation.

Ordeal by Air Pocket

Once in the air, however, I had cause to question my good fortune. I had flown many hours in all manner of planes; in my own two-seater I have fought the truly violent down-drafts of Africa's mountain passes. But never have I endured so bumpy a flight as this 200-mile trip to Medina.

The heat which rose from the desiccated plain was almost visible, and the air pockets into which we lurched and sank seemed bottomless. It was as if we had been caught in an elevator with an operator gone berserk, or had stumbled into the revolving room of some Crazy House at a children's carnival.

When our wheels at last touched ground at Medina, I joined my fellow passengers in giving thanks to God, not so much for the privilege of being in the town beloved by the Prophet as for arriving on the ground at all, and in one piece.

We waited no more than an hour in the [illegible] sun before the Government bus arrived, crammed to its heat-blistered sides, and we rode into the city packed together like tin soldiers in a box.

Hailing a porter, I set forth into the twisting, ancient streets in search of my friend's house. His name was Maulana Zeyaboodin, and he had lived in Medina many years.

But the address meant nothing to my bearer, and it was late afternoon before we found ourselves, dusty and footsore, at Zeyaboodin's gate.

My telegram of two days previous had not yet reached him. But he embraced me, nonetheless, cried "God be praised that you are here," and called his children to meet me.

When I had rested he suggested that before the evening prayers I might like to visit the public baths. Gratefully I went and steamed from myself the petty irritations and annoyances of the day, returning refreshed in body and spirit.

By the Tomb of the Prophet

As I strolled past walled gardens and houses old before the Prophet's time, a breeze that bore the promise of a cool night to come ruffled my fresh, clean garments and brushed my brow with a gentle touch.

At Zeyaboodin's I met a young man with whom I had played as a child on my first hadj. Possessing now a great beard, tall, neat and clothed in his Arab robes, he met my startled

(Text continued on page 57)

Pharaoh Offers Sheep for Sale. Here the Author Wears Western Garb

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Homeward at Sheep and Goats Await the Pilgrim's Knee on the Field of Sacrifice at Mina

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Moslems Must Kill at Least One Annually. They Often Sacrifice More in Expiation of Sins

A Nubian's Gorgeous Garb Contrasts a Camera, His Dagger Matches His Face

Pilgrims Bow to Mecca: a Casual Turns Away

37

Bhutto Rides a Magic Carpet with Pervez Negus

Pilgrims Bid Farewell to Mecca From "Eyes Accept My Hadj"

A Tale from Long Ago

"Peace be upon you, O Messenger of Allah! Bless the seat of the Prophets, the seal of prophecy, with blessings as numerous as the [illegible] and the waves of the sea." And the Messenger of Allah prayed not to [illegible] but for himself and for all [illegible] Then he gave thanks for those blessings and prayed [illegible] and sought forgiveness for [illegible]

One night, however, the king in his camp

[illegible] and in that [illegible] the Lord warned him that the Prophet's [illegible] He rode to the [illegible] on his fastest camel, and his army with him. He summoned the governor and instructed him to hold a huge feast and to [illegible] all in the town.

Then the king stationed himself by the door to the feasting tent and looked into the face of each guest who entered, for in [illegible]

[illegible] called the governor and said to him, "Now bring [illegible] Now all the people have come to the feast." And the governor [illegible] wandered through Medina [illegible] [illegible] but [illegible]

Stranded Pilgrims Queue Up for Americas Visit

street to the mosque itself, and already only a few feet short of the tomb of the Prophet.

"The king gave thanks for God's timely warning, stopped the tunnel with earth, and erected the tomb enclosed in metals of the hardest degree."

"And what happened to the scholars?" I asked.

"They did not die of old age," said my companion curtly.

Where the Prophet Became a General

From Medina I went out to the battlefields of Badr and Ohud where Mohammed fought the armies of Mecca. Driven into exile by the powerful Koreish tribe that controlled and profited from the idol worship around the Kaaba, Mohammed had sought allies among Medina's citizenry, many of them Jews.

These men became the Prophet's first troops and, after some initial reverses, proved that crusading passion, linked with shrewd generalship, could make a devoted handful the equal of a horde.

I visited the cemetery where many of these companions-in-arms lie buried, and the Kuba mosque built on what is believed to be the spot where Mohammed received his revelation instructing the faithful to face no longer toward Jerusalem when they prayed, but toward Mecca (pages 39, 41).

I heard about, but did not inspect, the well whose waters the Prophet's prayers changed from bitter to sweet, and the shrine where a bow and arrow supposed to have been his are displayed.

Higher, more temperate in climate than Mecca, Medina is calm, peaceful, almost luxuriant. The dust blows through its streets, yet there is greenery evident everywhere (page 40). Date palms wave over courtyard walls (and the dates are delicious); truck gardens provide an abundance of fresh vegetables; milk can be had, and pomegranates, the fruit of Paradise.

Second Holiest City of Islam

Time means little in Medina; eternity everything. The city seems not merely reconciled to death but half in love with it. For it is reckoned a great blessing to die in Islam's second holiest city; on the Day of Judgment, so legend says, the Prophet will arise, waken his family and the citizens of Medina, and together they will all march down to Mecca to arouse the rest of mankind.

How much this hope is prized became clear to me when I tried to tempt Zeyaudin to visit my family in Mecca. I offered him safaris into the bush, a shot at a lion or an elephant, mountains to climb. He only shook his head sadly and said, "But what if, after all these years, I should die outside of Medina?"

I countered: "Would that not be the will of Allah? And do you question His will?"

He smiled fearfully. "I question it not. Yet . . . I cannot go."

Most pilgrims to Medina perform at least 40 prayers. At five a day, these would consume eight days. I left the city after only 10 prayers. This disturbed my friends; but I knew that if I remained longer, it would disturb the Dean of the Harvard Graduate School of Business Administration even more. Worse, I was quite sure to miss the day of registration.

Mercifully the plane back to Jidda pursued a calmer course than the one on which I had arrived. But on Landing I discovered that commercial flights from that city to points outside the country were now subject to six days' quarantine imposed by foreign authorities. In despair I turned again to Aramco.

Obliging as ever, the company promised me space on a plane leaving the next day for Dhahran, whence I could fly home. With several hours to spare, I drove up the long road to Mecca, now relatively deserted, to say farewell to my family; for, true to my expectations, they had never quite made up their minds to join me in Medina.

The Pilgrim's Farewell

Most pilgrims making their tawaf or farewell around the Kaaba and bidding goodbye to Mecca know a gentle sorrow. They cannot tell when, if ever, they will lay their eyes again upon the holy city. My regrets stemmed largely from another source.

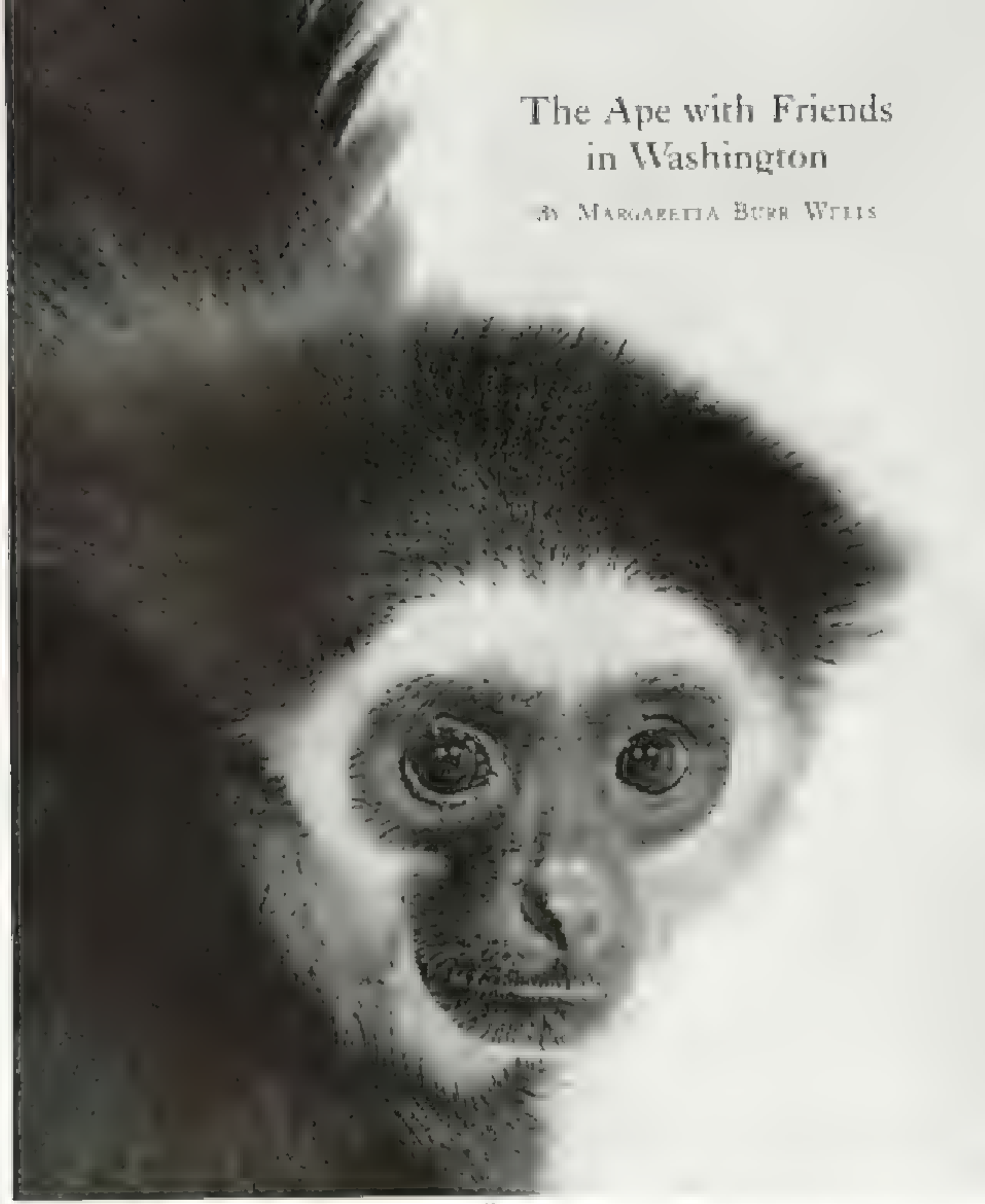
There is a saying among Arabs: "On the first hadj, one sees the House of the Lord only; on the second, one sees the House and the Lord; on the third, the Lord only." This was my third hadj, and I asked myself the sharp question: Had I reversed this order of spiritual progress, so that, distracted by my photographic mission, I had focused solely upon the House and missed the Host?

With Allah lay the answer. I walked for the last time up the muddy streets (wet with water sloshed on them by merchants against the dust); stepped past the doors where men lounged and called lazily to the *gahwe-wallahs*, "Coffee, I pray!"; and wheeled about for one lingering look at the mosque's high walls and slim, aspiring minarets.

Then to myself I murmured the prayer all pilgrims pray on their homeward course: "Lord, accept my hadj." And I turned and strode to the waiting car and drove toward Jidda and the plane which would take me to Dhahran and a flight westward to complete in New York my airborne pilgrimage.

The Ape with Friends in Washington

By Margaretta Burr Wells



61

President Dines Bunche and Roberta Wells On Ice at Stroll

Boatmen from Chiang Mai Prepare to Pole Down the Ping

[illegible] Thailand [illegible] elevated position [illegible] World War [illegible]

[illegible] found us at the zoo. We circled [illegible] and located three [illegible] one, a blotchy [illegible], and a smaller black one with white hands and feet and [illegible] of white about its face.

Is the Gibbon Bimbo?

"It is Bimbo, I know it," said Roberta excitingly.

"Call to her," urged our son, 10-year-old Kenneth.

Roberta [illegible] a [illegible] used to Thailand gibbons, this one pitched in the manner she had always used in attracting Bimbo.

[illegible] Roberta called more loudly. The curious [illegible] audible comments of the crowd [illegible] had made her feel a bit [illegible]

[illegible], leaning over the heads of [illegible] which at the [illegible] whoops.

[illegible] Bimbo [illegible] Roberta [illegible] he shouts her down," [illegible] Richards.

"We'd have to come early some morning when there is no crowd around," said Dad. The next day he telephoned Mr. Ernest F. Walker, [illegible] director.

"Can you tell me where you got that black [illegible]" he asked.

"I am an animal dealer in Bangkok; we don't know where he got it. Do you wish to buy one?"

"No. You see, she looks like a pet we had in Chiang Mai. We're [illegible] and be allowed up close to her to find out."

"Yes, indeed! I'm very much interested in the memory of apes. How about Friday morning, [illegible], and I'll be there at 6:30."

Gifts for Bimbo's Sweet Tooth

It had been 15 months since Bimbo had seen Roberta and Kenneth, half the world [illegible] Would Bimbo [illegible] recognize them?

[illegible] Roberta [illegible]

64

Birds Remember, a Hug for Summer, a Kiss for Roberta

Brother Hobbs Stood Long Enough for a Glimpse

Mouse Ready to Frolic, Bunny Pushes a Hand in Roberta's Face and Nips Her Hands

[illegible]

[illegible] Mother was born out West, explained Kenneth somewhat hastily when he saw the [illegible]

Mr. Walker came the next night to see Roberta up to the [illegible]

The mouse made herself right at home. Roberta [illegible]

The bunny was introduced [illegible]

Delighted Gibbon Accepts Candy

[illegible] Roberta gave [illegible] Gibbon took [illegible] "Then down she [illegible] was offered a chocolate. [illegible]

"I must say," said Mr. Walker, "this [illegible]

enjoying chocolate creams. She is yours without a doubt."

"She usually has waffles and syrup for Sunday-morning breakfast," observed Kenneth.

"That I'm afraid we can't manage," said Mr. Walker regretfully.

"Do let me get into the cage with her," begged Roberta.

"You'll have to do it at your own risk," warned an assistant standing by.

"Oh, yes, please! It will be all right."

Old Friends Enjoy a Good Cry

The iron bars were opened and Roberta stepped in. She stood at the far end of the cage, held up her hand, and called in a tone that told of palm trees, flame-of-the-forest, and frangipani blossoms.

With a whoop of joy Bimbo threw herself into Roberta's arms, and girl and gibbon hugged each other, crying unrestrainedly. For some time Bimbo refused to be put down, but clung fast and protested in a hurt little voice. She allowed her nose to be rubbed, and the spot between her eyes, and her eyebrows, and she stretched her neck as a cat does in order to be rubbed under the chin.

Since an animal ordinarily shies away from anything near the eyes, Mr. Walker was more convinced than ever that Bimbo was with her own family.

The morning crowds were beginning to come to the zoo and to flow past the Small Mammal House. The somewhat incongruous sight of a girl in the gibbon cage stopped them in their tracks. Reluctantly Roberta left the cage, giving Bimbo a second chocolate as a parting gift.

Roberta Receives a Scolding

"We must have pictures of this," declared Mr. Walker. "Can you come back on Wednesday?"

We did. The two larger gibbons had again been decoyed away and the cage cleaned. Bimbo watched with interest and offered comments while Mr. Walker set up his camera. She took the proffered pineapple and chocolates as her due; then, waiting until Roberta stepped into the cage, she greeted her with delight.

Finally Bimbo sat down on the floor and turned her back on Roberta, saying "woop, woup, woup," softly and reproachfully.

"She's pouting," explained Roberta, "and asking why we stayed away again after finding her."

Dr. William M. Mann, for 28 years the director of the zoo, wagged his head as if he had now seen everything.*

Roberta soothed Bimbo's ruffled feelings in apologetic tones, whereupon our pet brightened up and became her usual cheery self. She was ready to pick up life where she had left it in Chiang Mai, 15 months before. She made prodigious leaps while giving coy glances asking for pursuit. She tugged at Roberta's shirt and ran away, then returned to snatch at her hair, roughhousing as she used to do on the big veranda (opposite page).

Bimbo would never roughhouse with me, but would sit on my lap to be brushed and to have her head stroked and her feet rubbed. During this process she would stretch out and doze, purring gently like a cat, until with something like a sigh she would drop off to sleep.

"Get into the cage and see if she remembers you, Dad," suggested Kenneth.

"She may not forgive me for walking out on her—and for my teasing."

He referred to the times when he would stand near her feeding tray and eat a banana without offering her any. After feigning indignation at this outrage and using very bad gibbon language, she would then extend a long arm around him for the other banana hidden behind his back.

On this occasion Bimbo still remembered him and forgave all, and after a big smile and a hug she thumped him on the chest with both feet and darted away to show that they were back on the same old footing.

Bimbo Grew Up with Humans

Now just over six years old, Bimbo was a baby when we got her, and small enough to fit into a shoe box, long arms and all. She came from the fantastically beautiful Doi Chiang Dao, the Mountain of the City of the Stars, or, as some say, the Mountain as High as the Stars, which is 42 miles north of Chiang Mai. There, in a lush glen, wild gibbons feed on tropical fruits and drink from a crystal stream flowing from a limestone cave where tiers of golden Buddhas sit in endless meditation.

In the poinciana tree in our back yard we built Bimbo a small house, and in front of it placed horizontally a thick bamboo pole which extended about 20 feet to a post on which was mounted a feeding tray. She was tethered to the pole by a light chain and a sliding ring. She quickly learned to hang from the pole and swing along, hand over hand, with surprising ease and speed, and, as an alternative, to run along the top holding the chain in one hand.

From the beginning her outstanding traits were affection and mischief. Her mischief was

* See, in the National Geographic Magazine, "Man's Closest Counterparts," August, 1940, and "Monkey Folk," May, 1934, both by William M. Mann.

"Take a Drink," Urges the Actress, but Barbie Isn't Thirsty

Some States Are More Than a Barrel of People

not malicious, but a form of teasing to attract attention or to take advantage of a situation for the fun it promised. She exhibited a variety of moods—often pure pretense—such as disdain, coyness, jealousy, indignation, connivance, and greed, and sometimes she would giggle.

