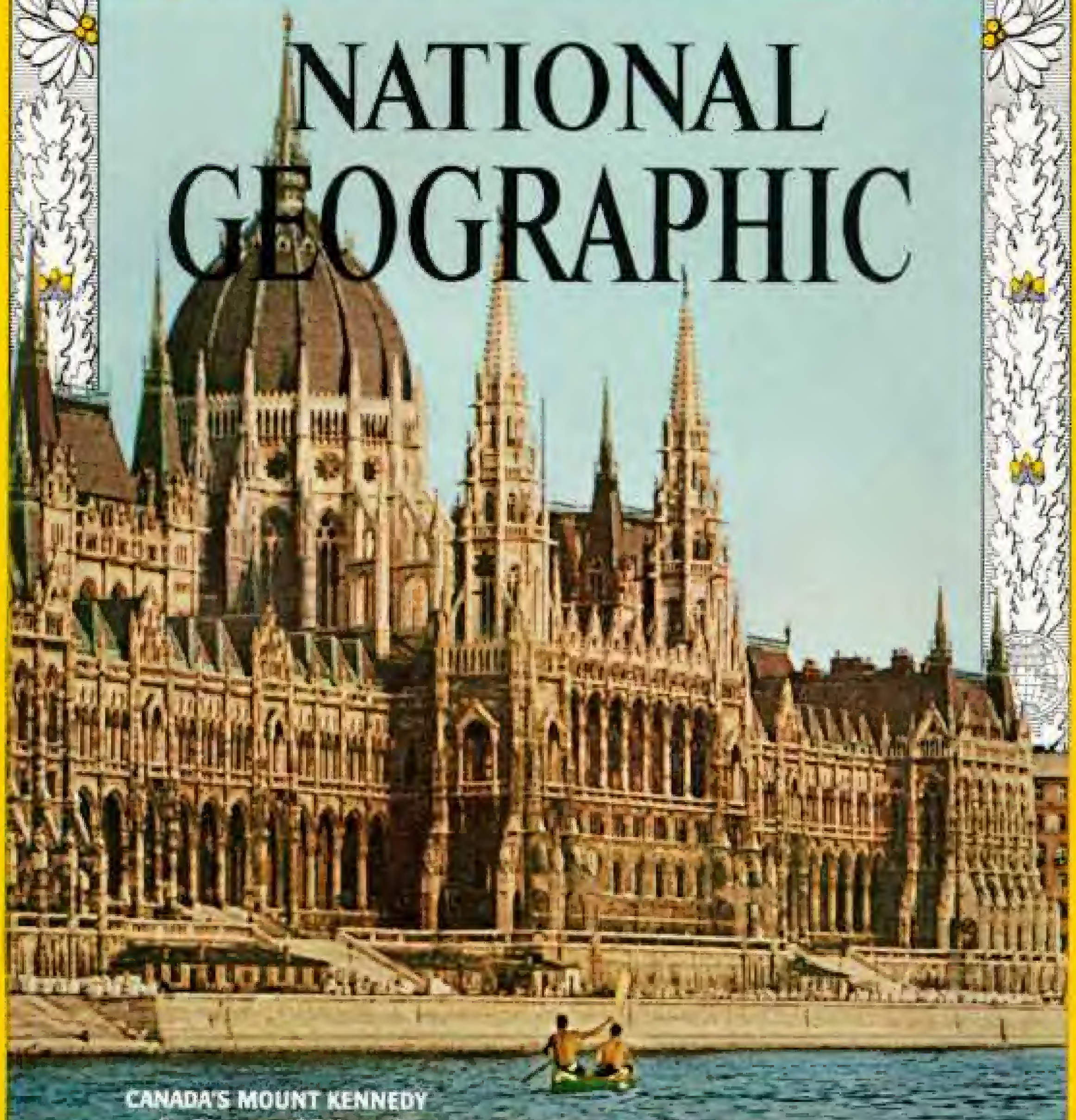
VOL. 128, NO. 1 JULY, 1965

# NATIONAL GEOGRAPHIC







THE JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D. C.

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**COVER:** Budapest's spired Parliament Building, rising beside the Danube, welcomes U. S. canoeists (page 55).

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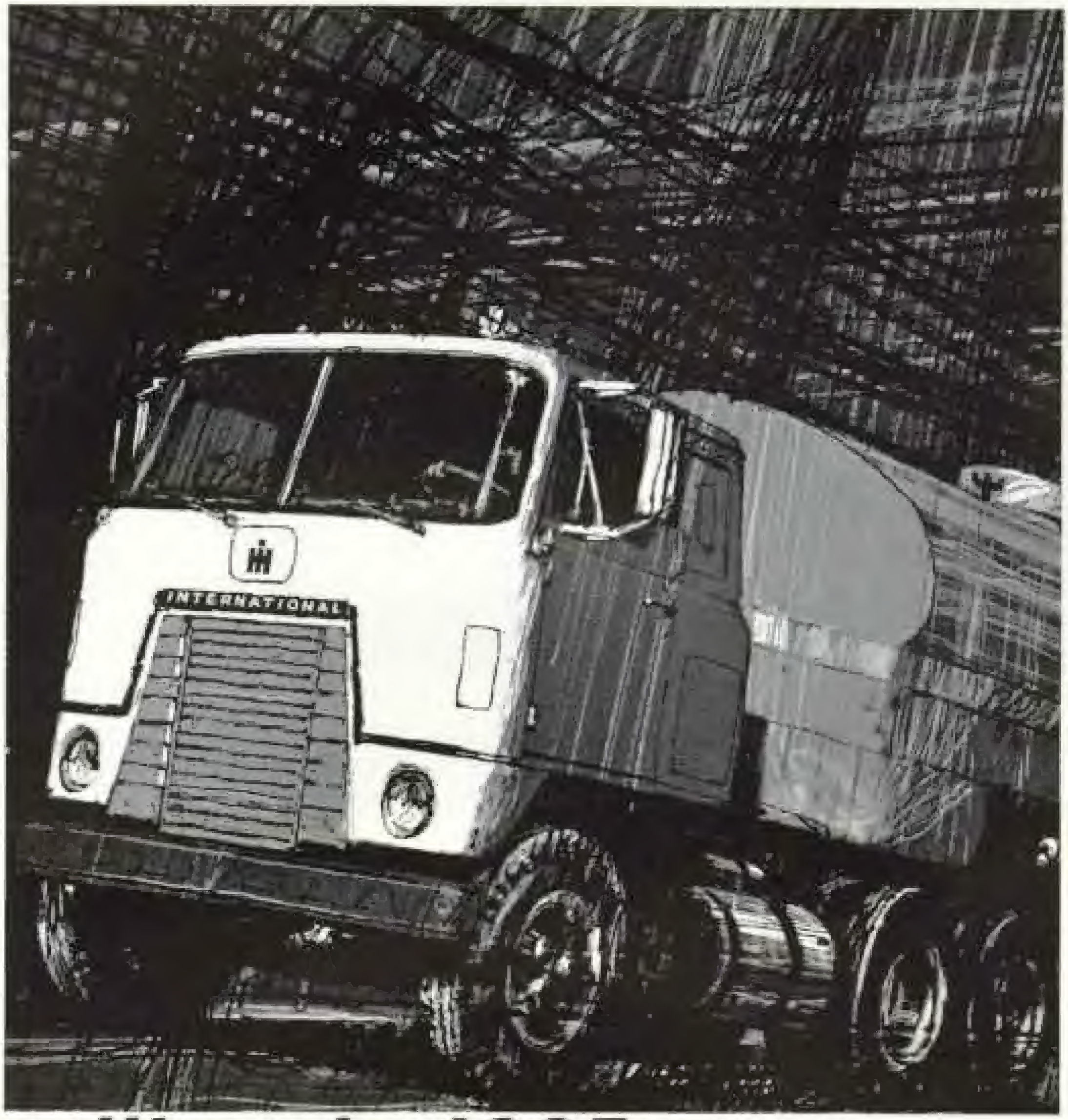