Bimbo was an early riser and each morning literally watched for the dawn. A Thai legend says that the gibbon's cry of "pee-a" (*pee*, husband) at the first touch of red in the sky is an expression of remorse. A fickle wife, folklore relates, helped a handsome brigand slay her husband. Highly displeased, the god Indra turned her into a gibbon. Since then the sight of a red dawn reminds a gibbon of the foul deed and sets her to wailing "pee-a."

On some mornings Bimbo would omit the cry and come nimbly out of her tree house, do a few pull-ups on the pole, and then perch on the feeding post and watch Mum, the cook, start a fire in the stove.

Friday was her night out—she was turned loose then; so on Saturday mornings she would swoop down from the giant rain tree in front of the house and run along the railing of the upstairs veranda to see if anyone was awake, particularly Roberta.

Sometimes Roberta would unlatch the screen door to her bedroom and then jump back into bed. Bimbo would cautiously push the door open and come in. The four-poster beds within were ideal for aerial tag, and as Bimbo swung about these tops her screaks of delight were mingled with Roberta's "Sh h h, Mother will hear us!"

Gibbon Feuds with Dog and Cat

Bimbo was jealous of Archie, our mottled cat, who had the freedom of the house. Archie would lie by the screen door to get the tropic breeze, and Bimbo, seeing him, would come up hissing with irritation. Archie would then yawn and switch his tail, safe behind the screen, whereupon the gibbon would fly into a tantrum.

Being herself tailless, Bimbo seemed to carry on a crusade against the tails of all cats, dogs, chickens, turkeys, and peacocks that came within reach. In a rough-and-tumble game with Sambo, a neighbor's puppy, Bimbo found that when she dragged him by the tail he was helpless. Thereafter their game developed into "tag the puppy's tail" until Sambo became exhausted and lay panting under the house, resting up for another go at it. In any game of tag Bimbo's speed and dexterity exceeded that of dogs and men.

With little Donny Marvin, Sambo's owner, Bimbo was all gentleness and affection. From the time the boy was a month old she knew that he was to be loved and protected. She would sit beside him while he wriggled about on a blanket on the floor, touch him caressingly, and even kiss him.

As Donny grew to her height, she preferred him to all others and at every opportunity would sit on the edge of his chair and put her arm around him.

Three-year-old Dottie, another neighbor, could pick Bimbo up awkwardly and lug her around [illegible] quite handily.

Only one child aroused her dislike, a boy who tormented her when she was tied up. Dad found her fuming and agitated, and to solace her he unhooked her chain. She gave him a quick hug of appreciation, then loped around the corner of the house, making most unusual cries. She located the boy, promptly went up and bit him, then scampered away doubtless feeling revenged.

Bimbo Romps with Schoolboys

It was Bimbo's fondness for schoolboys that necessitated tethering her during school days. When free she would often hide in a fruit tree until students came by, then dart out after them. They would retreat, laughing; then Bimbo would turn somersaults to show that it was a game and scamper back to her tree. Once more the boys would advance; down would come Bimbo like a small black hurricane and put them to flight again.

When thoroughly enjoying herself, she would leap up and turn backward somersaults in mid air.

Occasionally Bimbo's chain became unsnapped. Thereupon she would come rattling along the veranda, holding the chain in one hand, much as a lady does a long skirt, seeking the family. At 2 o'clock one morning we were awakened by her cries from a point above the house.

"Bimbo is caught!" wailed Roberta.

We rushed downstairs and outside. It was a still tropical night with a full moon lighting up all the countryside, and every twig and flower was silhouetted against the luminous sky. There was Bimbo near the top of the 100-foot rain tree, her chain caught on some branches. We could get no help until morning, by which time she might be hanging lifeless; sadly we turned and went indoors.

At daylight we were awakened by the familiar sound of the chain. There was Bimbo running along the veranda to see who was awake.

Serenade to the Moon

On another night, when free of her chain, she became bewitched by a full moon. She awakened as at midnight, calling from the very top of the rain tree and looking toward

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"Look How She's Grown!" Exclaims Roberta

During the 15-month separation between Roberta and Bimbo,

select a fine upstanding young mate, and enjoy the freedom of her kind. But she utterly ignored them and answered only to our calls.

If we started out for a walk, Bimbo would come from some treetop and run along the path after us, complaining the while of our duplicity in trying to give her the slip. If we remained indoors, she would leave the trees and appear upon the veranda railing, calling for cookies.

One afternoon we heard plaintive cries from far up the slope.

"Bimbo is lost!" I said.

"Nonsense," declared the others.

I went out and called. As soon as she heard me, she changed her cries and came hurtling from branch to branch to the cottage and her family. She had indeed lost sight of the cottage and was frantic.

Bimbo Warns of a Vicious Prowler

Early one morning she seemed too agitated to eat, but tried to tell us something while looking anxiously into the woods and climbing upwards the length of her chain. Evidently she had been frightened during the night.

That afternoon Bimbo stayed nearer home than usual, while we stayed indoors to play our new 3-o'clock game of "Hush." This consisted of reading quietly while keeping one eye on an open window. Presently our pet hen would appear, gaze about to see that all was still, then hop down into the bedroom, [illegible] and fly out cackling as only an agile Asiatic hen can do.

That night, as usual, we put the hen in a strong basket under the house. The next morning Bimbo was even more distraught. We looked around for a reason. Our pet hen, basket and all, was gone, and in the dust under the house were the four-inch paw marks of a leopard.

Acrobatics in the Treetops

Back on the mission school campus after vacation, Bimbo would make her rounds of favorite trees, hunting insects and sampling the hearts of any new flowers that appeared. She would take 10- and 20-foot leaps through the giant rain tree, apparently sliding down the wind, and seemed to coast down the slippery fronds of the palm trees.

On dull Saturday afternoons she would appear at an open window of the school office, sit hunched on the ledge, and watch the headmaster trying to catch up on desk work. But not for long. Seeing that he paid no attention to her cow murmurings, she would slip up behind him, give him a slap on the back, and dart for the window.

If this was ineffective she would return, pick up a paper off the desk, and make off with it, dropping it, however, inside the room. As a rule she never molested objects on dressing tables and desks after the manner of an inquisitive monkey.

Each day a small class of American children met on the upper veranda for school, with me as their teacher. Bimbo loved the bustle and the moving of chairs into a circle for English recitations and the piling of books on desks. For the most part she sat quietly in my lap as the children wrote, but protested when I would get up to inspect the work or to put something on the blackboard.

If Latin nouns or French verbs were reviewed orally, she took exception to the use of such strange languages. Having sat still as long as she could, she would leap from my lap and put on her "drunken sailor" act to distract the children and get a laugh. Seizing a table runner or a towel, she would stagger around the veranda with her eyes closed, bumping against the railing, the cloth draped over her.

But try to catch her! She was off like a flash. The only successful strategy was to seize one end of the cloth and then, in the ensuing tug of war, grab her from behind.

Peeping Tom Frightens a Guest

When running loose, Bimbo knew that before breakfast members of the family were apt to be in the bathroom. In our house the bathrooms were large and about as much a social center as the village well. Bimbo loved the sound of splashing water as the children bathed around the big clay jars, and the sight of laundry being piled and sorted for the wash girl. All this she took in by peering over the half curtains that covered only the lower portion of the bathroom windows.

One morning, while waiting on the veranda for a guest to dress, we heard a muffled exclamation of alarm from his room. The children dissolved into silent laughter.

"I'll bet Bimbo is looking into our guest's bathroom," said Kenneth.

"Are there wild animals around here?" asked the New York visitor in a guarded voice at breakfast.

"Oh, yes," answered Kenneth. "The jungle is just a little way out of town."

"Is that so? Do you know, while brushing my teeth this morning I was startled by a most unusual animal, black and hairy, staring at me through the window."

At that moment Bimbo appeared at the dining room window to call for a piece of papaya.

"There it is again!" exclaimed the guest.

"I'll take it away," said Roberta, picking up half of her fruit which she had left for

Swinging by Powerful Arms, Bambo Looks for a Familiar Face Outside Her Cage

Just Like Old Times: Binder Sits Down to Waffles with the Family

Gloucester Blesses Its Portuguese Fleet

With Prayer and Pageantry, Venturesome Deepwater Fishermen Ask the Protection of Our Lady of Good Voyage

By Lois Marden

With Color Photographs by the Author

"LET him who knows not how to pray go to sea."

Devout Portuguese fishermen of New England's old port of Gloucester, Massachusetts, who daily face the dangers of deep water, well know the truth of that old proverb. These men who wrest a hard living from the sea rely on Our Lady of Good Voyage, as well as chart and compass. And once a year, in early June, the vessels of Gloucester's Portuguese fleet gather at the State Fish Pier to be blessed (page 80).

Our Lady, a patroness of seafarers and travelers, has her own church, of Azorean style, built high on a hill, between twin cupolas stands an 18-foot statue of the Virgin (page 79). Homeward-bound fishermen, approaching by night, often radiotelephone to shore and ask that the statue be lighted; then the crew crowds the rail to catch its glow on the horizon, first landfall as they stand in for Gloucester (page 84).

A smaller figure of the Virgin—a woodcarving from Portugal—goes to the annual Blessing of the Fleet on the shoulders of proud fishermen (page 77). Four men from each vessel's crew take turns carrying the beautiful figure to the water front as the church's carillon rings out.

A Model Ship with Silver Spars

Gloucester's first Blessing of the Fleet took place in 1945. Three years later the present statue, which had been carved from Brazilian cedar in Porto, arrived from Portugal aboard the hospital ship *Gil Eanes*. Like all carvings of Our Lady of Good Voyage, she carried a fishing vessel in one hand.

Portugal's Ambassador to the United States at the time, Dr. Pedro Teotonio Pereira, himself a lover of the sea, noticed that the little silver vessel was of Portuguese, rather than Gloucester, rig. Sending plans of a Gloucester schooner to Portugal, he ordered a new wooden model with silver spars and rigging. This is the one the figure now holds.

Portuguese settled in Gloucester as early as 1847, but long before Columbus the Portuguese, then as now among the world's most skilled seamen, fished as far away as Iceland, and some think they reached the Grand Banks off Newfoundland. If they did, then the Portuguese, and not the English ancestors of New England Yankees, were the true pioneers on the world's richest codfishing grounds.*

Some early Portuguese settlers came from the mainland, but most came from the Azores. Even today there are many in Gloucester's Portuguese colony who hail directly from the Azorean island of Pico.

American whalers of a century ago used to touch at the Azores to take on a crew. Starvation diet, poor wages, and liberal use of the belaying pin made many of these men go permanently ashore at the home port of New Bedford. From there many made their way to Gloucester to become fishermen.

Sons Prefer a Landlubber's Life

Men have fished out of Gloucester since the 1620's, when the first cargo of salt fish was sent to Bilbao in Spain, but today relatively few of the original Yankee names are heard around Gloucestermen. Well before the turn of the century old-timers began to dissuade their sons from going to sea, because of the danger, hard life, and small remuneration. Sons of the men who sailed the famous old schooners came ashore to less arduous and more profitable occupations, leaving the field to foreign-born fishermen.

Of Gloucester's present-day fleet of 303 vessels, not more than 30 still are run by native Yankees. Thirty-two are Portuguese, 100 Italian, and the rest divided among Nova Scotians, Newfoundlanders, Norwegians, Swedes, and Finns.

Ironically, the cycle seems about to complete itself, for today a few Portuguese captains, still erect, "able-bodied seamen" when past 70, are beginning to advise *their* sons not to go to sea. But so far there has been no shortage of willing and able men to work and captain the Portuguese draggers.

Early Gloucester fishing was done from sloops and ketches. But in 1713 a different vessel slid down the ways. Her fore-and-aft rig enabled her to sail fast close to the wind. The story goes that, as the vessel was launched, a man watching cried, "See how she scoons [skims]!" Her builder, Andrew Robinson, heard him, and so called the vessel a "scooner." Except for the spelling, all her

* See "I Sailed with Portugal's Captains Courageous," by Alan Villiers, National Geographic Magazine, May, 1953.

descendants took the original vessel's name.

For two centuries the schooner was supreme, and before the end of the 19th century Gloucester's fleet totaled 500 sail.

The Gloucester schooner reached the peak of design in the *Gertrude L. Thebaud*, built in 1930, which represented the United States in the International Fishermen's Races with the *Bluenose* of Nova Scotia. Her sleek black hull bearing a cloud of canvas was a glorious sight. I sailed in her when Capt. Ben Pine contested the last Fishermen's Races in 1938. In February, 1948, while running cargo in the Caribbean, she broke up on the breakwater of La Guaira, Venezuela.

So passed the last Gloucester schooner to work under sail. All have been lost at sea or converted to power, with diesels in the hold, topmasts removed, and bowsprit cut to a stump, a mere support for the forestay.

So many old schooners were available for conversion that it is only in the last five years that new draggers have been built from the keel up in the Essex yards.

The Gloucester fishery was founded on king Cod and associated groundfish—haddock, hake, cusk, and halibut. When the early shore fishery became depleted, schooners ran out to Georges Bank, and later as far as the Grand Banks off Newfoundland. Once on the banks, fishermen left the anchored parent vessel and fished two in a dory, setting trawls—buoyed and anchored lines more than a mile long, armed with 500 to 1,000 hooks. The trawls, of French origin, were set in water 150 to 200 fathoms deep.

Stout Dories Have Crossed Atlantic

Dories, flat-bottomed, double-ended boats about 16 feet long, have been called the world's most seaworthy small craft. Several Nova men have rowed and sailed them across the Atlantic.

The advent of the otter trawl, a purselike net fished by dragging along the bottom, helped deplete the shore cod fisheries, because the net took so many fish at one sweep and raked up the bottom, destroying fish food. Incidentally, with the coming of the tin can, eating habits changed, and people ate less salt fish.

But draggers (so called in Gloucester to distinguish them from the early hook-and-line trawlers) use the otter trawl for most of the fishing done out of Gloucester today, though they rarely drag for groundfish. Setting the nets higher for free-swimming school fish, draggers take enormous quantities of ocean perch, or rosefish (*Sebastes marinus*).

Since this small red fish became popular as a foodfish, about 1935, it has been taken in ever-increasing numbers, until today it makes up about 50 percent of the Gloucester catch.

Though long a staple, New Englanders still prefer their cod, haddock, or mackerel. But ocean perch find ready markets in the South and Midwest; the smaller fish more nearly resemble fresh-water varieties long eaten in the Midwest, and the small fillets are just right for the popular southern fish fries.

God Shares in the Catch

Portuguese and other Gloucestermen fish on a lay basis, ship and crew sharing proceeds of the catch. At the end of each voyage the crews of Portuguese craft set a certain amount aside as "God's share," to be given to the Church for charitable works.

Early Gloucester skippers sailed by "compass soundings, and personal judgment" alone. Today the draggers use radiotelephone, radar, depth indicators, and even loran, the long-range electronic navigation system that transmits its streets and avenues up the ocean's gray wastes. Yet, despite power and modern navigational aids, the sea still exacts a heavy toll.

Few fishing families of Gloucester have not paid tribute to this hard mistress. From Gloucester's beginnings as a fishing port until the present time, more than 1,000 of her vessels and 8,000 of her men have been lost at sea.

Men were washed overboard; schooners went down in northeast gales. Thick white fog took many lives when men in the dories lost sight of the parent vessel and could not find their way back, despite mournful blasts of the schooner's horn. Some lucky few rowed to land, their fingers frozen round the oars.

The danger of anchor cables parting added another hazard to winter fishing on the banks. Men peering through swirling snow would sometimes see the gray ghost of a drifting vessel bearing down on them. Then the man standing by the anchor cable had to swing his sharp ax instantly, for if a drifting schooner crashed into an anchored vessel in rough seas, both were almost certain to go down.

Many fishing vessels were simply never heard from again, victims perhaps, of a hurricane, the screaming wind that the tough men of Gloucester called an "August breeze."

At a Blessing of the Fleet, the Most Reverend Richard J. Cushing, Archbishop of Boston, said:

"The natural virtues of a fisherman are two—trust in God, and perseverance. Toiling on the sea has taught them both."

And so, despite all hazards, the men of Gloucester will continue to go down to the sea to reap the harvest of its waters. And the sea-knowing Portuguese will be among them.

Gloucester, Massachusetts, Fishermen Take Turns Carrying Our Lady of Good Voyage

Fishermen and Their Families Hear Mass Before the Yearly Blessing of the Fleet

A Bishop in Cope and Mitre Blesses the Fishing Vessels. Thousands Join the Water Front

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Our Lady Visits the Ships That Ask Her Protection. Pantasa's Flag Flies Beside America's

Distant Captains Keep Stations Above Shipboard Chart Tables

Future Fishermen in Sou'westers Wear a Dress on Wheels

Girls in White Strew Flowers on the Floating Tide in Memory of Men Lost at Sea

A Ship on Her Arm — an Illuminated Statue of the Virgin Welcomes Fishermen Home

Votive statue made by [illegible] and placed [illegible] to watch over the [illegible] Thirty-eight [illegible] [illegible]

The Yankee Sailor Who Opened Japan

Commodore Perry and His Black Ships Changed the Course of History by Ending Japan's Seclusion a Century Ago This Month

By Ferdinand Kuhn

JUST [illegible] 1853, Commodore Matthew Calbraith Perry of the United States Navy opened Japan to the outer world.

He broke through a wall that had hidden Japan from Western eyes for 216 years. In doing so, he changed the course of history.

Other American naval commanders have reshaped the future in a single battle—Dewey at Manila Bay, for example, or Nimitz at Midway. But Perry did it without firing a shot.

His weapon was diplomacy, backed by a willingness to use force if he had to.

Festival Recalls Commodore's Landing

To the terrified Japanese of a century ago, Perry's steam frigates were the "black ships of the evil men." They spewed black smoke, they moved without oars, and they churned up Japanese waters that were supposed to be inviolable.

But because Perry did his work without bloodshed, because he dealt with the Japanese with dignity and fairness, he is remembered as a stern benefactor of modern Japan. And the arrival of his "black ships" is commemorated in a local festival every summer by the descendants of those frightened Japanese whose country he awakened after a sleep of centuries.