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Charging across the sands, men of Jordan's Camel Corps patrol the desert in this photograph—one of hundreds taken by the Schreiders on the trip. They traveled 20,000 miles in eight months, interviewing residents of 14 Asian and African countries.

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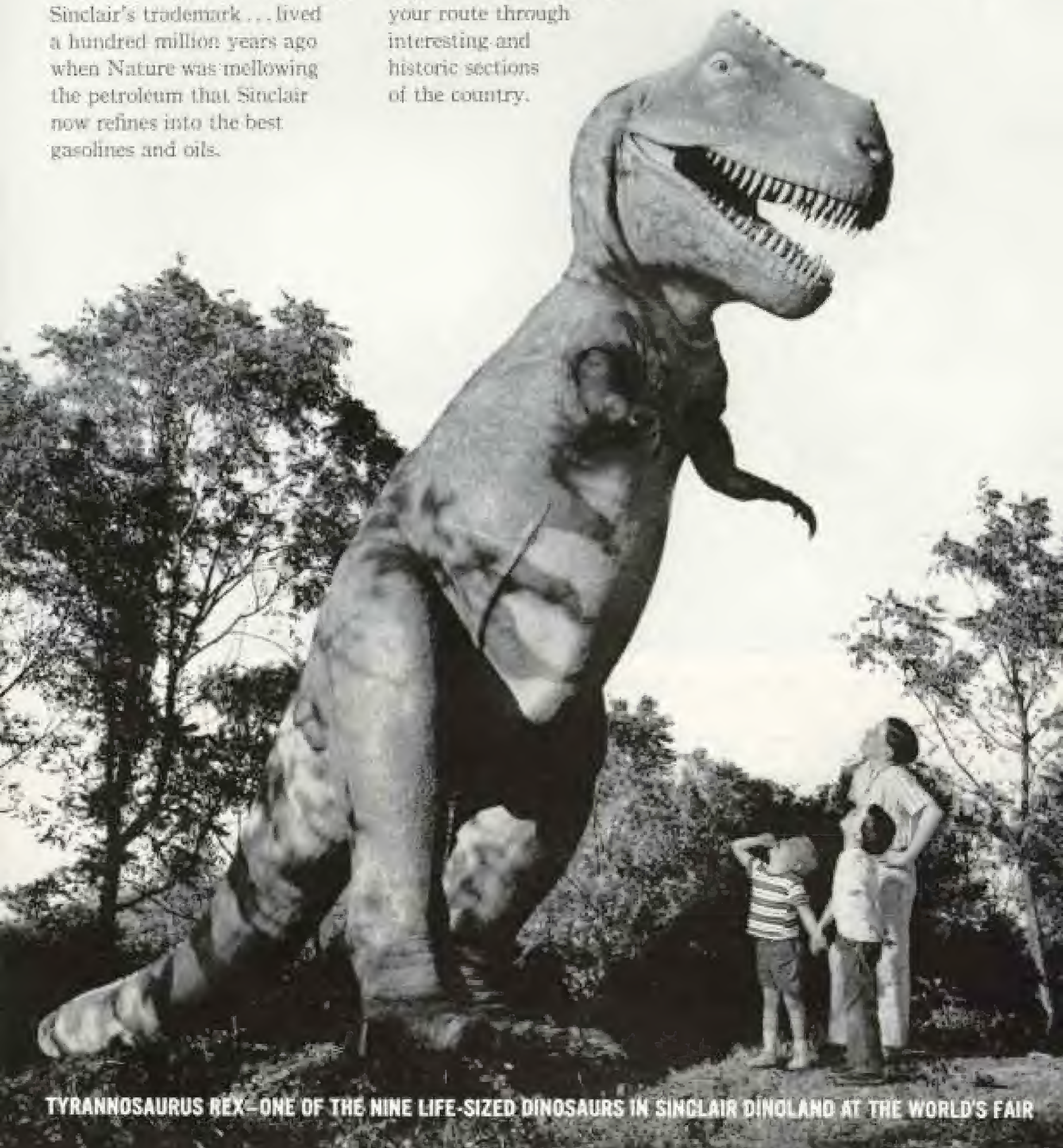

TYRANNOSAURUS REX—ONE OF THE NINE LIFE-SIZED DINOSAURS IN SINCLAIR DINOLAND AT THE WORLD'S FAIR

Front, 1965 Sedan de Ville; left, 1965 Eldorado Convertible; right, 1965 Coupe de Ville

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Robert Ortenstein

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# The great new Rollei 16 from Honeywell may change some of your ideas about photography!

Rollei HONEYWELL

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**Optimum size.** The new Rollei 16 measures 4⅞"x1⅝"x1¾" and weighs just 9½ ounces. It makes eighteen pictures on a roll of 16mm film. The illustration below shows the Rollei 16's format in relation to two other small formats:


**Easy to use.** The Rollei 16 is the only small camera equipped with a shutter which automatically selects the most favorable combination of exposure time (1/30 - 1/500 sec.) and lens aperture (f/2.8 - f/22) for the best possible exposure under all conditions. A green "go" signal in the viewfinder shows you that there is adequate light for proper exposure. To reduce the risk of camera movement, and to insure sharp action pictures, the Rollei 16's unique programmed shutter automatically selects a fast shutter speed at the beginning of the exposure range. When light is limited, the accessory Rolleiflash 16 flashgun provides even illumination. In addition, Bulb and Time exposures of any duration may be made with the versatile Rollei 16.

**Superb optical system.** From its brilliant, fully parallax-corrected viewfinder to its superb Zeiss Tessar 25mm f/2.8 lens, the new Rollei 16 boasts of magnificent optical performance. The viewfinder, illustrated here, has three image frames: the full field is for use with the accessory Zeiss Mutar wide-angle lens (2.8x-16mm); the intermediate frame is for normal lens use, and the small central frame is for use with the accessory Zeiss Mutar telephoto lens (1.7x-42mm). Yes, you read that correctly—famous Zeiss Mutar lenses are available for the Rollei 16, making it the most versatile of all small cameras!

**How about film?** Super 16 Film for the Rollei 16 is furnished in easy-loading drop-in cartridges. Available in 18-exposure rolls are black and white Plus-X (ASA 125), and famous Kodachrome II (ASA 25) daylight color reversal film, with other films available soon. Both black and white and color processing are readily available.

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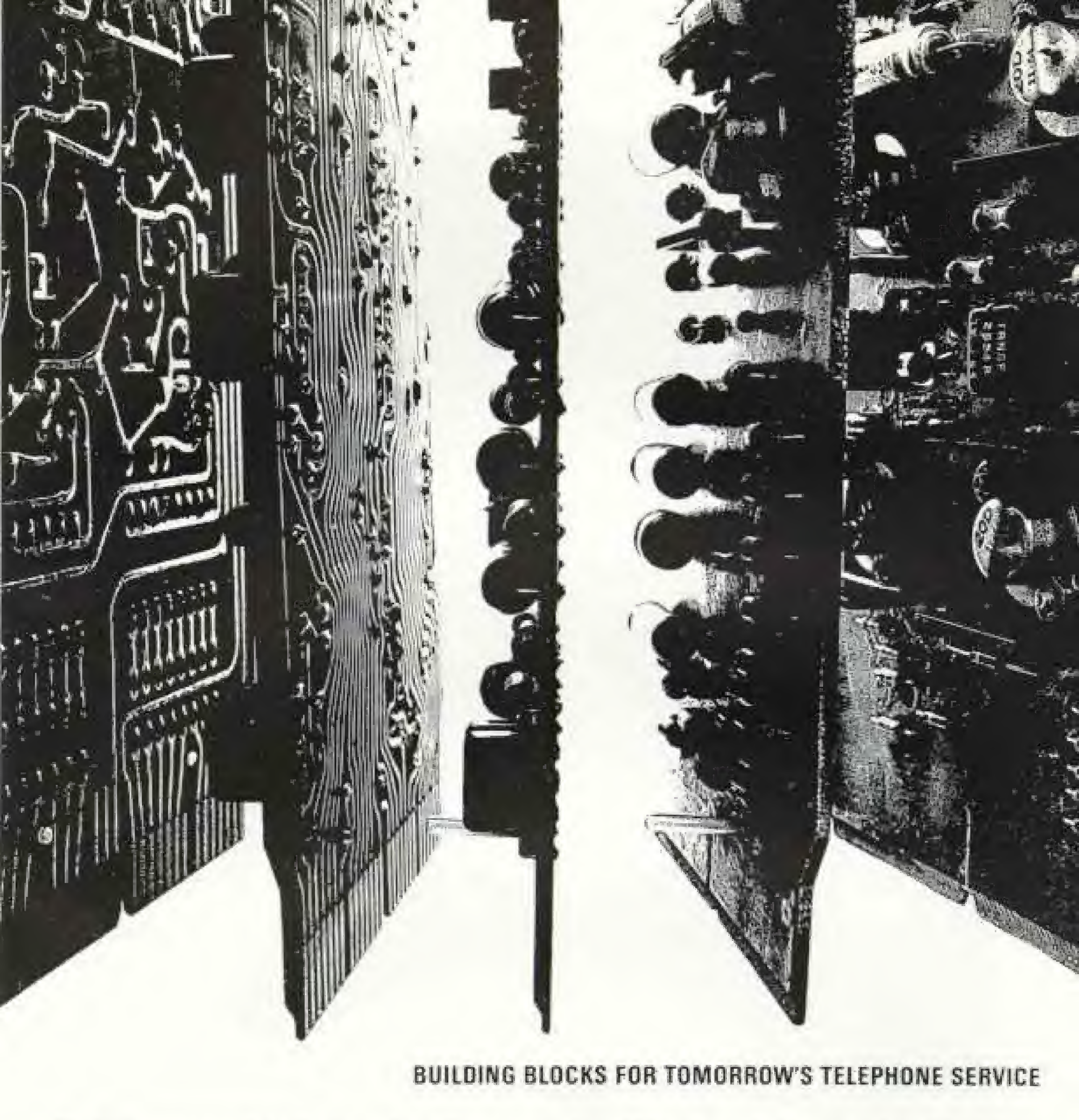

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July, 1965

THE NATIONAL GEOGRAPHIC MAGAZINE

# NATIONAL GEOGRAPHIC



TO DR. BRADFORD WASHBURN in Boston and to the National Geographic Society in Washington, D. C., Canada's choice last winter of a noble Yukon peak to bear the name Mount Kennedy came as particularly welcome news. As the 24-year-old leader of our Yukon Expedition of 1935, Brad Washburn had been first to lay eyes on the peak. Now he phoned me with the same energy and enthusiasm that had made him a great expedition leader and the moving spirit of Boston's Museum of Science. "It's terrific," he said. "A wonderful peak. That whole area should be better known."

Out of that conversation was born our Mount Kennedy Yukon Expedition of 1965, a joint undertaking of the two institutions to explore and map this remote region more thoroughly. The following articles tell the story of the peak's discovery and the new expedition's first stage. Soon after writing this account, Dr. Washburn again flew west for the second stage—a month or more of hard-slogging ground surveys for a new map—to be reported in a later issue.—MELVILLE BELL GROSVENOR

## CANADA'S MOUNT KENNEDY

# I: The Discovery

By BRADFORD WASHBURN

Director, Museum of Science, Boston, and Leader of the
National Geographic Society-sponsored Yukon Expeditions of 1935 and 1965

TENSE WITH EXCITEMENT and anticipation, Andy Taylor and I pressed close to the windows of our single-engine Fairchild ski-plane. It was midafternoon on a brilliant, cloudless winter day, February 26, 1935.

With bush pilot Everett Wasson at the controls, we had just taken off from frozen Kluane Lake, in Canada's Yukon Territory, on the second of two thrilling exploratory flights on the same memorable day. Now we climbed steadily southward up the dramatic, winding valley of the great Kaskawulsh Glacier.

Here the map ended. It is hard to believe that only 30 years ago a totally blank area of nearly 5,000 square miles could still exist in North America so close to civilization. Yet it did. Maps labeled the area "unexplored mountains and glaciers."

Taylor and I formed the vanguard of a seven-man reconnaissance survey party that was to fly into the very center of this Yukon blank spot, spend three months there, photograph it, and unravel its mysteries for the National Geographic Society.*

As our slow but rugged old plane circled up out of the valley, our eyes scanned the glowering crests of a range of rocky peaks. For all time—until that day—they had concealed the secret of what lay in the heart of the St. Elias Mountains.

Suddenly I cried out, "There it is!" In all its ice-clad glory, Mount Hubbard rose majestically above the lower peaks ahead. Named in 1890 for Gardiner Greene Hubbard, first President of the National Geographic Society, this 14,950-foot peak stood guard over the southern edge of the vast unknown region (maps, page 12)

*See "Exploring Yukon's Glacial Stronghold," by Bradford Washburn, in the June, 1936, GEOGRAPHIC.

Canada's highest summit, 19,850-foot Mount Logan, marked the region's northwest tip.

Mount Hubbard had been mapped from the Alaskan coast, 30 miles away, as a key turning point on the Canadian boundary. Its huge icy dome and that of its partner, 14,500-foot Mount Alverstone, had loomed for three decades as tiny islands of the known in a sea of unmapped mountains and glaciers.