Today, if you stand at Perry's first landing place at Kurihama, 30 miles south of Tokyo, you can span a hundred years of history in a single view [map, page 90].

The surroundings have not changed appreciably since Perry landed. I know they have not changed, for when I went to Kurihama with my son Philip, a student at Harvard, I took with me a contemporary drawing of the beach as Perry saw it a century ago [page 88].

At one end of the crescent beach, to the northeast, is the bold headland behind which Perry's ships first anchored. At the other end the land rises in gentle contours as green as the hills of Ireland.

On the landward side are the tiny rice fields and cottages of Kurihama. And looking out across Uraga Strait, at the southern end of Tokyo Bay, you can see the dim outlines of the mountains of the Boso Peninsula on the opposite shore.

Perry saw this same placid background but the scene on the beach was vastly different on the morning of his landing. According to the official account he submitted to Congress, the curving beach "was gay with a long stretch of painted screens of cloth, upon which was emblazoned the arms of the Emperor.

"Nine tall standards stood in the centre of an immense number of banners of divers lively colors, which were arranged on either side, until the whole formed a crescent of variously tinted flags, which fluttered brightly in the rays of the morning sun.

"From the tall standards were suspended broad pennons of rich scarlet which swept the ground with their flowing length. On the beach in front of this display were ranged regiments of soldiers, who stood in fixed order, evidently arrayed to give an appearance of martial force.

When I saw Kurihama not long ago there were no "regiments of soldiers." Children were splashing happily in the waves at the water's edge. In place of the scarlet pennons and fluttering flags were rows of souvenir teahouses and soft-drink stands. Where a clutter of houses stood in 1853, at the southwest end of the beach, a big ice factory now stands as the only major change in the landscape.

A Monument to Perry Survives War

On the spot where the Emperor's representative received Perry and his retinue, a 33-foot granite shaft honors the great Commodore in a sandy enclosure known as Perry Park.

An inscription in English says: "This monument commemorates the first arrival of Commodore Perry, Ambassador from the United States of America, who landed at this place July 14, 1853. Erected July 14, 1901, by America's Friend Association."

The monument has stood as a symbol of American-Japanese friendship for more than half a century, with only the interruption of the war. It stood through the years of bitter fighting in the Pacific in 1942 and 1943, but in 1944 militant Japanese patriots pulled it down. After the surrender, it was put back on its massive base as a sign that the Commodore was not forgotten.

As I looked out from the monument to the brilliant blue of Uraga Strait, I saw a big merchantman at anchor where Perry's ships guarded the first landing. I read its name through binoculars.

It was the *American Victory*.

Perry's opening of Japan was indeed an

[illegible]

Japanese Eyes Saw Commodore Perry as Stern and Forbidding

Matthew Calbraith Perry [illegible] Japan [illegible] Manjiro [illegible] to the Emperor [illegible]

American expeditions had failed to break the seclusion, although they succeeded in rescuing the imprisoned seamen.

Our ships in Pacific waters needed coaling but could not get it. [illegible] needed release from Japanese [illegible]. And, in the young America of those days there was a fiery, [illegible] expansionist [illegible] in the Pacific. [illegible] helped to [illegible] in Washington to fit out a massive expedition to open Japan.

"Make no use of force," the Secretary of State, Edward Everett, wrote to Perry at the President's insistence, "except in the last resort [illegible]."

What the President [illegible] and could not know was that Japan was ready to be opened. The Japanese people had taken [illegible] feudal [illegible] to the [illegible]. [illegible] taxes were oppressive; the walls of seclusion were already crumbling.

Japanese scholars knowing their country [illegible] had to come [illegible] learned from the language of the Hollanders who had been allowed to keep a [illegible] in Nagasaki harbor through all the hermit years.

From Dutch books in later years the Japanese learned of Western science, of the growth of cities and nations in Europe, of the growth of European empires and the rise of the United States. But in [illegible], the arts, the theater, the "closed-door" way of life went on undisturbed, [illegible].

Thus the island nation was being left behind in a swiftly changing world, and few [illegible].

American victory, although world-minded Japanese now regard it as a victory for their [illegible] as well.

To the United States of those days, and to President Millard Fillmore, who gave Perry his orders, the [illegible] seclusion of Japan had become a nuisance and a menace to practical American interests.

Hermit Japan Imprisoned Seamen

The crews of American whalers, shipwrecked on Japanese shores, had been imprisoned. Some had been [illegible] for years as [illegible] for landing on [illegible]

If someone had to do the dreadful job of opening Japan, Matthew Perry was the ideal man. His name alone was enough to give him authority in the Navy. His father, four brothers, and two brothers-in-law had been naval officers.

Perry a Stern Disciplinarian

One of his brothers, who had died long before 1853, was the dashing, charming Oliver Hazard Perry, the hero of the Battle of Lake Erie in the War of 1812, the author of the famous report "We have met the enemy and they are ours."

But Matthew Perry was very different from Oliver in looks and in personality. He was known in the Navy as "Old Matt," and sometimes his men talked of him as "Old Bruin." By 1853 he was almost 60 years old, proud and portly, blunt in speech and somewhat of a tyrant to his men.

The weight of a struggle of wits and wills would darken the ship with storm. His heavy black eyebrows and his black hair made him a formidable opponent to any lawbreaker. He was left many impressions of him in their contemporary prints (opposite page).

Nathaniel Hawthorne described him as "brisk, gentlemanly, off-hand but not rough; unaffected and sensible." He was indeed sensible," and so businesslike in his preparations for the forthcoming expedition that he read some 40 books on Japan before he sailed. He supplied and trained his expedition as if it were going off to fight a serious war.

With all his sternness, the Yankee sailor from Rhode Island had a soft spot in his heart for children, although he didn't always understand them.

Perry's Men Called Him "Old Matt" or "Old Bruin"

brother Oliver, long dead, before sailing for the Far East. He asked his 8-year-old grandnephew, Thomas Perry, home. He wrote: "I like to come in contact with children."

Thomas Dashes Off to Sea

The youngster disappeared like a shot and the Commodore had to go searching for him in the attic. He found the boy packing his belongings in an old sea chest, ready to go at once.

The Commodore took a really great liking to Thomas. But Thomas did go to Japan, decades later

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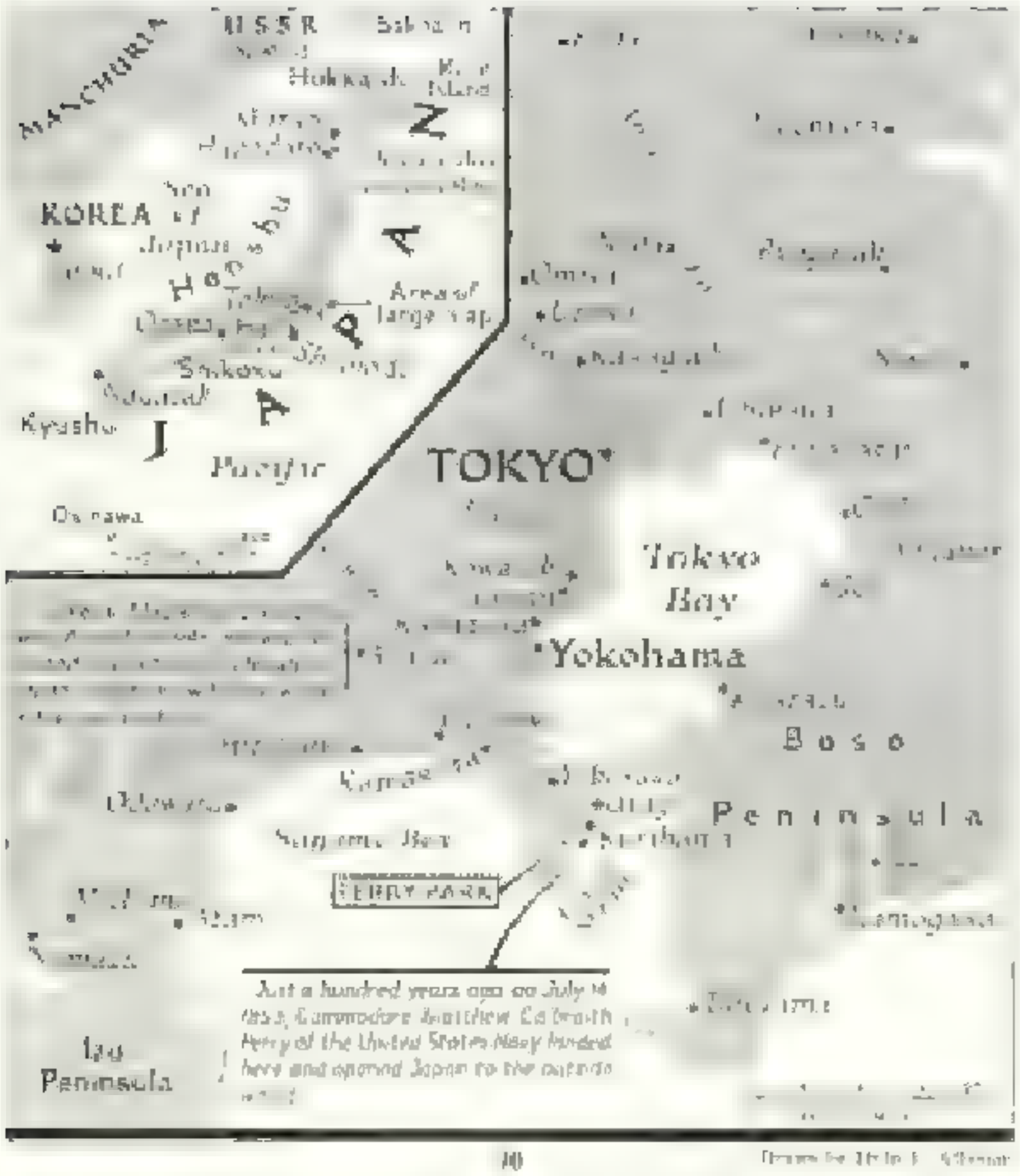
Kurt Lewin Bench Has Changed Little Since Perry First Saw It in 1853

Americans Land on Japan's Forbidden Shore with a Letter for the Emperor



Perry Saw Farms and Huts Where Busy Yokohama Sprawls Today

Here, in Tokyo Bay, Perry secured a treaty promising protection for shipwrecked Americans and opening the ports of Shimoda and Hakodate to American trade (inset). The Commodore's engines were at Kurihama and Yokohama.

English literature at Keio University in Tokyo. And Thomas, in turn, had a charming daughter who became well known in Japan, not only as a Perry but as America's First Lady in Tokyo for 10 years.

She is Mrs. Joseph C. Grew, the wife of the last American Ambassador to Japan before the war.* In her home in Washington not long ago she showed me relics of the Perrys, and Japanese prints of the arrival of the Commodore in his "black ships" a hundred years ago.

A Spy Warns of Perry's Plans

Three steam paddle-wheelers formed the main ships of Perry's squadron. The Commodore knew the value of steam ships; he had pioneered in developing them for the Navy, and his first flagship, the *Susquehanna*, was of respectable size—257 feet long, 69½ feet broad, with an armament of six 8-inch guns.

The *Mississippi*, with the Commodore aboard, steamed alone across the Atlantic to Cape Town, across the Indian Ocean, and north along the coast of China to what is now Okinawa.

From Okinawa a Japanese spy secretly relayed news of the Commodore's plans to Japan, so that the Japanese authorities expected him when he arrived.

But the sight of his ships off Uraga spread consternation. In Yedo, now Tokyo, thousands fled the city, thinking that the great ships with their guns would destroy their homes.

A Ship's Whistle Strikes Terror

Little Japanese guard boats clustered like gnats around Perry's black monsters (page 96), but the Commodore would let no one aboard except persons having official business with the expedition.

Once, when the ship *Mississippi* blew her whistle, the entire crew of one of the guard boats dived overboard in abject terror. All through the first night Perry's sailors saw beacon fires glowing on the hillsides and heard the tolling of a great bell, which they took to be an alarm signal.

Perry had thought of everything; he had even brought a Dutch interpreter along, suspecting, correctly, that Dutch was the only European language any of the Japanese would know.

He knew that he would find a highly sophisticated society in Japan, but he had a surprise when the leading functionary of Uraga came aboard in a rich silk robe embroidered in a peacock-feather pattern.

Perry's officers showed the official and his aides a globe of the world. The Japanese promptly pointed to Washington as the capital of the United States, and to New York as its business center, and they also identified England, France, Denmark, and other countries of Europe without the slightest hesitation.

With a combination of tact and iron firmness, Perry convinced the Japanese officials that he would insist on delivering a letter

*See, in the NATIONAL GEOGRAPHIC MAGAZINE, "Japan and the Pacific," by Joseph C. Grew, April, [illegible]

A Model of Perry's Steamship Sails the Tidal Basin in Washington, D. C.

from the President to a representative of the Emperor, and to no one else. He said he would go at most Yokohama and not at Nagasaki, where the Japanese had tried to send him.

After six days of cold but courteous explaining, a landing was arranged on the beach at Kurihama, just around the headland from the squadron's anchorage.

The Commodore took no chances. He ordered that his marines and sailors with muskets and cutlasses and some guns to add to the impressiveness of the occasion, were 40 handpicked men who bristled lustily on their way to the shore.

Perry himself took great pains to make sure that his own landing would have the greatest possible effect on the Japanese. He spent a long time in front of a mirror, combing his unruly hair and buttoning his uniform, which full-dress and formal, although it was a hot summer's day.

Then, with all the majesty of an emperor he went ashore.

With the bands still playing, his men formed a procession that marched up to a temporary building where the Emperor's representative was waiting. Perry did not know that this spokesman, the "Prince of Idzu," was only a minor functionary from Osaka named Toda.

The Japanese had given Toda high rank just for the occasion. They had refused to send anyone of really high station for the distasteful and humiliating task of receiving a letter from the foreign "barbarians."

Golden Casket Guards a Letter

With elaborate ceremonial, Perry delivered the letter in a box of rosewood and gold that had cost $1,[illegible] and that was President Fillmore's [illegible] to the Emperor.

"I have no other object in sending [illegible] [Commodore Perry] to Japan," the President wrote, "but to propose ... that the United States and Japan should live in friendship and have commercial intercourse with each other.

"The Constitution and laws of the United States forbid all interference with the religion

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With an Emperor's Dignity Jeffs Approaches the Treaty House near Yokohama

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Curious Villagers Gape Behind a Wall of Marines While Lookouts Fire Salutes

in keeping with the spirit of the age. Included were samples of art and craftsmanship from the United States.

He included a telegraph instrument, with about a mile of wire, several clocks, a telescope; firearms of assorted sizes; and a hundred gallons of whiskey. He brought along a four-volume set of *Natural History of America*, since most men of learning could read Dutch. Some Welcome Presents

Telegraph Baffles, Train Delights

All these gifts were solemnly carried onto the beach near Yokohama after Perry's second visit. The telegraph instrument caused much puzzlement; some who saw it raced from the sender to the receiver and could not understand how messages could travel [illegible] the fleetest runner.

But nothing created as much excitement as the model train which Perry had brought with him, complete and accurate in every detail. The locomotive was one fourth the size of the tall-stacked engines of those days. With it went a tender, a little passenger car, and [illegible] track to run on.

The train traveled at 35 miles an hour and [illegible] by Japanese who watched in [illegible]

[illegible] of the day marveled at the speed [illegible] Its whistle rivaled the thunder, and the [illegible] rolled along as the wind, was truly [illegible]

Within 20 years the first real railway line in Japan was in full operation over the 18-mile stretch from Yokohama to Tokyo. Today Japan has 14,000 miles of track. The entire system owes its first encouragement to the Yankee Commodore.

Perry soon learned that the Emperor had answered the President's letter and was ready to make a treaty. Another pageant, more splendid than the first one on the Kurihama sands, was arranged for the signing, this time at what is now the busy metropolitan port of Yokohama.

A Crack in the Wall of Isolation

The treaty of March 31, 1854, pried Japan open by at least a crack. It opened the ports of Shimoda, 80 miles southwest of Tokyo, and Hakodate, on the northern island of Hokkaido, to American ships; it permitted limited trade between the two countries, and it authorized the first American consular representation in once secluded Japan.

The Locomotive at Kanagawa's Amusement Park Recalls Perry's Gift to the Emperor

Japanese [illegible] the [illegible] Perry's similar gift to Yokohama [illegible] model [illegible] Yokohama [illegible] other gifts from America [illegible]

Terrified Japanese Saw Perry's Steamers as Leaping Monsters

Great Buddha Meditates Serenely After Seven Centuries of Quake, Tidal Wave, and War

Most unique work ever to be undertaken by any organization in the country. But "Old World" methods of his master. He has achieved for the United States what no foreign artist has been able to do for more than one year.

The way was paved for Japan to make a new treaty with Britain, Russia and the Netherlands and to send her astonishingly small fleet to the Orient in her power.

Cults of Buttons Delight Japanese

When the new trade regulations were made Japan was the merchant was ready for anything the old Empire could do to please. He allowed Japanese laborers as well as officials to visit his shops and he found them entranced by everything they saw, even bits of Western clothing.

The object of the exercise of the exercise was to give the Japanese people a right to possess themselves of anything that pleased to be the most civilized people on the earth.

They went out and got such as a button, the zipper and was presented with the best part of the whole thing, and showed it away as if it were the greatest value.

The reason of it was that the Japanese people had the strength of character to put their interests and other things together.

To show their interest, the Japanese carried out a treatment of the form of weights to the weights of the weights. There were also interested in the construction of these weights and in the method of using and choosing of their purchased goods.

A few days later the Americans reciprocated with a feast on board the *Powhatan*. Below deck, a table was set for the Commodore, his captains, and the high commissioners of Japan. Outdoors, on the 45-foot-wide deck, long tables were set for Perry's subordinate officers and the lesser functionaries (page 97).