### Unknown Peak of Himalayan Grandeur

Just east of Hubbard and Alverstone rose another giant that we judged to be 14,000 feet high. Unlike the rounded domes of its neighbors, this mountain had a sharp, almost Himalayan summit (page 71), flanked with staggering precipices of ice and granite.

Throughout those long, eventful first flights, and even after months of ground exploration, this new peak stood out vividly as the most exciting and majestic of the scores we discovered. I have kept a photographic enlargement of the mountain before my desk for many years. To me it epitomized all the mighty mountain grandeur of Alaska and the Yukon.

It was a thrill to learn last January, thirty years after we discovered the peak, that Canada had named it Mount Kennedy in honor of our late President. Prime Minister Lester B. Pearson announced the selection. The Canadians sought a mountain that had not previously been named, that towered lofty and magnificent, and that lay as close as possible to the international boundary, where it would endure as a symbol of the unique friendship that exists between our two great nations. They could not have chosen better.

Last March and April, I revisited the superb St. Elias range as leader of the Mount Kennedy Yukon Expedition, cosponsored by the National Geographic Society and Boston's Museum of Science. Prompt cooperation came from the Canadian and United States Governments, particularly their Air Forces.

Since our first expedition, the Canadians had made an excellent map of the area, on a scale of ⅛-inch to the mile. Now we planned surveys that would make possible new maps on a scale five times larger, with much more detail—the actual shapes of peaks and glaciers, of snow fields, crevasses, and moraines.

Senator Robert F. Kennedy expressed a wish to be among the first climbers to set foot on his brother's peak, and we invited him to join our advance party, assigned to place a survey marker there. Careful planning, superb weather, and wonderful Canadian cooperation resulted in total success for this important first phase of our expedition.

**Steep, snowy slope** on Lowell Glacier proved too much for the sled team of the 1935 expedition. Here the explorers, having unhitched the dogs, haul up the sled themselves.

**Atop a Cairn, the Author (left) Charts the Raw North in 1935**

Young Bradford Washburn takes theodolite sightings on Lowell Glacier during the National Geographic Society's 1935 Yukon Expedition. Then the marker flag at his feet was erected on the cairn. Returning last spring as leader of the Mount Kennedy Yukon Expedition, Dr. Washburn found the staff still there.

The seven-man party of 30 years ago discovered scores of peaks above 10,000 feet, including the future Mount Kennedy, and named two of the new peaks for King George V and Queen Mary of Great Britain.

**Expedition leader** Washburn, then 24, plays with Cracker and Monkey, two of six dogs that mushed across more than a thousand miles of the frozen Yukon with the 1935 party.


**Rocky north face** of Mount Kennedy dwarfs the High Camp on Lowell Glacier. Washburn named the glacier for Dr. A. Lawrence Lowell, former President of Harvard, nearby rise two peaks named for alumni, Mounts Kennedy and Hubbard, the latter for Gardiner Greene Hubbard, our Society's first President. Members of the 1935 expedition climbed to 12,200 feet on Mount Kennedy to establish their highest survey station.

**Fokker ski-plane** unloads supplies for the 1935 explorers.

MOUNT KENNEDY

# II: A Peak Worthy of the President

By ROBERT F. KENNEDY
United States Senator from New York

"IT LOOKS LIKE THE END of the world!" Mount Kennedy drew this exclamation from the Royal Canadian Air Force helicopter pilot who flew us in to the Base Camp on the mountain last March 22. Viewing the peak from on high, I thought the description apt.

Mount Kennedy is a magnificent mountain—lonely, stark, forbidding. The utter desolation of that part of the Yukon Territory only emphasizes the peak's beauty.

When the Canadian Government announced last winter that it would name this mountain after President Kennedy, it occurred almost simultaneously to my brother Edward and to me that we should climb it.

It also occurred to the National Geographic Society, for a few days later we were invited to accompany the first phase of a Geographic expedition organized to map the area in detail in cooperation with the Canadian Government and Boston's Museum of Science. Because my brother was not yet well enough from his airplane crash the year before, I went on by myself with the advance party.

I am extremely grateful to Canada for naming this majestic mountain after the President, and for the help it gave us in making the climb. I consider it a privilege to have accompanied a fine group of climbers, whose purpose was to place markers on two conspicuous peaks for surveying and mapping. That I was the first man to reach the top of Mount Kennedy can be attributed only to the generosity and helpfulness of the men with whom I climbed.

We did not accomplish any historic or physical feat. But reaching the summit of the peak—and the companionship of the men—gave me great satisfaction. I am grateful, particularly, to James W. Whittaker and Barry W. Prather of Washington State, and to James Craig of British Columbia; George R. Senner, Dee Molenaar, and William N. Prater of Washington State, and William A. Allard of Minnesota.

**Kneeling atop the mountain** named for his brother, Senator Kennedy receives a congratulatory hug from climbing companion James W. Whittaker. Moments earlier the Senator had planted the family flag on the summit.

I climbed Mount Kennedy for compelling personal reasons. I gained other rewards as well. There was the unassuming courage and dedication, intelligence and good humor of the climbers. There was the mountain itself, and there was the knowledge that we had helped bring this remote part of the world closer to all of us.

The complete explanation of why men leave their families to huddle in a cold little tent on the side of a difficult mountain is something that perhaps can't be explained until we can explain man himself. I tried to figure it out as I looked around our crowded, uncomfortable tent.

Why did these men who had climbed and faced death so many times now wait on this high glacier—a glacier interspersed with crevasses, some huge, some small, some breathtaking in their starkness, some hidden and far more sinister?

Why did these men wait here, dwarfed by vast mountains on all sides, to climb this peak whose summit had never been reached?

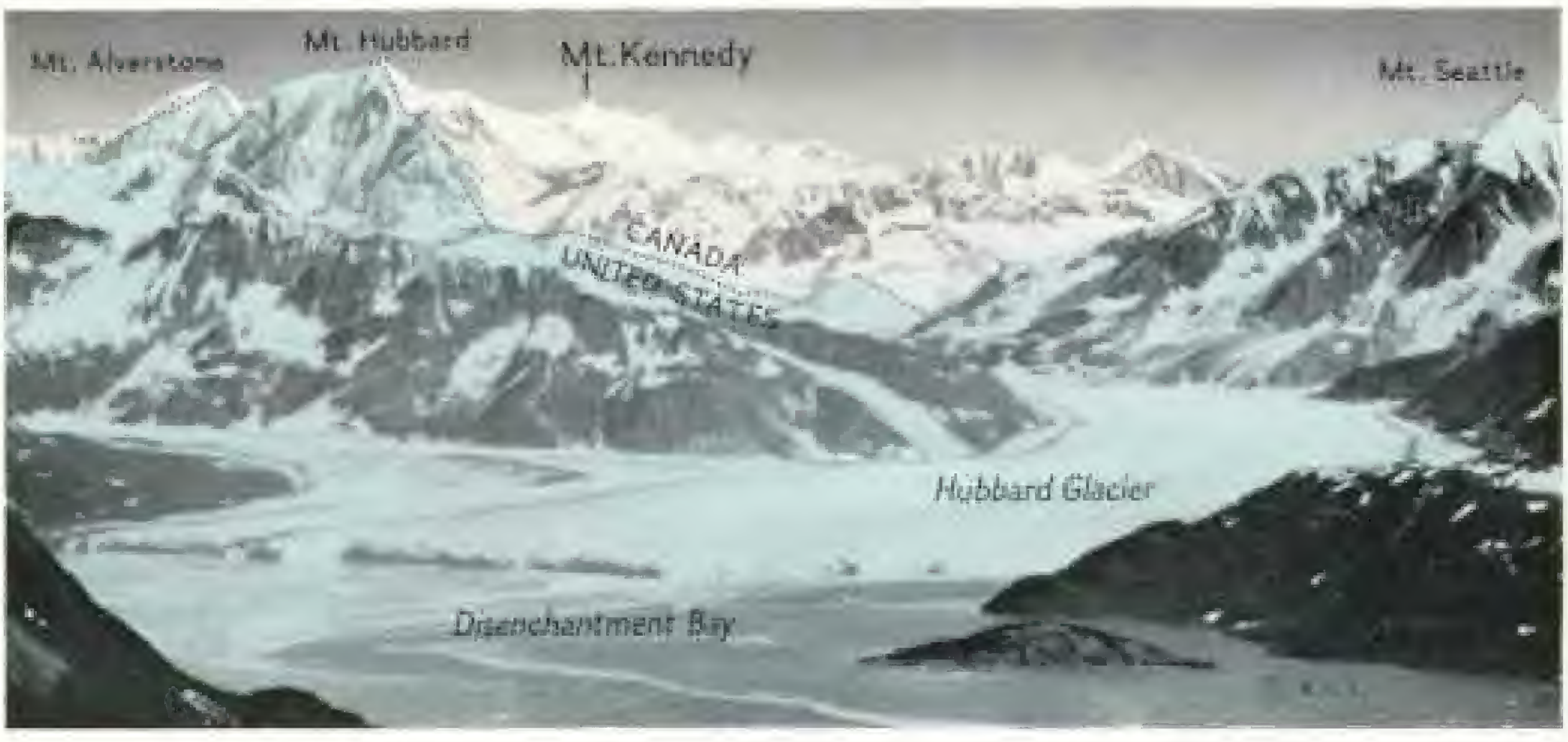
I think of Jim Whittaker's favorite quote, the words of James Ramsey Ullman, noted author and chronicler of the Geographic-sponsored American Mount Everest

**Mount Alverstone** wears a swirling wreath of cloud-. The name commemorates the British Lord Chief Justice who helped fix Alaska's boundaries in 1903.

**Jagged ice-hung spire,** Mount Kennedy juts some 7,500 feet above a 1935 survey party on Lowell Glacier, which lies to the north and east of the peak.

**Struggling** up Mount Hubbard, 14,950-foot neighbor of Mount Kennedy, William N. Prater carries a marker post to leave as a guide to map makers.

**Lofty peaks spike** the Canada-United States boundary. Key below names the border-marking giant—Alverstone, Hubbard, and Seattle—and shows newly named Mount Kennedy, three miles deep in Yukon Territory. The name Disenchantment Bay reflects Spanish explorer Alejandro Malaspina's failure to find a Northwest Passage here in 1791.



ACCORDING TO W. L. GARRETT, NATIONAL GEOGRAPHIC STAFF © N.G.S.

Expedition: "Challenge is the core and mainspring of all human activity. If there's an ocean, we cross it; if there's a disease, we cure it; if there's a wrong, we right it; if there's a record, we break it; and finally, if there's a mountain, we climb it."

I returned with great respect for the men who climb mountains. They are not a footloose, carefree lot, haphazardly searching for thrills.

For instance, of nineteen Americans on the 1963 Mount Everest Expedition, eighteen were college graduates, five held master's degrees, five were Ph.D.'s, and three were doctors of medicine. If you took the Nation's nineteen best businessmen, labor leaders, or Members of the Senate or House of Representatives, I doubt that their educational achievements would be any higher. The courage of mountain climbers is not blind, inexplicable, meaningless; it is courage with ability, brains, tenacity of purpose.

President Kennedy loved the outdoors. He loved adventure. He admired courage more than any other human quality, and he was President of the United States, which is frequently and accurately called the loneliest job in the world.

So I am sure he would be pleased that this lonely, beautiful mountain in the Yukon bears his name, and that in this way, at least, he has joined the fraternity of those who live outdoors, battle the elements, and climb mountains.


GEORGE JENNER

MOUNT KENNEDY

# III: The First Ascent

By JAMES W. WHITTAKER

*Photographs by WILLIAM ALBERT ALLARD*

I THRUST MY ICE AX, shaft down, as hard and deep as I could into the wind-packed snow on the ridge and wrapped our nylon rope around its neck. Then I bent over on top of the ax, chest and shoulders firm against it, holding it down. It *must* hold. A man's life depended on it.

Beneath me, Mount Kennedy—newly named in honor of our late President John F. Kennedy—fell sharply away to a shoulder more than a mile below. Sixty feet beneath my little cornice, rope tied around his waist, stood United States Senator Robert F. Kennedy, brother of the slain President.

"You're on belay," I yelled. "Now you climb!"

**Crampons biting the icy slope,** climbers reach 12,800 feet on Mount Kennedy. Summit lies 3,200 feet and three zigzagging hours ahead. The author, Everest veteran James W. Whittaker, moves up at far left; Senator Robert F. Kennedy carries his family's furled flag; and George Senner leads.


Senator Kennedy had never before climbed a mountain. He hesitated. The steep face looked impossible.

We had been slogging up Mount Kennedy, in Canada's Yukon Territory, for two days, just ahead lay the worst of it—the best of it, to me. Here one of North America's highest unclimbed mountains, its snowy summit reaching about 14,000 feet, made its sternest challenge.

### Lifeline: Sixty Feet of Nylon Rope

Now the novice climber moved out onto the face, onto the slippery, wind-whipped 65-degree slope. I was sure he was going to fall. A beginner will lean into a slope like this, out of fear. He'll snuggle up against the face—and his body angle is wrong. The pull of gravity kicks his feet out. Down he goes.

I waited for this, expecting it, knowing that I'd have him on the rope. But the Senator didn't panic and fall. He plunged his ice ax in deep and hauled himself up a couple of steps, then repeated the procedure. I took in the slack as he moved up, and he moved surprisingly fast. He didn't even use the kick-steps I had gouged out with my crampons.

"Remember to breathe," I shouted as he scrambled toward me. People forget to breathe when they get into difficult spots. "You're doing fine. It looks good. Keep it up."

I talked him up the face. From below, Barry Prather, the third man on our rope and a teammate of mine on the American Mount Everest Expedition in 1963, encouraged him. The man between us came up to the ridge, stopped right under my feet, and drove his ax into the snow hard. He hung there panting.

"What do you think of it?" I asked him.

"I don't want to look at anything," Senator Kennedy said. "I just want to stay right here."

But soon he asked me how much farther we had to go. I was glad to tell him that the final ridge lay ahead. The virgin summit awaited us only a couple of hundred yards above.