The Commodore had taken good care to make it a lavish feast. The tables were loaded with beef, lamb, and poultry, fish, vegetables, and fruits and with ample supplies of fine wines. The Japanese, according to Perry's official report, drank "unmeasured glasses" of champagne and maraschino, and the party was uproarious before the dinner ended.

Leftovers Go Inside Sleeves

One of the observant Americans at the dinner was Edward Yorke McCauley, a Perry sailor who later became a rear admiral. In his diary McCauley wrote that a new phase of the banquet began when the eating had ended.

All the Japanese except the interpreters, he wrote, "left their seats and commenced pocketing all the edibles they could lay their hands on, wrapping each piece of pie, slice of beef, leg of chicken &c in a piece of paper, depositing it in the bag of their capacious sleeves."

Who could blame them? The American food was new and strange, and, besides, they were simply following a polite Japanese custom of those days—a custom which the Commodore and his men were asked to follow when they, in turn, were offered a dinner of fish soup, raw and cooked fish, rice cakes, and cider on shore.

After the banquet on the *Powhatan* the Americans put on an old-fashioned minstrel show. Bones and Sambo, in blackface, went through their usual antics, and even the chief Japanese negotiator, Prince Hayashi, the chancellor of the university in Tokyo and the Chief Confucian Adviser to the Shogun, shook his stately sides with laughter.

A Parting Embrace for Perry

The champagne must have been effective; for, as the Japanese were about to leave the ship, one of them threw his arms around Perry's neck, crushing a new pair of epaulets in his embrace and saying, in fervent Japanese, "Nippon and America, all the same now." Later, according to the official report, [illegible] a salute of 17 guns boomed from the Saratoga.

Because the Japanese authorities kept them within strict limits, Perry and his men could see little of the country. From their ships the Americans could hear the bells of Tokyo, and once they saw, dimly in the distance, the crowded wooden houses of the capital city. On land they were limited to a circuit of only a few miles.

Their walks ashore were enough to show them the beauty of the scenery, the neatness of [illegible], the well-tilled rice fields, the tiny fields, the courtesy and friendliness of the people. Strictly off limits to them, apparently, was the most picturesque place in the entire neighborhood of the Yokohama anchorage: the ancient capital city of Kamakura, with its 65 temples and 19 shrines, and its wondrous relics of medieval Japan.

One of Perry's ships, the *Macedonian*, went aground off Kamakura on the second voyage. The Commodore anchored there during the refloating operations, but he knew the place only as a dangerously exposed anchorage, open to the winds of the western Pacific.

Of its shrines, the most famous is the contemplative Daibutsu, or Great Buddha, 42½ feet high, a landmark of Japan as familiar now as Big Ben in London or the Eiffel Tower in Paris. There is no record that any of Perry's men ever saw it, although it is only six miles from the shore of Tokyo Bay.

Today Allied soldiers on leave from Korea and sailors from the Yokosuka naval base visit the Great Buddha in droves. Its serene repose seems to cast a spell over them, for they show it immaculate respect as a shrine.

Buddha Echoes to "Alouette"

When I was there I heard something, coming from among the trees near the statue, that would have horrified Perry. It was boogie-woogie echoing from behind a sign that advertised the Hotel Buddha. A Japanese band was trying to master the rhythms of Harlem, and was having trouble doing it.

The band gave up when a lusty platoon of French-Canadian soldiers in berets invaded the Hotel Buddha, singing "Alouette" at the top of their voices. They palavered politely with the band leader and asked if they might borrow his instruments.

Soon the Canadians were blaring and shouting their cheerful song so loudly that the Buddha itself almost clenched its palms in anguish:

> Alouet-te, gentille Alouet-te,
> Alouet-te, je te plumerai . . .

The soldiers were men of the Royal Twenty-second Regiment, a unit made up almost entirely of French Canadians and known from Ontario to the Maritime Provinces as the Vingt-deuxième—pronounced in French Canada as the "Vandoos."

To millions of present-day Japanese in the Tokyo area Kamakura means not only the site

100

Bearded Ainu, Survivor of Japan's Prehistoric People, Sits Proudly Among His Trophies

Medieval Musicians and Geishas Welcome Visitors to Shimoda's Black Ships Festival

along a single main street. Today it is a busy port of almost a quarter-million people and the terminus of the rail ferry that links the 4½ million on Hokkaido with their countrymen on the main island of Honshu.

One of Perry's armed steamships, the *Southampton*, paid a visit to Volcano Bay (Uchiura Bay), ringed by several volcanoes, two of them belching smoke at the time. There the sailors found some of the true curiosities of Hokkaido—the Ainus, the primitive people who were living in Japan before the ancestors of the present-day Japanese arrived.*

Ainus a Vanishing Race

One student estimated that in the 17th century there were 200,000 Ainus on Hokkaido. In Perry's day there may have been only between 20,000 and 30,000, chiefly because a smallpox epidemic had almost wiped them out a century before.

The *Southampton's* commander described them as short "but well proportioned, with intelligent features," and noted their "very black, coarse hair."

Today only a handful of pure-blooded Ainus survive in Japan. My son and I visited two survivors of this departing race in their log house at Shiraoi, on the southern coast of Hokkaido (page 100).

They had taken Japanese names—Mr. and Mrs. Tonosuke Miyamoto—and of course they spoke Japanese. The man, at least, had the high cheekbones and other features of a Russian peasant. Their eyes were deep-set under bushy brows that reflected the mild and friendly disposition for which the Ainus have always been known.

Mr. Miyamoto had a long white beard; his wife had tattooing like a mustache around her lips. The old couple was seated on the floor, facing a half-circle of Japanese schoolchildren who were watching with as much quiet as our children would show for a full-blooded Indian chief.

With a soft and gentle voice, Mr. Miyamoto described his exploits in hunting bears, which from time immemorial has been a major occupation of Ainu men and the mainstay of Ainu folklore. The old man pointed proudly to the precious lacquer jars which the feudal lords of old Japan had given his father and grandfather in payment for bearskins.

What if Perry had not opened Japan? Would it have been better, for Japan and for the rest of the world, if the lacquer curtain had not been pierced a century ago?

The questions are misleading: Japan would have been opened anyway, even if Perry had not gone there. Great Britain or Russia surely would have done it.

Perry himself foresaw an eventual conflict between America and Russia which, he said, would determine "the freedom or the slavery of the world." His official report to Congress in 1856 noted that Russia had pursued its expansionist aims "noiselessly" but persistently, with the hope of controlling both shores of the northern Pacific Ocean.

"If she possessed Japan," the Commodore reported, "she would have an abundance of harbors, unrivalled in the world for excellency, and with her resources would control the commerce of the Pacific. It is not, therefore, the interest of any part of the commercial world that Russia should ever own Japan."

If any foreign nation had to open Japan by the threat of force, probably it was fortunate that it was the United States. Neither the old Commodore nor his Government ever sought to "own" Japan or to take possession of an inch of its soil for the United States.

We wanted only to open the country to trade and friendship and to what he honestly believed were the blessings of Western civilization.

I have often talked to Japanese friends about Perry. They knew the details of his expedition: they had learned about it in school. In the old days, many Japanese looked upon it as a national humiliation, for the Japan of Perry's time was defenseless and woefully asleep to its own best interests.

Japan Quick to Learn Western Ways

Yet intelligent Japanese now honor Perry as the initiator of 50 years of dazzling progress. In the half-century from the signing of Perry's treaty to the start of the exhausting war with Russia in 1904, Japan amazed the Western World by transforming herself into a modern state.

She developed a banking system, a railway network, a merchant marine, and industries; she absorbed the technology of the West and at least the forms of Western political institutions as well. It was only in the second half-century after Perry that Japan took a wrong turning which led her to the disaster of militarism, war, and defeat.

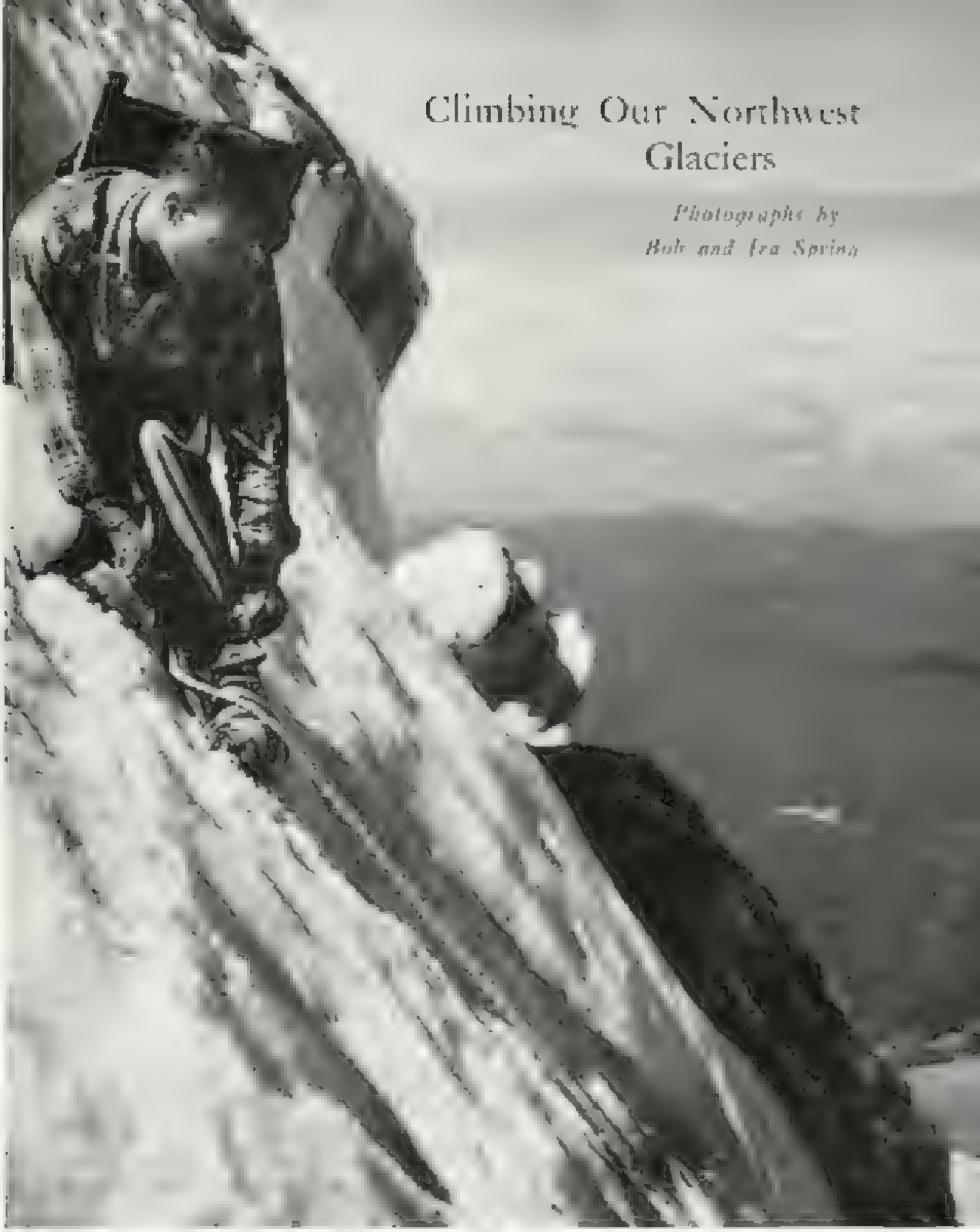
Today her thoughtful leaders wish their country had continued on the course of peaceful progress that Perry started.† In Japan as in the United States, the thickset figure of the Commodore looms larger with the passing years; and his "black ships," once so menacing, are remembered as the agents of a national liberation.

* See, in the NATIONAL GEOGRAPHIC MAGAZINE, "Friendly Journeys in Japan," by John Patric, April 1950.

† See, in the NATIONAL GEOGRAPHIC MAGAZINE, "Japan Tries Freedom's Road," by Frederick G. Vosburgh, May, 1950.

Climbing Our Northwest Glaciers

Photographs by
Bob and Ira Spring



[illegible]

[illegible]

Mount Rainier Commercial Photographer | Tacoma Seattle Olympia Bellevue Photographer Carbon Glacier

"Come and Get 'Em!" Pancakes Hot Off the Griddle

[16]

Roped Climbers, Near Mount Rainier's Top, Start on Jacob-Irregard Crevasse

Crossing a Glacier Snow Bridge on Mount Olympus, a Misstep Could Mean Disaster

Dwarfed Adventurers Thread a Maze of Tortuous Chasms

[illegible] Mountaineers must check every inch of climbing rope, for sharp rocks and [illegible] housekeeping essentials must be crammed into [illegible] weight loads are packed in waterproof containers.

As soon as the climbing party reaches the glacier, teams of two or four rope together. On the ice sheet, skilled climbers can move [illegible] within half an hour. [illegible] crevasses [illegible] drops and [illegible]

These [illegible] use a rhythmic "rest step," a pace geared to the [illegible] With each step [illegible] takes about three seconds, the time required for a full stride.

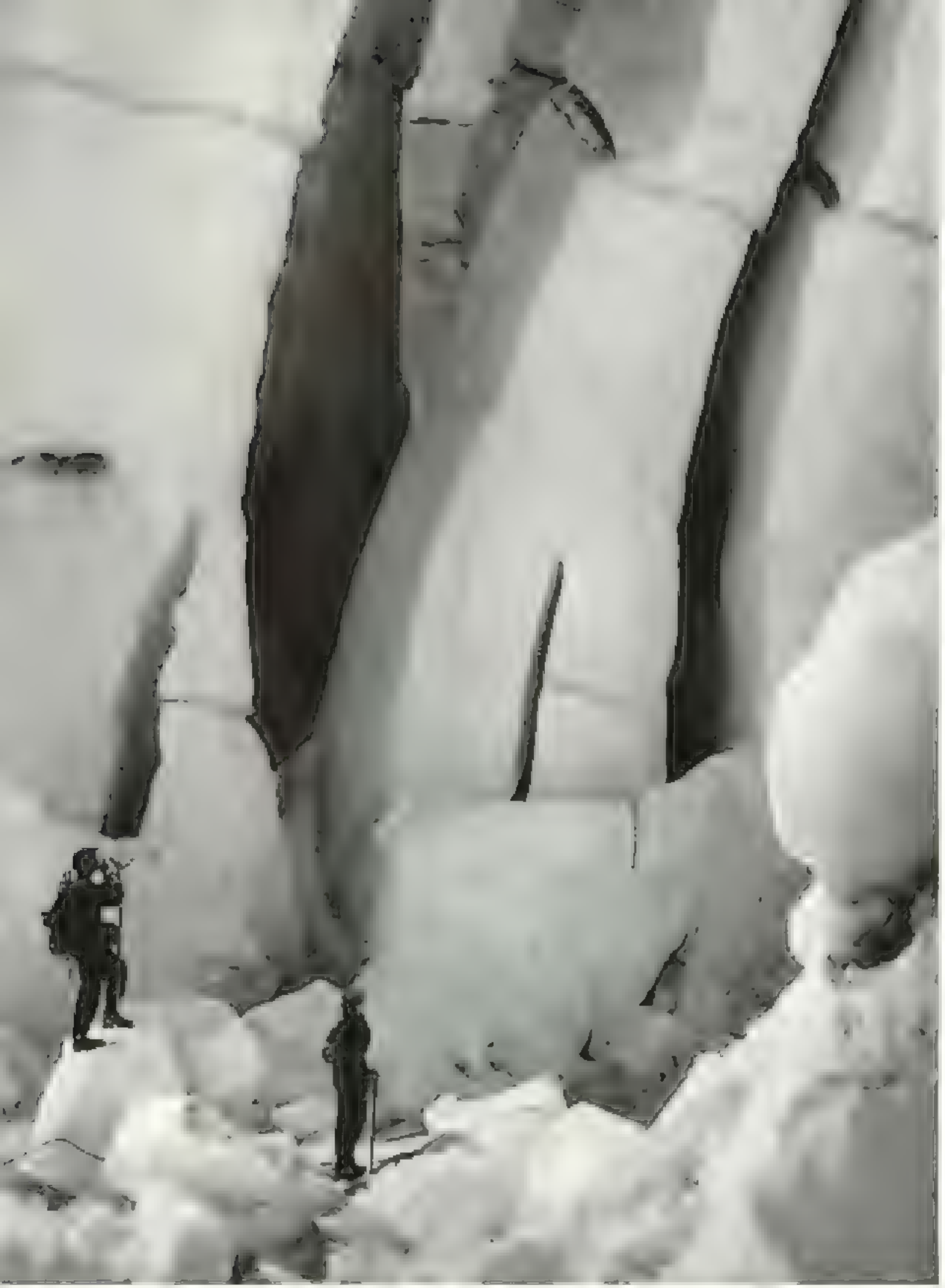
[illegible] on Mount Rainier [illegible] independent parties with qualified leaders may try for the summit. All members must register with park rangers before starting and upon returning. They must give evidence of glacier-travel capability, proper equipment, and adequate experience.

[illegible] above constitute the [illegible] climbers [illegible] some of the ice formations may have extended [illegible] Puget Sound area ages ago [illegible] years ago.

[illegible] provide [illegible] shelter in extreme cold [illegible] turns [illegible] [illegible] mountain [illegible] [illegible] [illegible] storms [illegible] [illegible] mountain [illegible] [illegible] steam [illegible] [illegible] size.

Beneath it the top of [illegible] jar peaks, climber [illegible] registration books [illegible] waterproof containers.

Three [illegible] cross a [illegible] besides [illegible] Winthrop Glacier, one of six ice rivers [illegible] at Mount Rainier. [illegible] camps at Steamboat Prow. The paved trail to the black rock mass [illegible] itself, known [illegible], spirits the hikers [illegible] Puget [illegible] Mount [illegible]



Tall Pillars of Ice Curve Upward from the Crumbled Floor of a Glacial Fissure

[illegible] Mount Rainier's [illegible] in Winthrop glacier.