"You're just 15 minutes from the top," I said. The ascent would be relatively easy from here—walking up a 20-degree spine to the summit, planting one foot on this side of the ridge and one on the other (page 24)

Barry Prather pulled himself over the face, grinned, and we three moved on up the ridge. Presently we came to a small level area, sunny and sheltered from the wind. Bob was weary from his exertions, face drawn, head aching from the thin air. We flaked out in the silence of the upper air and waited for the other five members of the party to catch up.

From this height in the St. Elias Mountains, you could see 150 miles out, as well as

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**The Author:** First American to reach the summit of Mount Everest, 36-year-old James W. Whittaker now works as sales manager for Recreational Equipment, Inc., a Seattle firm dealing in mountaineering and sports supplies. An expert skier as well as climber, he operates a ski school—and skin dives in summer. He also serves on the Washington State Parks and Recreation Commission.


14,000 feet down to the ocean. It made me think of Mount Everest and the high Himalayas—all rock and ice and snow, sharp pinnacles, sheer faces, vertical gorges, grinding glaciers. All beautiful and awesome.

To the west rose 14,950-foot Mount Hubbard, straddling the Canada-United States border (map, opposite). The first expedition ever sent out by the National Geographic Society had discovered and named this peak for the Society's first President 75 years ago.

### Lofty Peak Added to the Map

Then, in 1935, the Society's Yukon Expedition, led by youthful Bradford Washburn, had explored and mapped this desolate region. Among the tallest peaks discovered was the magnificent ice-sheathed mass of granite, just 3.3 miles northeast of Mount Hubbard, upon which we were resting. To honor the memory of President Kennedy, the Canadian Government last January had given it his name.

Now the National Geographic Society had organized a new Yukon expedition, this one to concentrate on the Mount Kennedy area; again the leader was Bradford Washburn. Boston's Museum of Science, of which Dr. Washburn is director, was cosponsor.

As a courtesy, the Society had invited a member of the late President's family to accompany the expedition's climbing party assigned to plant an orange survey marker post exactly on top of Mount Kennedy. This marker, and another atop Mount Hubbard,

**Like a large-scale map,** this frigid scene shows Mount Kennedy with its neighbors and the route of its first ascent, March 23-24, 1965.

**Orange smoke flares** from generators dropped by a Royal Canadian Air Force helicopter show wind direction for a landing at Base Camp, 8,700 feet high on Mount Kennedy. The craft, a Boeing-Vertol Labrador, ferried four members of the expedition from Whitehorse, of gold-rush fame.

**Trees above treeline:** Spruces cut far below serve as runway markers for a ski-equipped de Havilland Beaver of the Yukon Flying Service. At Base Camp, it unloads supplies.

**In the highest helicopter landing** ever made in Canada, an RCAF Labrador sits on 14,950-foot Mount Hubbard. "The temperature was 15 above zero—a fine day," reported expedition leader Bradford Washburn. Survey marker, planted by Barry W. Prather's four-man party the previous day, caps the mountain's topmost point.





would be essential to ground surveying, which together with high-altitude aerial photography would provide detailed maps of a 150-square-mile area.

I was honored when the Society asked me to join the Mount Kennedy party. Perhaps its officers thought of me because in 1963 I was a member of the first American expedition to climb Mount Everest, highest peak in the world at 29,028 feet. The National Geographic Society had been the largest single supporter of that expedition, and I appreciated all that the Society had done for exploration and mountaineering.*

Even so, I reluctantly declined at first. My wife Blanche has mixed feelings about mountaineering. When I was on Everest, she was very worried. And I had been away from her and our boys—Curt, 10, and Scott, 8—on climbs for many months in the past few years.

Then I learned from the Society that Senator Kennedy had accepted its invitation to take part in the first ascent as a representative of the family. I was asked to be his guide and companion. "Jim," Blanche said, "you've got to go." She felt I could help the Senator.

That was all I needed. Besides, I had—and will always have—a very vivid mental picture of the smiling young President of the United States as he presented us with the National Geographic Society's gold Hubbard Medal on a glorious July day in the White House Rose Garden, only a few months before his assassination. Anything I could do for his family I wanted to do. I told the Society it could count on me.

### Climbers Fitted with Everest-type Gear

By telegram from Washington, D. C., we obtained the Senator's clothing and shoe sizes, learning that he is a wiry 5 feet 10, weighing 165 pounds. When he flew into Seattle on March 21, I had his equipment all stowed in duffel bags and packs—the same kind of gear and clothing that we used on Everest.

Sleeping bag with quarter-inch foam pads to help ward off the cold—we prepared for temperatures as low as 35° below zero. Underwear of down, down vest, down hood, even down gloves. Down booties for camp wear, rubber Korean overboots for the climb, nylon parka and pants. Crampons and ice ax. Prusik sling for extricating oneself from a crevasse. Goggles, face mask, hat, sun lotion, candy bars, beef jerky, pemmican, energy food.

His pack, loaded, weighed 45 pounds. The 120-foot nylon rope he would be tied to, 7/16-inch thick, could stand 4,000 pounds and stretch a third of its length before parting.

Next morning Bob, Brad Washburn, and I flew by airliner to Juneau, capital of Alaska (map, page 12). There a chartered plane flew us on to Whitehorse—where bad news greeted us. Low clouds between us and Mount Kennedy made flying unsafe. We couldn't get in to Base Camp, established at 8,700 feet a week earlier by our five-man advance party.

### Canadians Provide a Magic Carpet

But soon a Royal Canadian Air Force jet was sent out on weather reconnaissance. Meanwhile a large RCAF helicopter had set down to refuel. Expedition leader Washburn asked if it could be made available to us. A phone call was put in to Ottawa.

We tossed darts, waiting. Our Canadian member, James Craig, a Vancouver, British Columbia, lawyer and mountaineer, joined us. Now we were an international expedition.

Good news. The jet radioed a favorable weather report, and the RCAF helicopter would lift us to Base Camp. Brad Washburn would ride to camp with us, showing us the way, and return in the chopper to Whitehorse.

I stole a glance at the Senator as we flew over jagged Yukon peaks. He reminded me strongly of President Kennedy—same head of hair, same eyes. He was reading a book by Winston Churchill, underlining parts of it. When we landed, he was the first man off.

I sized up the mountain we would tackle—up to now I knew it only from photographs. Immediately I thought of Everest.

Base Camp's two tents—one for eating and sleeping, the other for equipment and supplies—sat on a great glacier in a natural amphitheater. Beetling crags of granite and glittering icefalls walled us in. A cascade of ice pushed through a cleft in front of me. On the right, the first shoulder of Mount Kennedy towered far above. To the left rose the snow-clad southern buttress of Mount Hubbard, flanked by tawny granite crags. The terrain seemed transported from the high Himalayas, half a world away (page 13).

Barry Prather, at 26 our youngest climber, and NATIONAL GEOGRAPHIC photographer

*(Continued on page 20)*

*See, in the October, 1963, GEOGRAPHIC, "Six to the Summit," by Norman G. Dyhrenfurth; "How We Climbed Everest," by Barry C. Bishop; "The First Traverse," by Thomas F. Hornbein and William F. Unsoeld; and "President Kennedy Presents the Hubbard Medal."