111

Only a Few Feet of Packed Snow Separate Cavalry Camp from Mount Pleasant

Cradled in a Sliding Loop, Louise Ingalls Rappels Down a 100-foot Cliff

[illegible]

An and Spikes Process Iron Ingots

114

Step by Step, Climber Chops Through Penthouse to a Towering Spire on Mount Baker

Dublin's Historic Horse Show

Horse Lovers on Both Sides of the Atlantic Hail This Annual Event on Ireland's Green Old Sod

By Maynard Owen Williams

With Color Photographs by the Author

IN NEARLY every country, of top-level importance from Virginia or the Argentine to Singapore, Horse Show Week in Dublin evokes a cherished memory or a strong hope. To thousands of Irish horse enthusiasts the competition every August in the flower-bordered, green-turfed enclosure of the Royal Dublin Society is the mecca of their dreams.

If the famous horse show itself, like a tall hunter or fine filly, could have a pedigree, it might read "Social Event," by "Royal Dublin," out of "National Prize."

As early as 1867 the Royal Dublin Society, pledged to "improve the Husbandry, Manufactures, and other useful Arts" of Ireland, called the attention of Parliament to the need for more and better sires. A direct result was the first Dublin Horse Show under the society's auspices the following year.

Horsemen Treasure a Dublin Rosette

Today the prestige of winning at Dublin is world-wide. Cash prizes are offered, but the real reward is the red, or red, white, and blue rosette of victory, which a winner carries in his mouth past admiring thousands while his horse dances as it for the joy of it all (page 124). The big event is the Grand International Jumping Competition for the Aga Khan Challenge Trophy.

During five busy days more than a thousand horses compete. Class, not cash, is the keynote. When two high-stepping harness mares from England, seemingly cut from the same black satin, strut to the applause of horse lovers, everyone knows that these exquisite equines are working for sheer pride in their prowess, not for money.

In the Ballsbridge Sale Paddock, across Merrion Road from the show grounds at Ball's Bridge, nearly a thousand thoroughbreds are sold at auction.

On the first day some untried yearling, but future winner, may bring only a few hundred pounds.

On the second and third days prices may be higher. For example, a chestnut colt by Royal Charger, out of Four in Hand, sold for about $10,000.

Horses in training and untried thoroughbreds are sold on the fourth day.

On the final day, horses entered in the show classes change hands. I photographed one horse that was withdrawn when bids were only $11,000.

With an Irish companion I walked along in front of the diplomatic boxes for a preview of the jumping enclosure. A neat hedge of alternate green and gold privet enclosed a half-mile oval of greensward.

In the wide enclosure were the six permanent jumps: bank and ditch, single bank, stone wall, hurdle, double bank, and water. For some events as many as 10 fly fences are added. These additional barriers deliberately test skill as well as power. Riders sometimes lose their way and are disqualified.

Time Counts in Case of Ties

Ordinarily, speed counts no more in jumping than in golf. But an automatic timer is the deciding factor when several horses triumph over 13 or 16 barriers without a single fault for a "clear" round. In the final, and timed, round of one jumping event I witnessed, six horses had faultless rounds and finished within a time difference of eight seconds; the fastest won.

Opening day two years ago, Tuesday, August 7, dawned dark, with drizzling rain, but when I arrived, soon after 9, grooms and handlers had been at work for hours, giving an extra polish to a shapely flank or brushing a mane (page 122).

In four rings at once the judging of nearly 100 heavyweight hunters, 100 medium-weight hunters, 138 lightweight hunters, and many 3-year-olds, 2 year-olds, and yearlings began. In the jumping enclosure thoroughbred stallions, yearlings, brood mares, and foals were parading on velvet turf while judges appraised each entry.

On that first day 110 jumpers competed, and I saw such master riders as Capt. Kevin Barry of Ireland, Lt. Col. Harry M. Llewelyn of England, and Dublin's own Iris P. Kellett in action (page 117).

One headline for Wednesday was "Rain Puts Damper on Horse Show." That was true for the crowd. But the interest of the experts remained at full heat. Judges rode one beautiful horse after another, picking their spines as well as their reputations.

On Friday the sun appeared for the most important hour of the whole show, the Grand International Jumping Competition for teams

of four horses. I stood on a small cement platform between the diplomatic boxes and the western end of the grandstands. Diagonally across the oval, 250 yards away, crowds packed the roofless bleachers. To the northeast the view was closed by Anglesea Stand, with every seat filled. Judges and announcer occupied a glass-walled box in front. At the left end, the members' stand filled a corner beyond a row of second-story diplomatic boxes.

Off my right shoulder stretched the grandstands, packed to capacity. In front of them a tremendous crowd lined the rails.

The President of the Irish Republic, Sean Tomás Ó Ceallaigh ("Sean T. O'Kelly" in the Dublin newspapers), was escorted to his seat amid boisterous acclaim.

Sixteen splendid horses, 10 of them bred in Ireland, represented Spain, England, Italy and Ireland (page 120).

Preceded by two bands, they passed the Presidential box, showed their left flanks to diplomatic row, passed the members' stand and met the full-throated cheers from the towering Anglesea Stand. Both brass and kilt bands were playing *The Wearing of the Green*, but the atmosphere was *Pomp and Circumstance*.

Jumping for International Honors

Then the vast enclosure was empty except for a lone horse and rider, a tiny pattern on the huge velvet oval. Spain's Lt. Col. Joaquin Noguera, on Master B., was starting the first of two rounds.

This contest between England's civilian team and three army teams was for the Aga Khan Challenge Trophy. The contestants must clear the six permanent jumps, as well as 10 extra jumps such as Railway Gate, Rustic Gate, Road-Closed Gate, Brick Wall and Pole, and, most popular for the general public, the "in and out"—Triple Hedges and Low—only a few strides apart and counting as three.

All contestants knew the course, but the arrangement of the barriers had been changed. Irish-bred Aherlow, England's second starter, took the wrong course and was eliminated. Since only the three best scores for each team are counted, this did not mean disaster.

Italy's Principe, bred in Germany, lost his way, but the crowd shouted a warning in time, as it did to another Italian entry, Gian, bred in Italy.

The time allowance for the course proved generous, but since both England's Foxhunter and Ireland's Kilnagarriff were tied, with only two faults out of a possible 128 for jumps alone, Foxhunter, "the best known jumping horse in the world," won on time.

At one moment Ireland's chances seemed excellent, for Ormonde had a "clear" first round, except for a misstep at the single bank.

England's team won this 1951 event with a total of 30 faults, including only two by Foxhunter. Ireland was second; Spain, third, and Italy, fourth.

President O'Kelly, in dark coat and gray topper, came onto the field and presented the two-gallon gold cup to the pink-coated English team, led by Lieutenant Colonel Llewellyn while the bands played Great Britain's national anthem.

Unfortunately, the 1952 show followed so soon after the Olympic Games that riders competing at Helsinki could not ship their mounts to Dublin in time for entry. As a result, the coveted Aga Khan Trophy was not offered.

Horsemen representing France, the United States, England, Italy, Ireland, and the Netherlands did match skills in a stirring unofficial team competition, won by England. The results of several other traditional contests also were unofficial last year.

Show Ends with Bargain Day

Having watched the big 1951 show, with smiling skies, for more than two hours, some visitors drifted away to ten garden or flower exhibitions. But tens of thousands stayed on to see nearly 50 horses in the Consolation Competition. Appropriately named, the winner was Happy, and the big day was done.

Saturday is bargain day. For 1s cents anyone can enter the grounds. For 1s cents more, he can enter the grandstand enclosure. Those who braved the rain saw two of the finest events of the show.

Ballyhack, a sturdy veteran of many a year, broke the course record with a high jump of 6 feet 3 inches on his sixth jump. His owner, Mrs. R. G. Garland, of Newry, in Northern Ireland, is an American.

The other outstanding event, the International Jumping Competition for the Work. Cup, or Irish Trophy, was won by Hack On, an Irish horse.

The Dublin show was over. Irish horse lovers had had their day. I boarded my plane and came home. At the New York International Airport there was nothing to remind me of the preceding week's glamour.

"Too bad," I thought. "Americans really should know more about the Dublin Horse Show."

The customs inspector greeted me: "How long were you abroad?"

"Only three weeks—at the Dublin Horse Show," I told him.

"What a vacation! How did Foxhunter look?"

Pride of the Irish: Iris Kellett and Rusty, Her 14-year-old Jumper

A Dublin girl is Ireland's foremost horsewoman. She and Rusty have won many trophies in international jumping competitions, including Sweden's Princess Elizabeth Cup in 1949 and 1951 and Dublin's World Cup in 1948

Heroic Statues Line Dublin's Spacious O'Connell Street

[illegible]

[illegible]

[illegible]

[illegible]

Coach Passengers Embark for the Lakes of Killarney

Jumping Teams of Four Nations Pass in Review at the Dublin Horse Show

A military and private competition of the Royal Dublin Horse Troops [illegible] annual show. Here riders and teams parade from the arena. [illegible] Ireland, Holland, Belgium, Italy, France, and Spain.

English Riders in Hunting Pinks Won the Last Ask Khan Trophy Competition

This cup is presented by the Imperial Government of India, and each year competitors come all over the country to take part in the contest for the possession of it

Admirers Prepare a Children's Pony For the Judging Ring

Maternity Mares with Foals at Foot Circle a Velvet Lawn, Booted-Spurred Officer Is Judge for Competing Horseflesh

A College in Formal Riding Attire Awaits Her Turn Before the Judges

Clenched Teeth Held Coveted Awards

A Thatched Roof Shields the Cottage of These Sisters in Adare

Thomas Moore Composed Songs at This Pianoforte

A Farmer Drives His Cart Across Historic Thousand Bridge Spanning the River Shannon at Limerick

Dublin's Baby Elephant Takes Three Admirers for a Ride

Sunset Glide: the Stone Chimneys of Old Gowanus

A Flotilla of Swans Sails Past the Dublin Custom House

A A Cart Truck Hugs the Shore of Killarney's Black Lough. Here, Legend Says, St. Patrick Drowned Pagan Last Snake

Young and Old Erin Pause for Rest by a Connemara Road

Rip Van Winkle of the Underground

North America's Much Misunderstood Insect, the Periodical Cicada, Emerges After 17 Years in the Earth for a Fling in the Sun

By Kenneth F. Weaver

National Geographic Magazine Staff

One May [illegible] in May, a mysterious signal crossed the land. Citizens going about their chores heard no sound and felt no apprehension. But an invading host, waiting underground, heard and acted.

At a multitude of spots between the Atlantic Ocean and the Mississippi River the invaders began rising by night from their hiding places, fanning out to take possession of forest, wood lot and orchard. Startled citizens, facing millions of uninvited visitors, were roused by curiosity and alarm.

A "W" Marks the Coat of Arms

The woodland occupants were in storms of black with orange trim, and shiny cloaks embroidered with the letter W. Their grayish faces and gleaming red eyes stared unblinkingly at passers-by. Discarded armor hung from every tree and fence post. From dawn to dusk drummers filled the air with a harsh and mournful din.

Invaders from Mars or from some alien land? No, these creatures are as American as baseball or buffalo nickels. They are the periodical cicadas, known to almost everybody but entomologists as 17-year locusts.

In June these same cicadas were at their prime in many places east of the Mississippi, enjoying a brief and noisy fling in the sunshine after 17 winters of subterranean darkness. The apprehension that recently met their appearance has given way to varying degrees of annoyance.

By the middle of July the periodical cicada and his keening cry will be only a memory. Then the very air would hang in limp relief were it not for the dog-day cicada, or harvest fly, whose rasp makes drowsy the late summer afternoons. But a myriad dying corpses and empty shells will continue to remind us of the summer's visitation (page 142).

Life Cycle Began in 1930

When this summer's crop of periodical cicadas began its life cycle 17 years ago, the United States was recovering from depression, Edward of Windsor was sitting on England's throne, and Hitler was gaining strength in Germany. If anyone mentioned war, he likely meant the civil war in Spain.

That was 1930. In that July and August day antlike creatures wriggled from nests in furrowed twigs. They scampered briefly on bark and leaves, then tumbled to earth. There they quickly burrowed into the protective soil, to be seen no more until 1953.

A foot or so below the surface (some have been reported to dig 10 feet) the cicadas hollowed out tiny clay cells. There they sank beaks into tender roots and settled down in quiet darkness for almost their entire lives.

Seasons passed. Depression ended and war spread around the globe. Wood lots fell to the lumberman's ax. Towns appeared; cities grew. But the hidden cicada was oblivious to all these things, except as the death of woods or orchard destroyed the nourishing roots on which he sucked. He seldom moved except to shed his clothes and enlarge his chamber as increasing size demanded.

Out of the Burrows, Into the Sky!

But as last winter drew to a close, the solitary earth dwellers sensed that an important change was due. During late winter and early spring they gradually tunneled upward until their excavations touched the surface. Some, caught in leaf-covered or wet areas, built mud turrets above the ground as temporary shelters —exactly why, nobody knows. There they awaited Nature's mysterious announcement that sends them scurrying aloft by the millions to take part in the swift cycle of courtship, propagation, and death.

What strange telepathy must govern these small creatures! Each individual is isolated nearly 17 years; yet he senses instinctively and simultaneously with his fellows that his "resurrection day" has arrived. A few come out ahead of time, others straggle, but the big emergence in any locality takes place en masse on several consecutive nights.

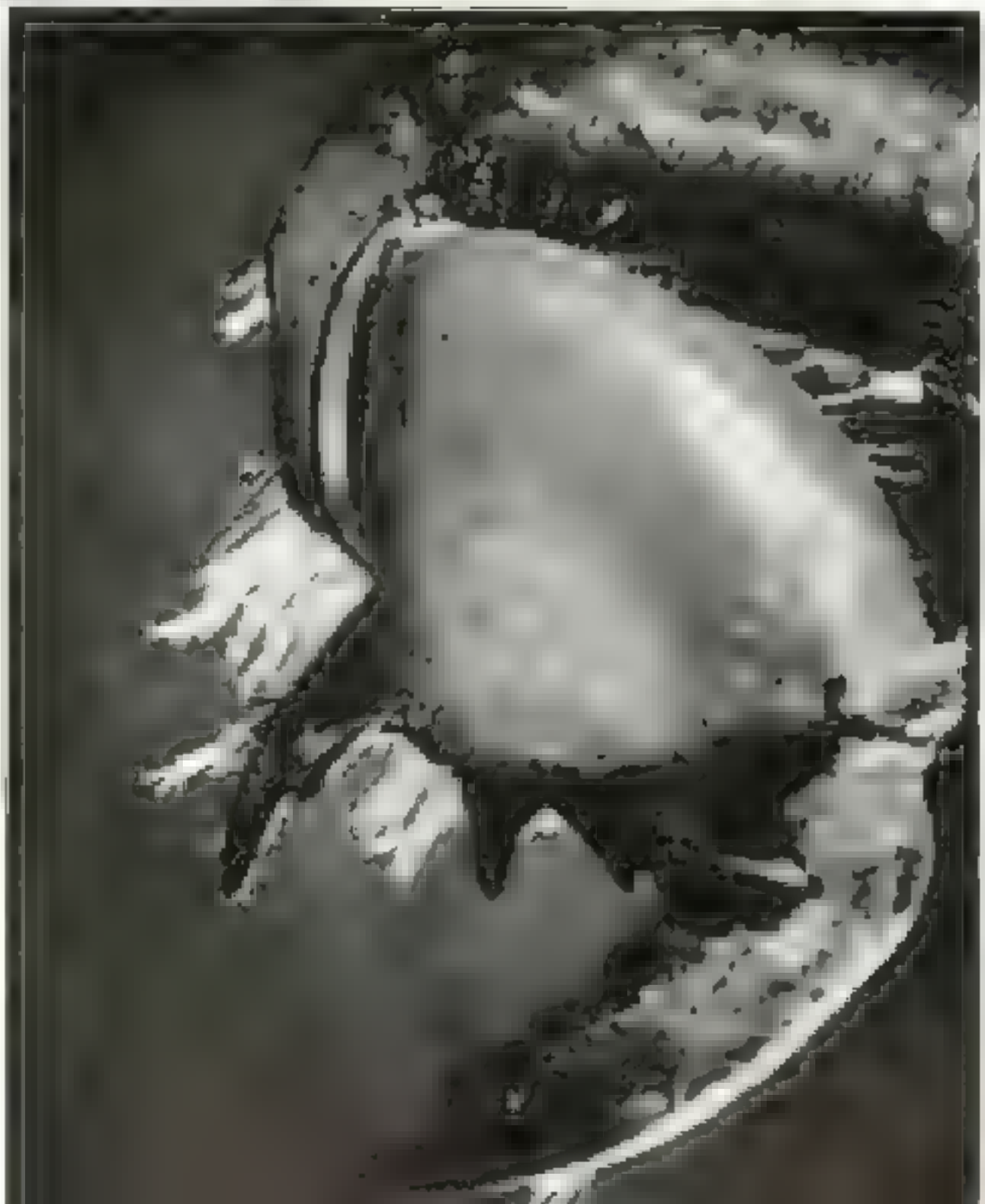
In some areas the ground may be peppered with half-inch holes, as many as 40,000 under a large tree (page 136). Small wonder if some awakening sleepers feel that an invading host has taken over during the night!

Thirty years ago the *New York Times* reported that no one had ever seen a periodical cicada nymph emerging; many writers have repeated the assertion. It is true that the creatures scuttle warily from their tunnels, usually under cover of darkness. Yet in more recent years observers with powerful lights and considerable patience have watched the fantastic emergence (page 137).

Lobster-like Claws Serve Rip Van Winkle While Underground

Its sturdy, red-tipped claws are used for crushing the prey it catches as it lurks in its underground burrow.