"AS LONE AS GOD, *and white as a winter moon. . . .*"

*Poet Joaquin Miller's words capture the awesome mood of the heights on Mount Kennedy. Two climbers slog toward High Camp, beyond the ridge at left. Barry Prather carries the survey marker to be placed atop the peak (page 32). Excellent visibility enabled the climbers to thread through this complex of crevasses. Forty-mile-an-hour gusts swirl faint snow plumes off the distant shoulders of Mount Kennedy.*

**Cavern carved in the glacier** served as combination parlor-kitchen-dining room at High Camp. Two climbers slept in the 8-by-14-foot cave. After shoveling out the hard-packed drifts, as George Senner does below, the men covered the open trench with snow blocks, igloo-fashion, and draped a tarpaulin over the entrance. Circle of sticks at left of the tents marks the cave's roof, to prevent strollers from dropping in unexpectedly.




**Dug in on the roof of the Yukon,** the expedition lies cut off from the world. Nearest civilization: Yakutat, an Alaskan village 60 miles away.

"**Senate Chamber,**" climbers dubbed the snow cave. Senner (left) helps Dee Molenaar make a Society flag to plant on the summit, stitching strips from a brown duffel bag (earth), green shirt lining (sea), and blue nylon tent sacking (sky).

**Chef Whittaker** prepares a dinner of freeze-dried crabmeat, chicken stew, and strawberries. Senator Kennedy reclines on his sleeping bag. Canadian James Craig (left) lent the expedition an international flavor. "Members Only" echoes signs on elevators in the Capitol in Washington, D. C. Three gas stoves, plus body heat, fight back the cold.

BACKGROUND (OPPOSITE PAGE) AND MIDGROUND (BELOW) BY WILLIAM ALBERT ALLARD; ENCAUSTIC BY WILLIAM H. PRATER © 2000

William A. Allard, 27, met us. The advance party's three other members—experienced climbers Dee Molenaar, George R. Senner, and William N. Prater—had remained at the 11,700-foot High Camp. Senator Kennedy and Bill Allard were the only novices.

Barry cooked dinner that evening, melting snow on the two-burner stove to make commendable chicken-noodle and beef-noodle soup. He also served hamburgers on slices of homemade bread Jim Craig had brought, and gave us peaches and pears for dessert.

The weather was surprisingly mild, with little wind and no snow. Our six-man tent held the five of us snugly; a gasoline pressure lantern provided good light.

### Words Carry World of Determination

"Well," said Bob Kennedy, "what do you think of the mountain? Will the climb be very difficult?"

Any unclimbed mountain poses problems, and one doesn't know what those problems will be. I did know that Mount Kennedy was magnificent, worthy of its name.

I am 6 feet, 5 inches tall, and weigh 205 pounds. I began mountaineering in 1941 as a 12-year-old Boy Scout. I've climbed 14,410-foot Mount Rainier in Washington State 54 times. Barry stands 6 feet tall, weighs around 220, and has been climbing most of his life. We figured we'd get the Senator to the top if it was the last thing we did.

"Let's put it this way," Barry told him. "We think you're going to make it."

"Oh, I *know* I'm going to make it," he said in tones that held no doubt.

The thermometer read 11° above zero when we crawled into our sleeping bags at 10 p.m., pleased that everything was shaping up well. Yet just 24 hours later, at High Camp, I wouldn't have given much for Bob's chances of scaling the peak, or anyone else's. Weather can change fast in this part of the world.

Up at daybreak, we breakfasted and washed the dishes. By 8:30 we were preparing for the climb to High Camp. At 10 we roped up. We wore snowshoes; each of us carried an ice ax and a ski pole, for balance.

I led off, breaking trail in the fluffy snow. When the rope had paid out 60 feet, it tugged on Bob, and he stepped off; when the slack went out of the 60 feet behind him, Barry began walking. Then came Jim Craig and Bill Allard, also roped together.

You have to rope up on a glacier. You expect to fall into crevasses. A glacier is a moving river of plastic ice. If it bends too much, it fractures. The rope is your security.

Zigzagging up Cathedral Glacier, we soon

**"No one can climb** in blizzard conditions," says Whittaker. "As wind-driven snow beat against our tent that night, I thought, 'We can't do it; we can't go up tomorrow.' But the morning dawned bright and clear." Braving a storm at High Camp, Prater (left) and Prather lash down packs, snowshoes, and summit marker.

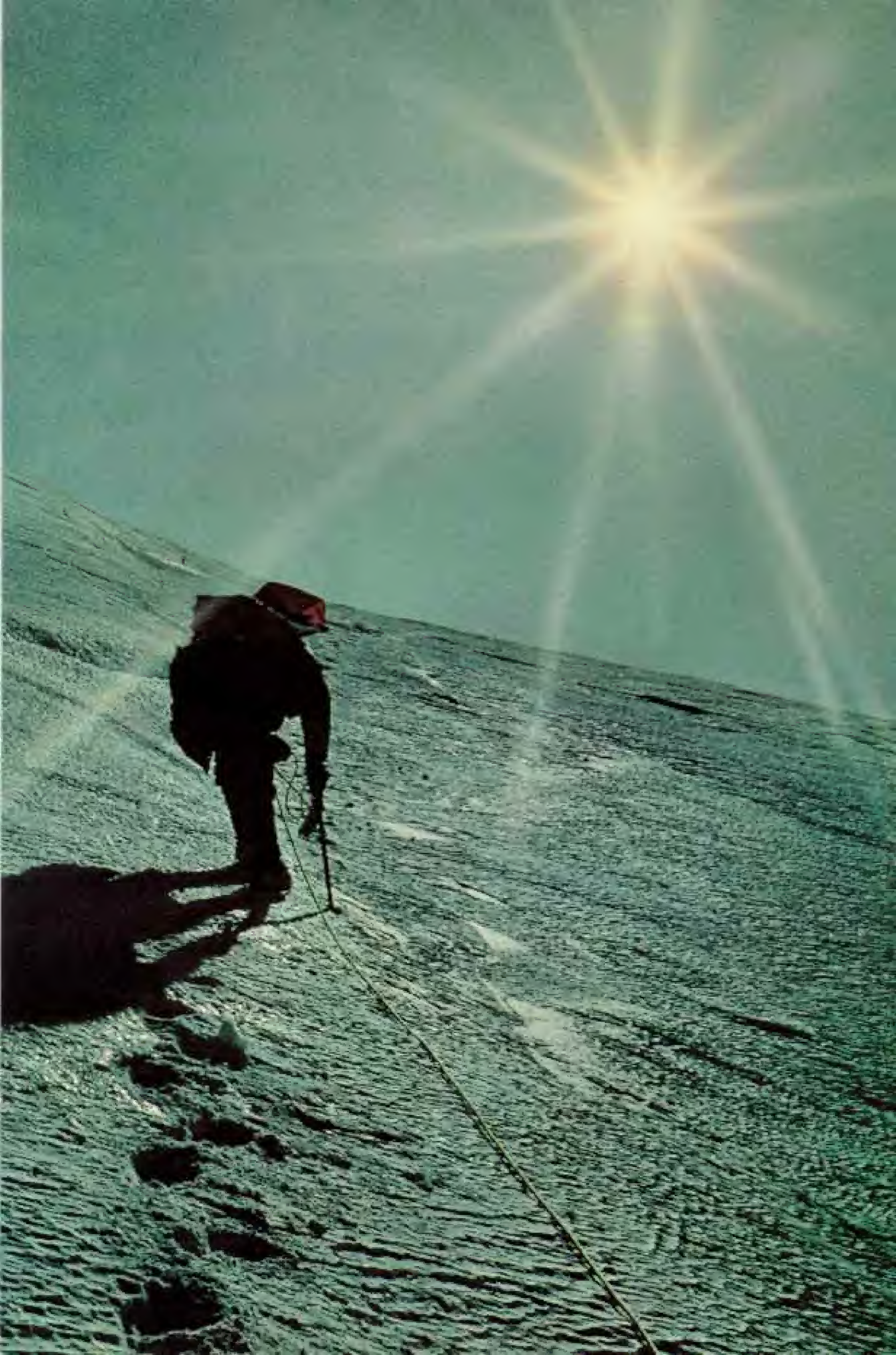
came to a crevasse, the first of many. One's first crevasse is quite a sobering sight.