Spectral Shells Sway in the Breeze



Microphone and Tape Record the Roar of Cicada Drums

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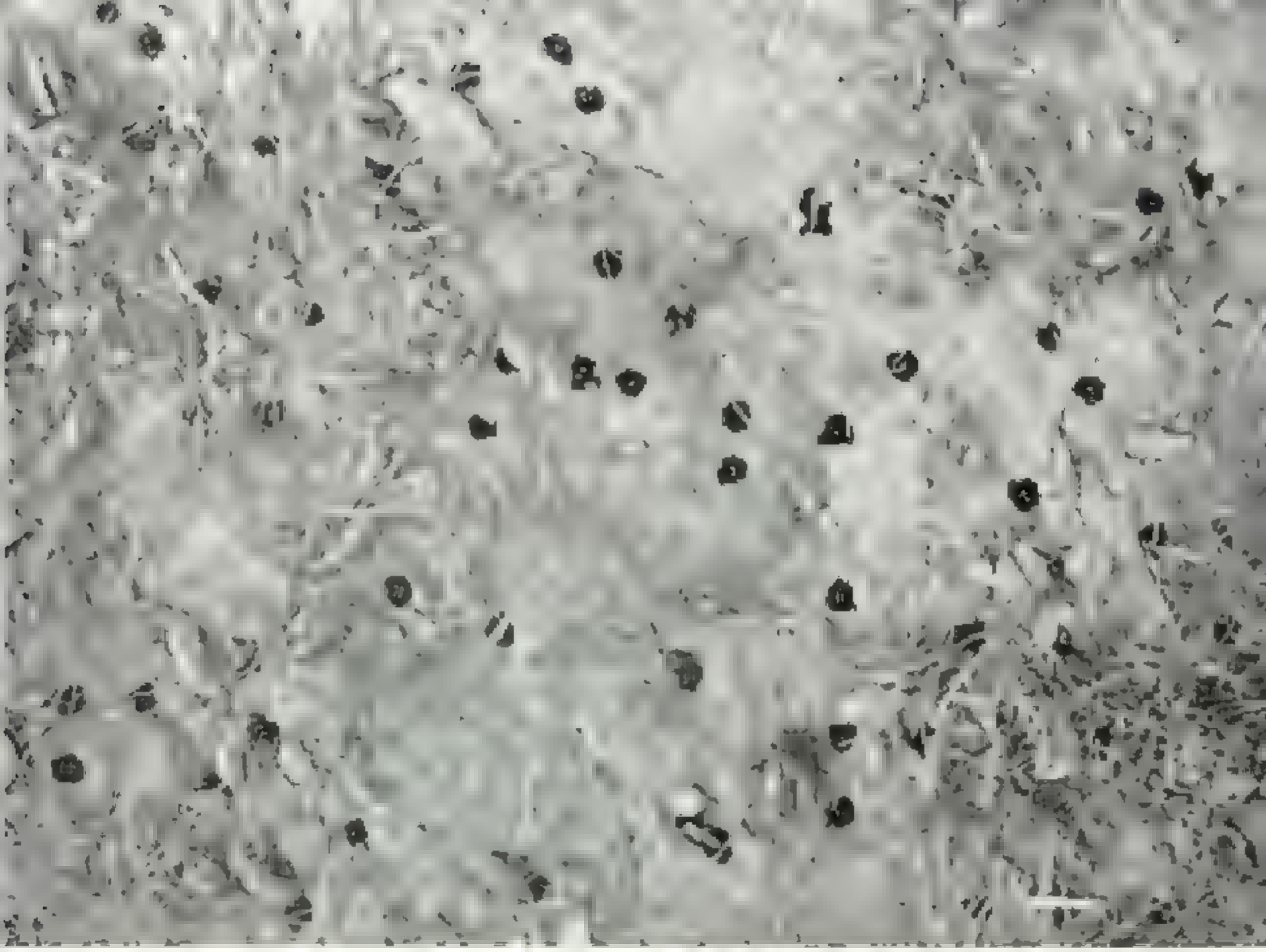

Emerging Cicada Nymphs Pepper the Earth with Half-inch Holes

Periodical cicadas spend most of their lives a foot or so below ground. In their 17th spring they tunnel upward, emerge just before the summer. Characteristically when the ground is wet or mud-covered they build mud turrets. There they await Mayhurst's mysterious call. Upon emerging, they honeycomb the earth with exit holes, as many as 54 to the square foot. Heavily infested areas may contain a million cicadas per acre.

In this stage the cicada, like the shedding crab, is completely defenseless. His outer skeleton is soft and flabby, and his thick wing pads have no power of flight (page 138).

But this condition changes overnight. Almost [illegible] the wing pads expand into [illegible] pread of fragile thinness (page [illegible] creamy white [illegible] or brown, then to glossy brownish black as the outer shell hardens. Orange red suffuses the margins and veins of each mica-shiny wing, while a dark W shows up [illegible]

By morning a new insect flits high in the treetops. Most of the time you hear rather than see him, this bumblebee-size creature with the fiery-red head lamps.

Pilgrim Fathers Called Them "Locusts"

An entomologist shudders when he hears the cicada called a locust. Yet the misnomer is easy to understand. It goes back to 1634, when Cape Cod Pilgrims took fright at the emergence of vast swarms. Indians knew the cicadas; they roasted and ate them, although they regarded the sudden appearance as an omen of pestilence.

But to the Pilgrims the insects were an eerie phenomenon. They concluded that the vast and noisy forest company must be locusts, the ancient plague of Egypt. Their illusion was heightened by the fact that the insect seemed to call, "Pha-a-a-r-a-o-a-o-h!"

I went to Louise M. Russell, the United States Department of Agriculture's authority on cicadas, for clarification of the cicada-locust confusion (page 140).

Locusts and cicadas have little in common, although some people may think they look alike," Miss Russell told me. "The locust, a member of the order Orthoptera, is a migratory grasshopper. He has strong jaws which can strip vegetation to the roots, and he is well known for his incalculable damage in the Middle East and Africa. He often migrates in vast swarms for hundreds of miles.*

"Cicadas belong to the order Hemiptera, insects whose mouth parts are developed for piercing and sucking rather than for chewing. They live on sap from trees and shrubs and

* See "Report from the Locust Wars," by Tony and Dickey Chapelle, National Geographic Magazine, April, 1955.

are related to other sucking insects such as aphids, scales, and leaf hoppers. Cicadas do not migrate; each dies within a few hundred yards of its burrow.

Few Insects Live As Long

Not only does the cicada insist on the right to his own name, but he lays claim to certain distinctions. For an insect, he has a staggering life span.

Man has catalogued more than two-thirds of a million insect species. Most live a year or less. Many exist only a few days or weeks.

[illegible] on the [illegible] Methuselah. As the Latin name implies, *Magicicada septendecim* [illegible] 17 years before it emerges as a winged insect. These creatures hold virtually the longest record known for insect longevity. (Some scientists believe the family Cicadidae may include a longer lived variety.)

A Nymph Reconsiders Before Entering an Unfriendly World

Instinct speaks to [illegible] in any locality emerge simultaneously during several [illegible] each year, to the astonishment of [illegible] insects. Here powerful flash and the camera's eye catch the rare instant as a nymph poking head and shoulders above

Cicadas, periodical and otherwise, are notable as the loudest insects, and their sound apparatus is one of Nature's most complicated.

Only males possess this equipment, a fact which led the ancient Greek Xenarchus to quip about the European variety:

> Happy are cicadas' lives,
> For they all have silent wives.

No one who has heard the periodical cicada in full chorus will forget the sound. The woods ring as if a hundred buzz saws were ripping through oak knots—a shrill, [illegible] wail whose monotonous rise and fall leave the listener unnerved and melancholy. A dwarf form of the insect makes a different sound, like the hissing of escaping steam.

Some insects sound their call by stroking filelike sections of legs or wings. But the cicada is a drummer. On his abdomen, behind the back legs, each male carries two corrugated membranes which tireless muscles vibrate rapidly (page 195). Sounding boards below the drums reflect and amplify the sound. These can be muffled to produce a ventriloquistic effect, so that a shrilling cicada almost at one's elbow may sound as if he were yards away.

R. E. Snodgrass, one of the world's foremost insect anatomists, drew on his extensive research to describe the cicada's music for me:

Insect Orchestra Tunes Up

"The periodical cicada utters at least four different sounds, all characterized by a sharp burr. None resembles the screech so commonly heard from the dog-day cicada. The effect is a prolonged burring, with individual notes becoming lost in the hum of the multitude.

"Another sound is the so-called 'Pharaoh' note, which, with imagination's aid, sounds like the ancient rulers' title, sustained for about five seconds on the first syllable and dropping abruptly on the last. It is repeated indefinitely at intervals of two to five seconds.

"A third note is a soft, one-syllable purr, often heard from the insect sitting low in the bushes. The remaining note is a loud, round burr uttered as a squawk of surprise or fright.

Is the cicada's drumming a mating call? Scientists don't know. For years they said

...for two or three years; recently they have found cures for her hells. But the purpose of the dismal drumming remains a mystery.

Where cicadas abound, the racket may make daytime hours uncomfortable. Reports tell of schools being dismissed because youngsters could not study; of travelers who, upon entering [illegible] stopped their cars to see what was causing the [illegible] and of [illegible] on village streets [illegible] for the duration of the insects' brief reign.

Yet on localized is the circada's appearance that while one town may be [illegible] with them, a near-by community may be virtually free.

17 Broods—One for Each Year

Periodical cicadas appear somewhere in the United States every year, but there are presumably are 17 broods of the 17-year race, each numbered in the order of its appearance. Some are small and scattered. Brood XI, due next year, has been recorded chiefly in the Connecticut River Valley, and it has been much reduced in numbers, possibly to the point of extinction.

This year's crop, Brood X, is the largest and most widespread. Records show it is now appearing from Vermont to central Georgia and from the eastern seaboard to the Mississippi, with an additional small colony [illegible] Nebraska border.

The annual emerges most thickly in three [illegible] areas. One is in the valley of the Potomac in New Jersey, Pennsylvania, Delaware, and Maryland; and a third covering the southern Appalachians in northern Georgia, Tennessee, and North Carolina.

We know by counting backward that brood XIV is the one seen by the Cape Cod settlers in 1634. It next appears in 1957.

Brood IV, the most westerly group, concentrates around the Kansas-Missouri-Oklahoma border region.

Theoretically, there are 13 broods of the 17-year cicadas, one for each year, but only two are of notable size. This race appears chiefly in the Deep South, especially in the Mississippi Valley.

Records show the broods, whether 17- or [illegible] appear only in the United States and only in its eastern half. Thus the periodical cicada is a North American insect—an American institution, if you will—although its steadily weakening numbers foretell a possible fate like that of another American, the passenger pigeon.

Cicadas mate a week or ten days after emerging. Within a few days the female begins to lay eggs beneath the soft bark of twigs or plant stems.

She prefers deciduous plants and rarely attacks conifers. Oak, hickory, apple, and peach are favorites.

Winged Crusader Sportage Warrantee from a Death Mass

Louise Russell, Insect Authority, Exhibits Her Collection of Cicadas

The Texas entomologist, a former resident of the town, returns to her native soil to study the insect life of the area. Her specimens are housed in the museum of the State Department of Agriculture, where she is employed as an assistant.

For an age-old pest, the cicada has taken a surprisingly modern approach to its business. Rather than relying on sheer numbers to overwhelm its predators, the cicada has developed a more sophisticated strategy: it spends the majority of its life underground, emerging only after a long period of development. This synchronized emergence, known as periodical emergence, can involve millions of individuals appearing at once, leaving behind a landscape littered with empty exoskeletons.

Cicadas Stick to a Logical Diet

Cicadas are entirely reliant on plant sap for their entire lives. Using their piercing-sucking mouthparts, they tap into the xylem or phloem of trees and shrubs, extracting the nutrients they need to survive. Because sap is relatively poor in nitrogen, cicadas must consume large volumes of it, and they have developed specialized filtering systems in their digestive tracts to excrete the excess water and sugar efficiently.

This feeding habit has little impact on the health of mature trees, but heavy infestations can cause significant damage to young saplings. The females use their ovipositors to slit small pockets in the bark of twigs, where they deposit their eggs. After hatching, the nymphs drop to the ground and burrow down to the roots, where they will remain for the next two to seventeen years, depending on the species.

When they finally emerge, the nymphs climb the nearest vertical surface, shed their skins, and unfold their wings. The whole process, from egg to adult, can take anywhere from two to nearly twenty years.

Bush Tanager with a Seventh Closed Curved Feathered Nest in Twigs

Owners Have Departed; Hollow Housings Cling to These Chestnut Leaves

[illegible] the winged cicada [illegible]

[illegible] cicadas bearing the sign of the W [illegible] almost every [illegible]

He [illegible] It would be very [illegible] for the cicada to puncture human skin with [illegible] [illegible] wasp, occasionally picked up by [illegible] with its prey.*

Only orchardists are likely to suffer extensively from cicada damage. [illegible] commonly known as TEPP is [illegible] when properly [illegible] and must be handled carefully. The ordinary homeowner in areas of heavy infestation had better protect his shrubs and young ornamental trees with cheesecloth.

[illegible] with a bountiful supply of the large insects. Indeed, while [illegible] people often use [illegible] for bait.

However, there [illegible] for the angler. He may have to work harder to get a [illegible] fed for a month on [illegible] much stronger and [illegible] than [illegible]; their flesh is firm and highly colored.

A clumsy flyer, the cicada falls easy prey to enemies. A fungus disease also decimates the hordes. Pigs root deep for the nymphs. Squirrels, barnyard fowl, [illegible], and wild birds fatten on [illegible]. In some places gluttonous English sparrows have almost wiped out the insect.

As the Woods Vanish, So Do Cicadas

But man, unwittingly, is cicadadom's greatest enemy. Wherever he cuts down trees and [illegible] asphalt, the cicada is doomed. Millions coming from the ground in recent weeks found their woodland homes gone. For them the line was broken; they were a lost generation. In their playgrounds the 17-year note will be heard no more.

Since cicadas do not migrate, the map of cicadaland constantly diminishes. Noisy the 17-year visitor may be, but he is a unique and fascinating creature, and the American scene will seem the poorer for his passing.

---

* See "[illegible]—Wasps and Hornets," by [illegible], National Geographic Magazine, July, 19[illegible].

Current Scientific Projects of the National Geographic Society

SIX major scientific undertakings, which range from mapping the distant reaches of the universe to exploring the bottom of the sea, are being carried out by the National Geographic Society and cooperating institutions during 1953.

The projects are: the National Geographic Society Palomar Observatory Sky Survey; The Society-*Calypso* Marine Archeological Expedition; development of an "Aquascope" for coastal underwater photography; The Society-Smithsonian Institution 12th Archeological Expedition to Middle America; a continuing investigation into the lives of ocean fish conducted with the University of Miami, Coral Gables, Florida; and The Society-Bartol Research Foundation Cosmic Ray Expedition to India.

A long-range undertaking now about half finished, the Sky Survey will prove of inestimable help to astronomers the world over, providing them with a comprehensive atlas of approximately three-fourths of the heavens. The Survey photographs heavenly bodies to a distance of more than 600,000,000 light-years from the earth.

Sky Survey Finds New Worlds

Already plates made with the remarkable 48-inch "Big Schmidt" telescope at California Institute of Technology's Palomar Observatory have disclosed thousands of heretofore unknown galaxies, vast "islands" of stars and gas in outer space.

Dr. Walter Baade, distinguished Palomar astronomer, proved in a revolutionary discovery earlier this year that the most distant visible galaxies are two billion light-years away, rather than one billion as previously believed. The discovery expands the volume of the observable universe eight times and places its age at four billion years rather than two billion.

When completed, the Sky Survey's celestial atlas will provide about 1,700 photographs of that part of the universe visible from Palomar Mountain. Each sky area is photographed with two plates, one sensitive to blue light, the other to red, so that details not captured by one will be shown on the other.

One of the most important archeological discoveries of recent years has been made by the National Geographic Society-*Calypso* Marine Archeological Expedition, headed by Commandant Jacques-Yves Cousteau of the French Navy. On the bottom of the Mediterranean off the southern coast of France expedition divers uncovered the oldest known cargo ship in the world, a Greco-Roman vessel that sank in the third century B. C.

Exploring Undersea by Television

Commandant Cousteau plans to raise the ship so archeologists can examine it in detail. In the meantime they watch television pictures flashed from a special camera exploring the galley and its cargo of ancient wine and oil jars 120 feet under water.

"We are seeing the galley at ease in the cabin of *Calypso*, our workship, with now and then a thought of pity for the frozen divers below," reports the Commandant.

For several years the National Geographic Society and the Marine Laboratory of the University of Miami, Florida, have cooperated in a study of plankton, the minute life that abounds in all the world's seas. Recently plankton nets in the Gulf Stream have trapped numerous larvae of important deep-sea fish.

Little is known of the lives of these creatures from the larval to adult stages, and a new long-range study of their entire existence has been started. Results of this National Geographic-sponsored research may someday help increase man's food supply from the sea.

Fish in the waters of Chesapeake Bay recently saw a strange object lowered to the bay floor. It was the National Geographic Society's "Aquascope," a unique 2,700-pound steel tank with a white plastic window. Inside were two men, a biologist observer and a staff cameraman; outside was equipment to provide brilliant light for high-speed photography.

Aquascope Photographs Marine Home Life

Lowered in 30 to 50 feet of water, the rectangular Aquascope rests on the bottom as if it were part of the underwater scenery. Marine life takes its normal course, allowing the photographer, lying prone in the tank, to take pictures of fish undisturbed in their natural setting. The Aquascope was designed and built by Gilbert C. Klingel of Randallstown, Maryland, a noted marine biologist.

Dr. Harold E. Edgerton, inventor of the electronic flashlight for ultra-high-speed photography, has worked with all three underwater projects on the lighting problems of

144

Mediterranean Depths Give Up Ancient Greek Wine Jars

Commandant Cousteau in the Mediterranean

Hunting Prehistory in Panama

the Museum's noted explorers and scientists are particularly active in the outer atmosphere. Dr. Marian A. Pomeranz was last has led two expeditions to the Hudson Bay country to [illegible] Subterranean Geographers to Inquire of Nature [illegible] research in Arctic

The Society and the American Museum of Natural History, New York, are sponsoring E. Thomas Gilliard's [illegible] New Guinea [illegible] search for [illegible] people [illegible] Stone Age [illegible]

Continuing [illegible] National Geographic [illegible] Dr. Carl W. Coolidge [illegible] Museum [illegible] Natural [illegible] tors of the research [illegible]

Last winter the Society sponsored an investigation by Dr. Emil A. Zahl of Hoboken, New Jersey, into [illegible] to discover [illegible] to the ancient [illegible] of Messina, between Sicily and Italy. Dr. Zahl's story and extraordinary color photographs will appear in THE MAGAZINE.

As usual, National Geographic [illegible]

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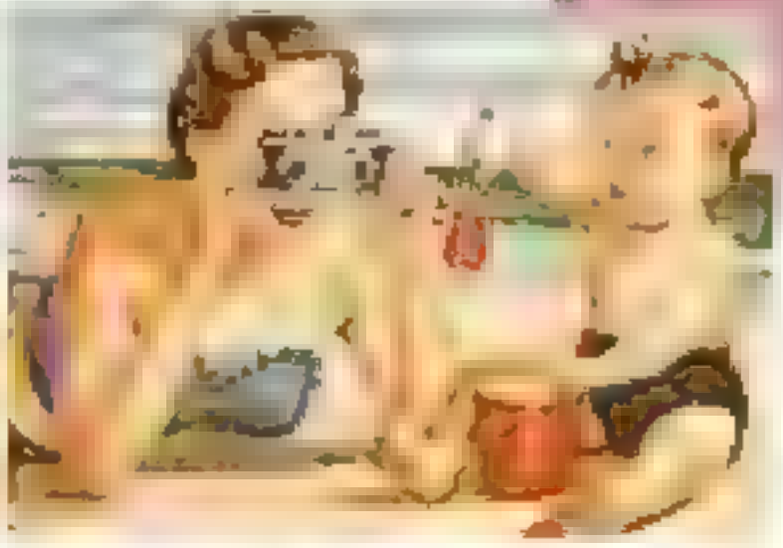

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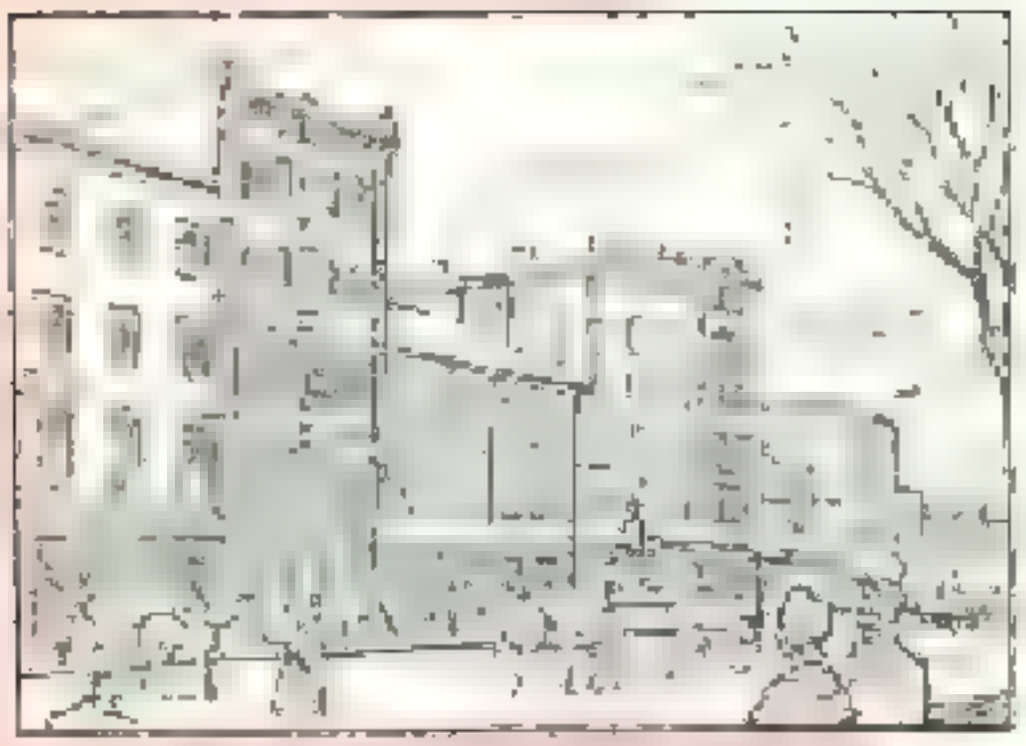

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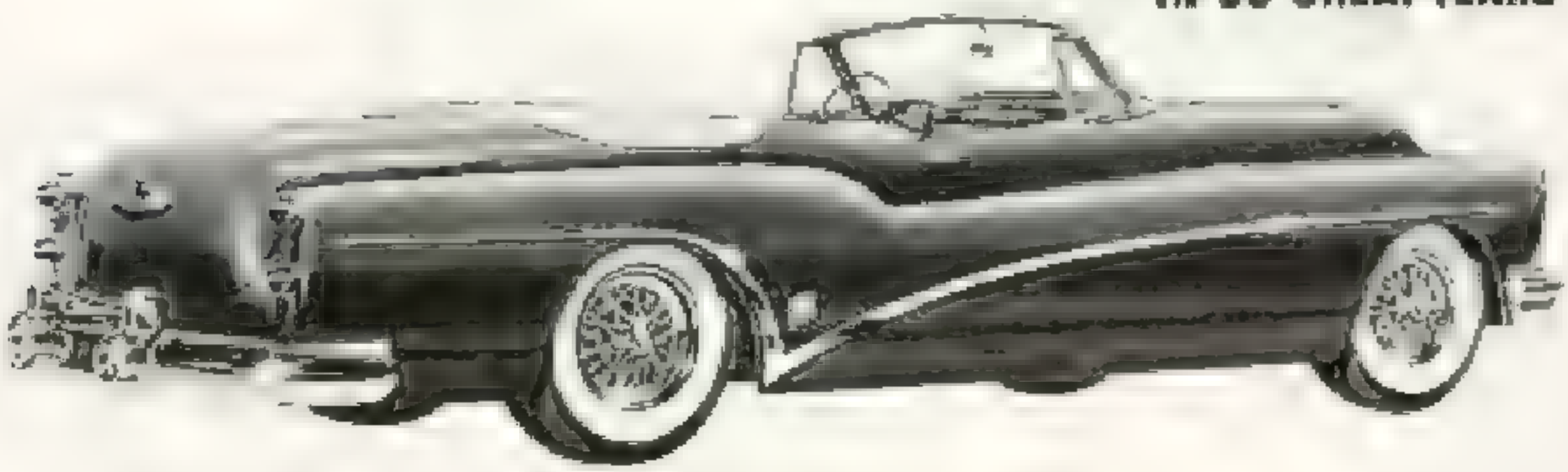

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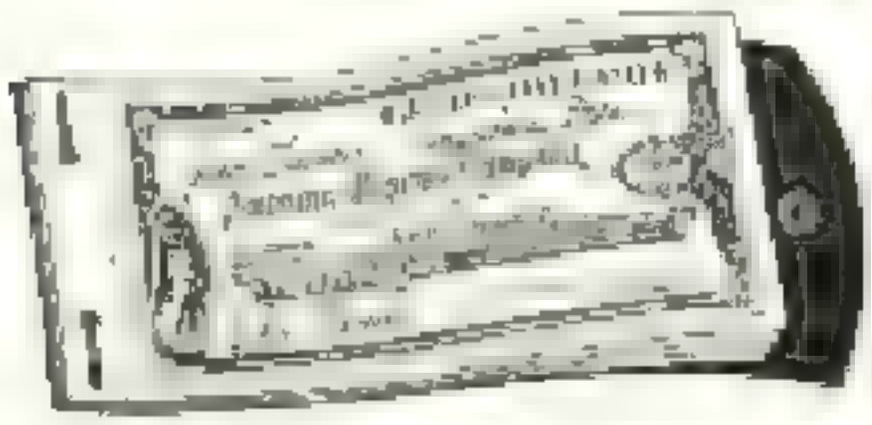

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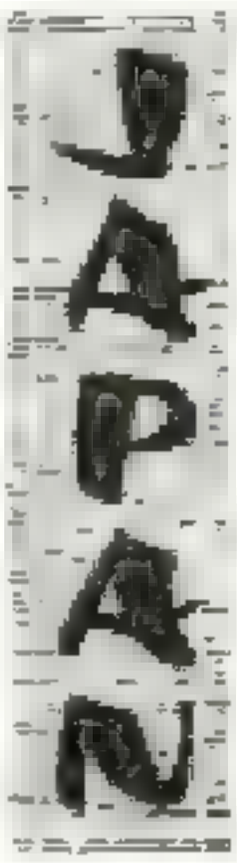

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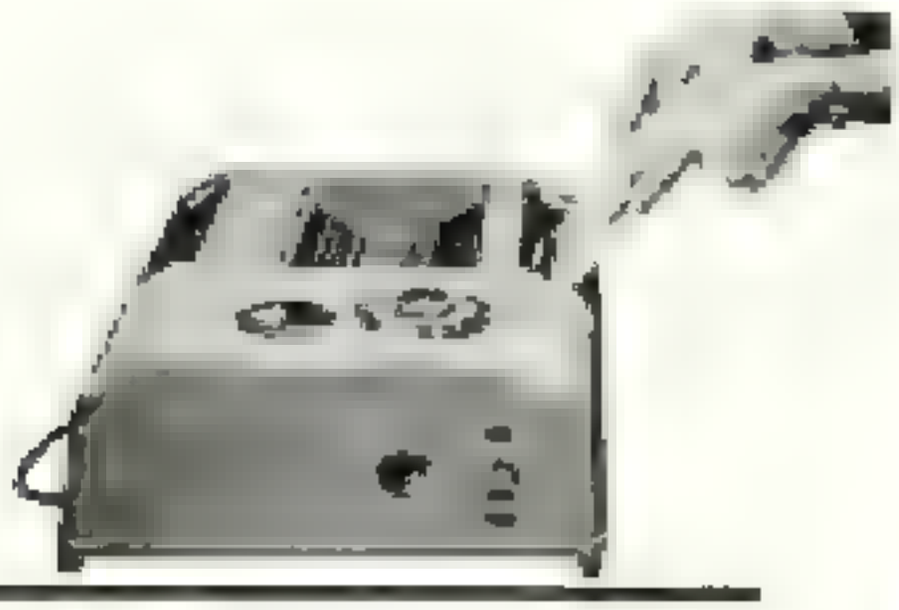

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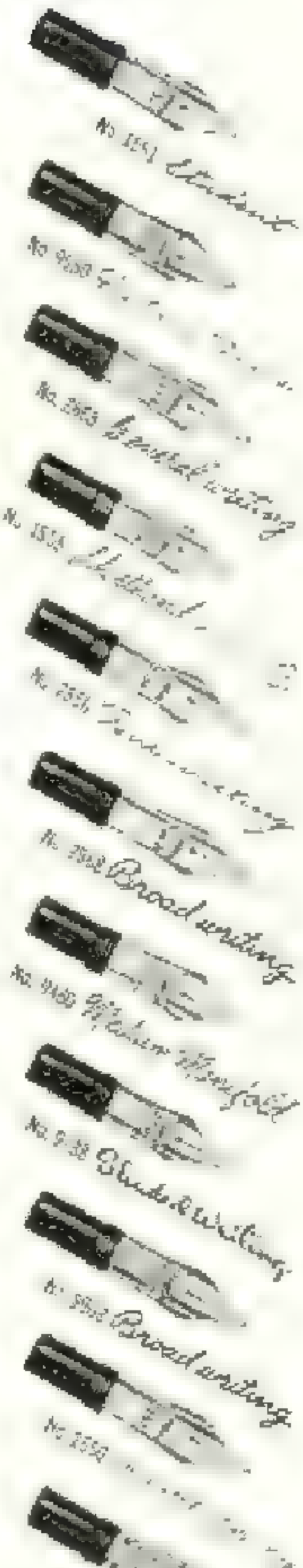

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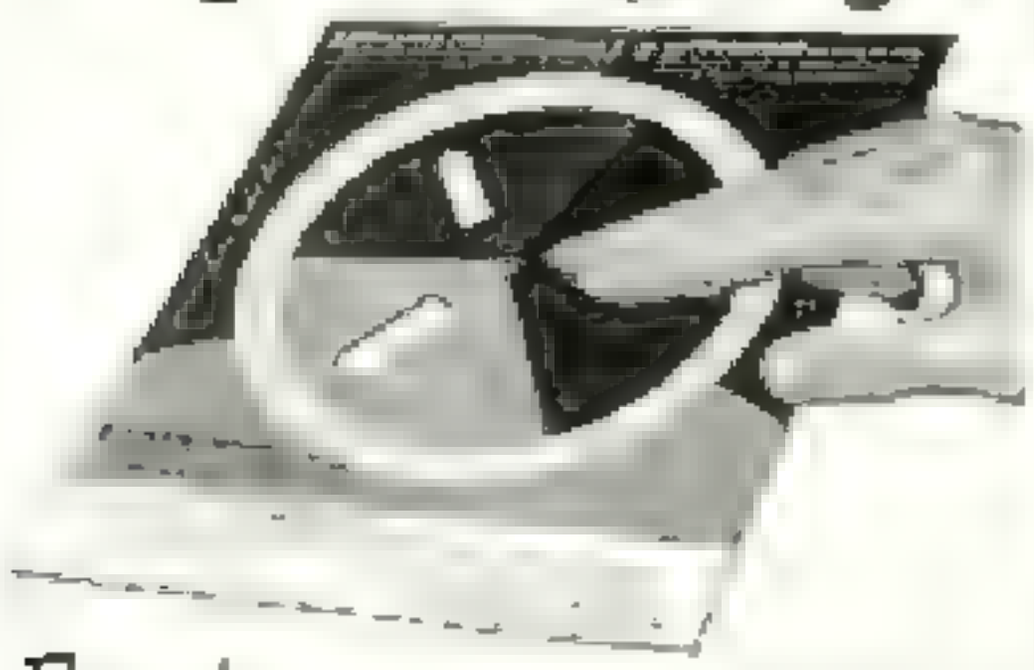

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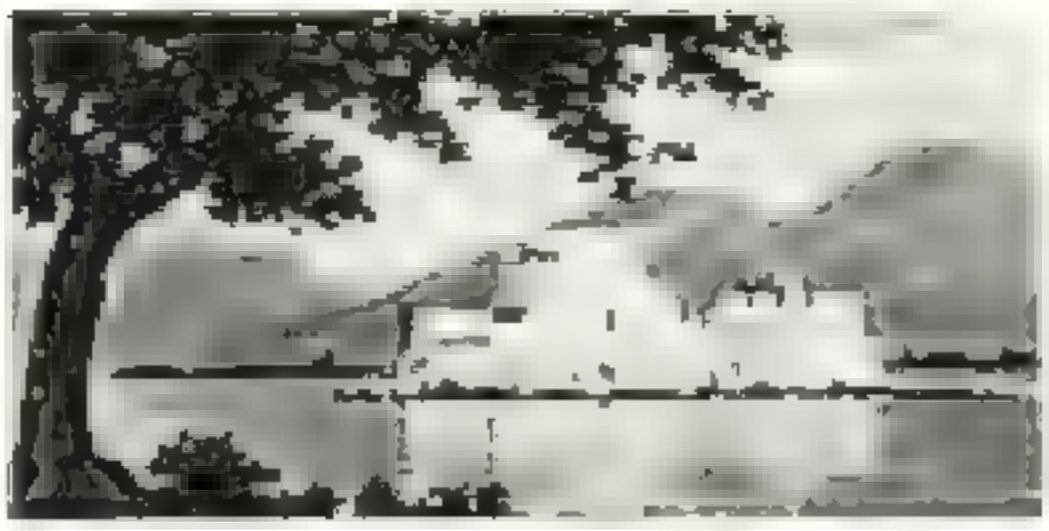

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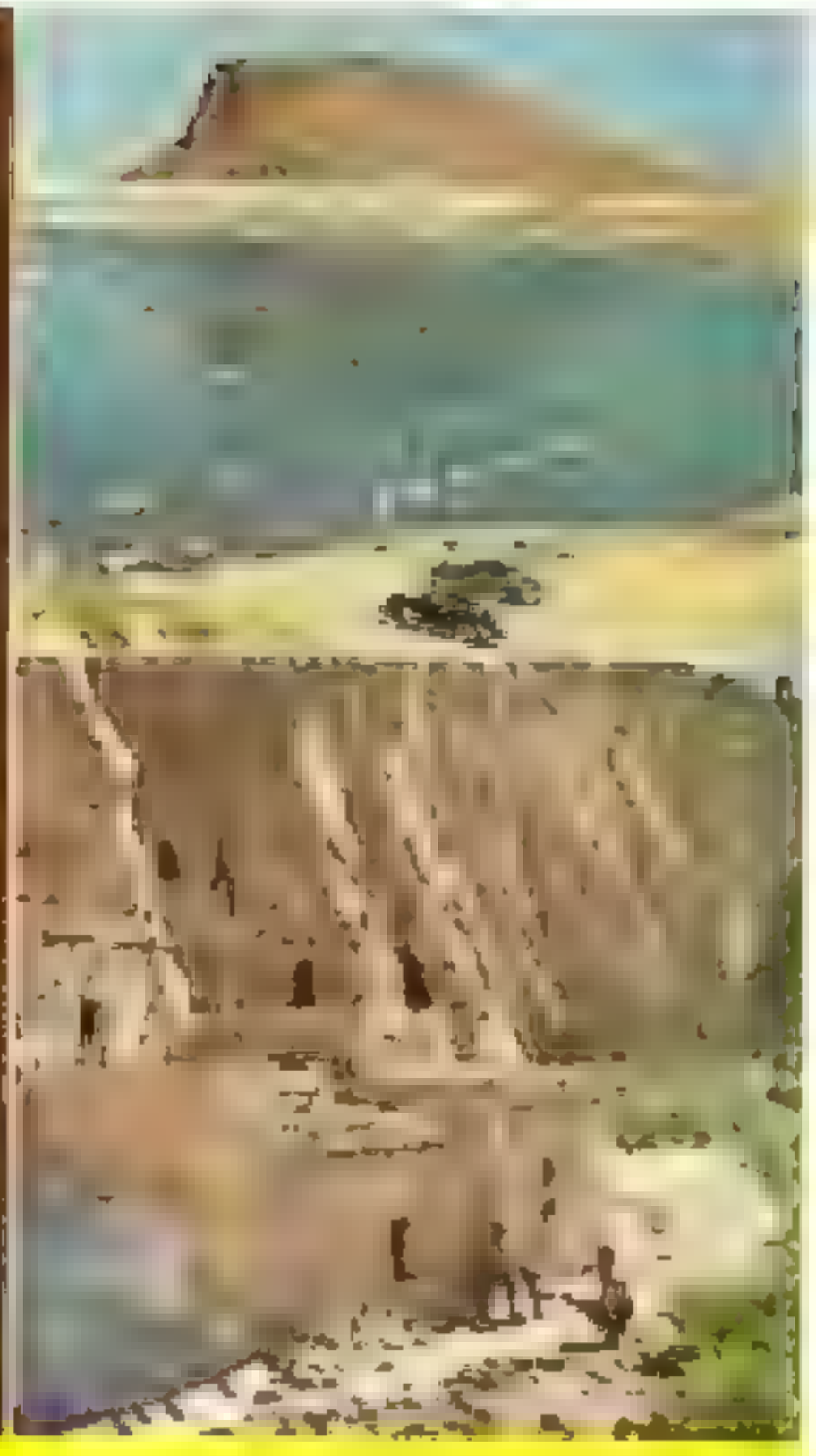

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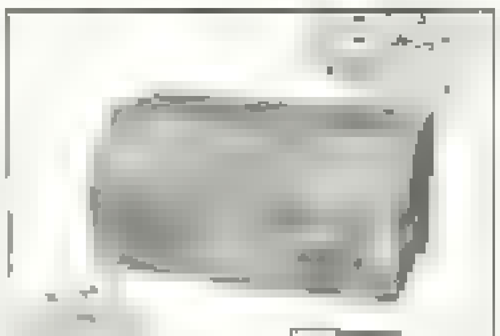

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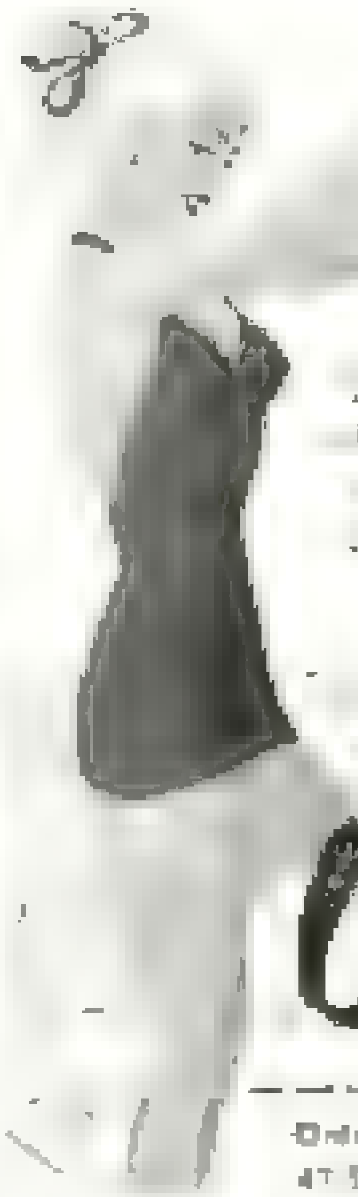

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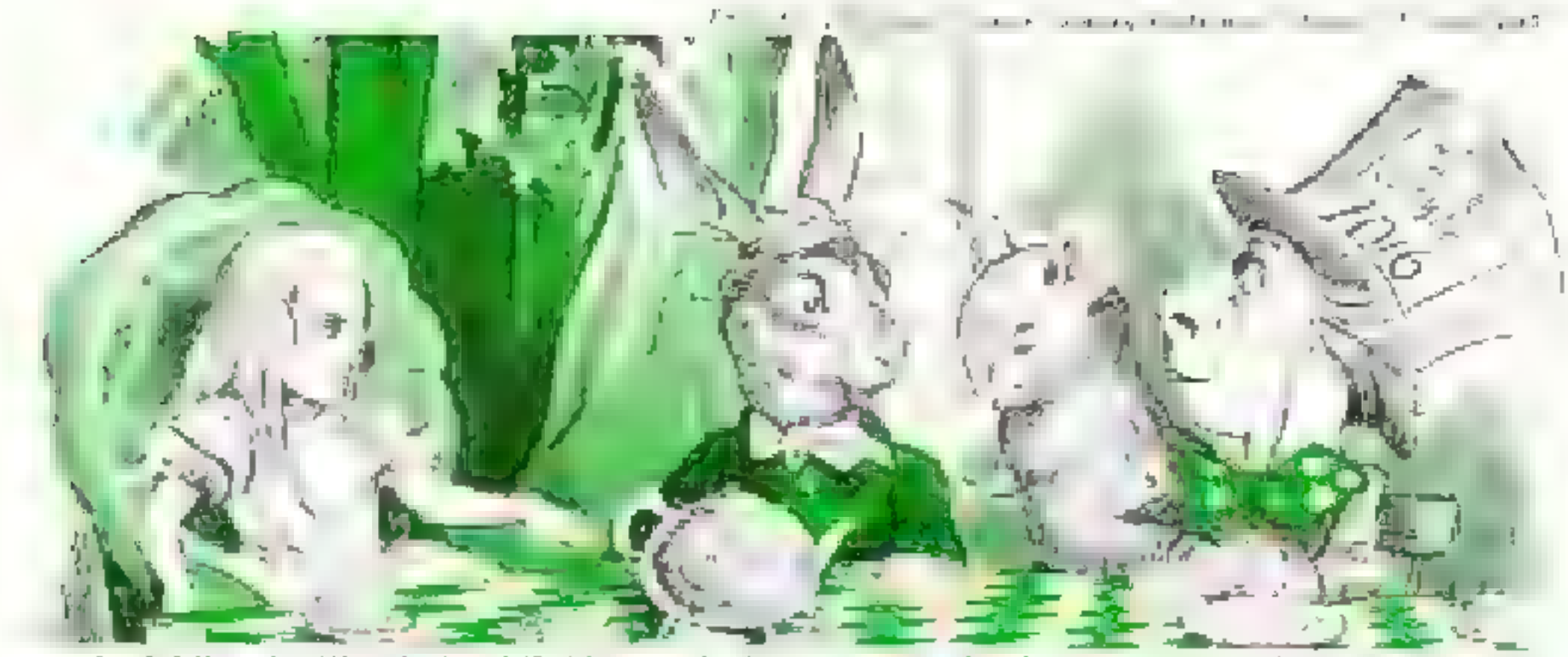

In "Alice in Wonderland," Alice and the Dormouse were talking.

"Once upon a time there were three little sisters," the Dormouse began in a great hurry, "and their names were Elsie, Lacie, and Tillie, and they lived at the bottom of a well —

"What did they live on?" said Alice.

"They lived on treacle," said the Dormouse.

"They couldn't have done that, you know," Alice remarked gently, "they'd have been ill.

Alice had the right idea about nutrition

Alice knew that no one could live on treacle (molasses) alone, or on any other single food. Indeed, she had the right idea about good nutrition.

Even today, unfounded claims are made about the "magic powers" of particular foods. Such claims should be disregarded. Authorities have proved that good health depends largely on eating a wide variety of properly chosen and prepared foods. These include meat, eggs, milk, fruits, vegetables, cereals and whole-grain breads.

How much and what kinds of foods you should eat to maintain health and *desirable weight* depends on your age, your physical constitution and the kind of work you do. Another person, for example, who is not physically active needs less of the foods that produce energy. He should have generous amounts of the foods that furnish proteins, vitamins, and minerals essential to the upkeep and repair of the body.

Your meals as well as usual, will supply these and other necessary elements in the proper amount. Proteins, for example, are used to build and repair the tissues of the body. The vitamins and minerals are necessary because they affect or take part in many chemical processes in the body. Proteins, vitamins and minerals are found in many foods. Good health depends upon eating a variety of such foods.

There is more to good eating habits, however, than simply what you eat. So, to help you get all the benefit from your food, here are some suggestions that you may follow:

Have your meals at regular hours.

Eat slowly and in a relaxed atmosphere.

Avoid strenuous exercise just before and immediately after eating.

See the doctor if you have frequent digestive upsets.

Have dental defects repaired promptly.

Follow your doctor's suggestions about reducing diets.

The *immediate* function of your food is to provide your body with the energy you need for daily activities. Metropolitan's free booklet, "Food for the Family," discusses the essential nutrients, how much you need them and what foods supply them. By following sensible rules about diet you may have longer life and greater ability to enjoy

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Take your children, for instance. Did you ever know them to hold still? Of course not! Happy youngsters are always on the go. You can't do them full justice in "still" pictures [illegible] life together as a family—in "still" pictures alone. Life just won't stand still!

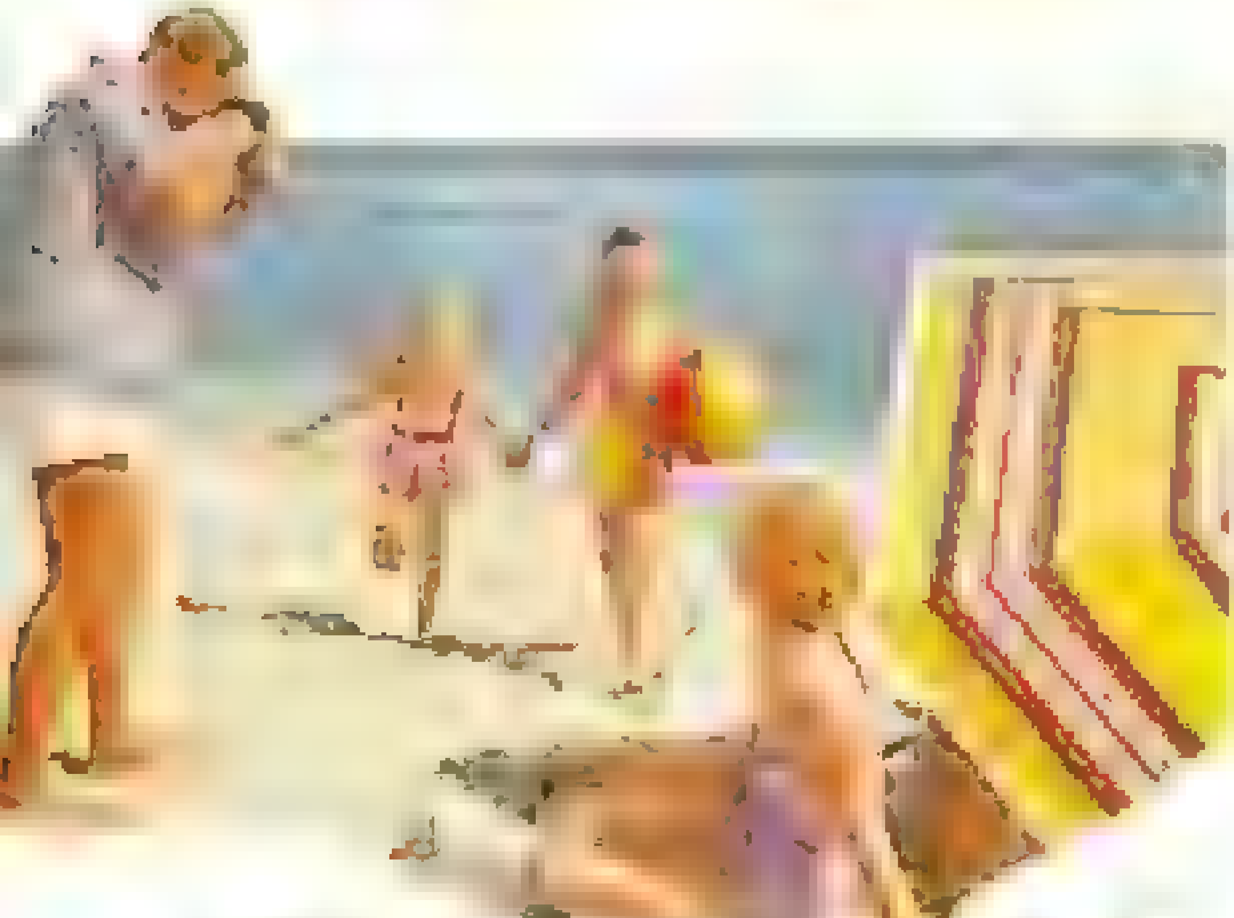
"Snapshots are wonderful," you say. "But aren't they hard to make?"

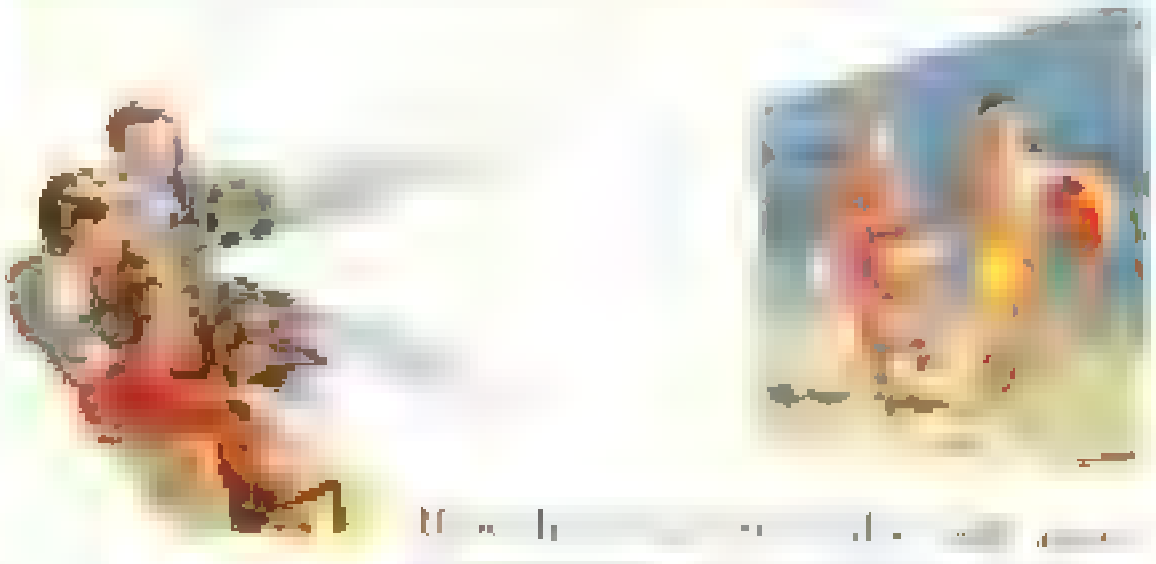
Not a bit of it! Movies are simple [illegible]. There's an exposure guide on every Kodak movie camera. Some models don't even have to be focused. You can focus the settings if you like, or you can use a convenient all-purpose setting that gives you crisp movies at almost any distance.

A fine, fast lens does a perfect job under [illegible] light. It has a built-in sunshade, so you can follow action almost right into the sun.

So it's easy to *make* movies. But the cost? Well—the Brownie Movie Camera, for instance, sells at a new low $[illegible]. [illegible] 8mm. roll film [illegible] only $[illegible] for full color or $3.25 for black-and-white, including *processing!* And each roll makes [illegible] length movie scenes!

But get the whole story for yourself from your Kodak dealer. Or mail coupon to Kodak for your free copy of "Let's Make Movies." You'll find out how easily you can bring the thrills of home movies to your house.

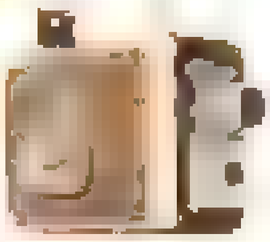




[illegible]

Ciné-Kodak Royal Magazine Camera— [illegible]

Ciné-Kodak Reliant Camera— [illegible]



Brownie Movie Camera [illegible] $[illegible]

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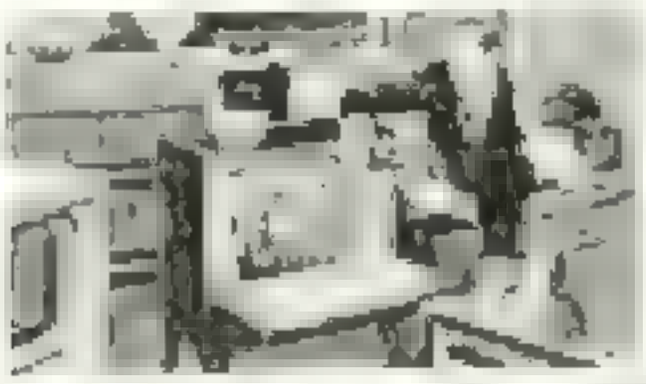

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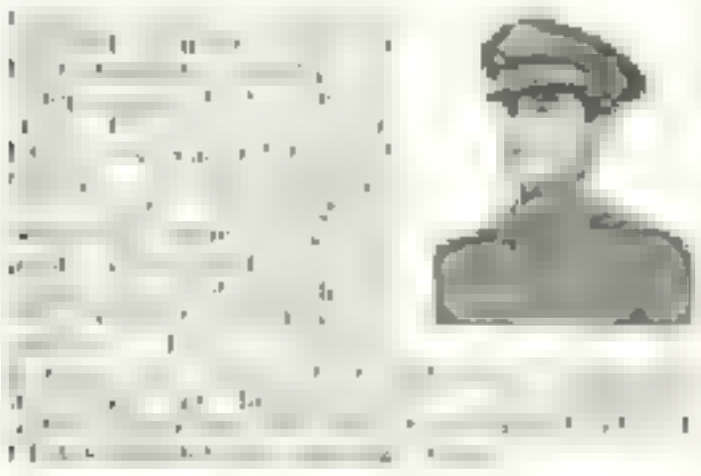

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7-53

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