"Wow!" exclaimed Senator Kennedy when he peered down it, down into blue darkness. It seemed bottomless.

We jumped across it—a bit awkwardly because of our snowshoes—and slogged onward.

It became pleasant going. The temperature had risen to 25° above zero, the sun was strong, and we were sweating. The pace I set was slower than Bob Kennedy liked at first—novice climbers are always in a hurry—but he soon realized that to push harder would only tire him all the more quickly.

I like the peace of the high places. In the stillness your pack frame creaks, and the snow complains beneath your snowshoes. No one talks much; you're working too hard. Sometimes the glacier seems to groan; sometimes an icefall breaks away from a rock cliff and rumbles and roars like an avalanche—which it is—down the pitch.



The mountaineer is in his element at such times, and part of it is the realization that danger lurks everywhere.

There are different kinds of climbing. Pleasure climbing in the Cascades, or Alps, or Olympics—I do that because it's enjoyable. Fresh air, exercise, nice view, good companionship. But to climb a peak that is dangerous, where you put your life on the line, is something else. I do it because of the challenge. I went to Mount Everest because of the challenge. I wanted to see if I could stand on top.

You don't really conquer such a mountain. You conquer yourself. You overcome the sickness and everything else—your pains, aches, fears—to reach the summit. Man is better off when he meets a challenge like this. He needs challenges; that's the nature of him.

Mount Kennedy was proving a pretty fair challenge. We moved up the glacier slowly, steadily, taking a short break every hour, nibbling raisins and energy food. We drank orange juice or water from our canteens.

### Snow Cave Becomes "Senate Chamber"

Now it began snowing. At about 11,500 feet we heard shouts and were greeted by Dee Molenaar and George Senner—our welcoming committee. Two hundred feet higher we came upon a cardboard sign rising out of the snow: "High Camp—three miles." It was a joke, of course. High Camp's two tents suddenly loomed in the twilight, and Bill Prater had soup cooking on a butane stove inside a big snow cave when we arrived.

It was 5:45 p.m. We had climbed nearly eight hours, covering around three miles to gain 3,000 feet in altitude. We all felt it. Senator Kennedy had amazed me with his stamina. It was a good hard day's work.

Bob laughed heartily, tired as he was, when he entered the snow cave, which had been dug out of the glacier's slope. Using silver paint from a pressurized can, someone had sprayed "Senate Chamber" on one wall, and "Members Only" on the side of the tunnel.

We added water to freeze-dried food and dined sumptuously: Alaska crabmeat, chicken stew, strawberries, coffee and tea. We had inadvertently left most of our mess gear at Base Camp, which prompted someone to observe, "You don't see many Senators eating stew with a knife out of a can."

We also learned that we had failed to bring along a National Geographic flag. Dee Molenaar remedied that. He cut a piece from a brown duffel bag, and sewed onto it a blue strip of nylon tent sacking and a green strip of lining from a wool shirt. Then he lettered "National Geographic Society" on it, and had a fairly good imitation of the real thing.

### Night Brings Howling Storm

Bob Kennedy, Jim Craig, George Senner, and I bedded down in the four-man tent. The snowstorm had turned into a blizzard. It raged down the mountain, shaking the tent, driving the snow hard against it (pages 20-21).

I grew discouraged. No one could climb in that weather. And it might go on for days. That night I slept badly, tossing and worrying. I reached out in the darkness at one point to adjust my pillow—an overboot—and pulled Senator Kennedy's hair. That didn't help matters any.

Morning finally came, and the wind was still blowing hard. The temperature was around zero. But when I looked outside I saw a perfectly clear sky, and I yelled for sheer joy. We were on our way!

By 8:30 we had roped up: myself, the Senator, and Barry Prather on one rope; George Senner and Dee Molenaar, with Bill Allard in the middle; then Bill Prater and Jim Craig. We wore crampons now; we would be hitting stretches of ice and hard snow (opposite).

Bob was carrying the Kennedy family flag. Adapted from the Kennedy coat of arms, it consisted of three gold helmets on a black background, white-bordered on the sides and red on the top and bottom. With the flag was a streamer depicting the Kennedy crest—a laurel wreath surrounding a sleeved arm, with the hand holding four arrows.

We secured the rolled flag to Bob's pack, and it stuck up like a quiver. We moved out at 8:35 a.m., getting into the rhythm and the motion after a few hundred feet. It was smooth climbing, except for occasional gusts up to 50 miles an hour, and I urged the Senator to let his mind wander. Thinking of the steep slopes that lay ahead might worry him.

**Scaling a slick-as-glass incline** at 13,000 feet, Molenaar stabs his ice ax handle into the crust. "It took total concentration to keep moving," says photographer Allard, "but a stop increased the risk of sliding back down." Sun in the camera lens creates a ray effect.

JAMES W. WHITTAKER

ROBERT F. KENNEDY

BARRY W. PRATHER

DEE MOLENAAR

WILLIAM A. ALLARD

GEORGE B. SENNEB

Step by icy step, Kennedy inches up a wind-lashed ridge. Now he stops and bends forward, anchored by his ax, as lead man Whittaker ascends the snowy spine. Slope at left drops 6,000 feet; summit lies 200 yards past the snow overhang. Rope on the trail links the two men with Prather, third member of the lead team. The eight climbers ascended in teams of three, three, and two, as indicated by the portrait groupings.

ASSIGNMENTS BY BARRY B. PRATHER
PHOTOS BY WILLIAM A. ALLARD
AT NATIONAL GEOGRAPHIC SOCIETY

WILLIAM N. PRATER

JAMES CRAIG

He had his own method of relaxing, I found out later. He climbed Mount Kennedy by sections, counting the steps it took to get from one to another.

An hour of this, and we stopped to remove our parkas, stowing them in our packs. The sun was shining, and the wind had died down considerably. We had overheated. Then we trudged on, up and up.

Now I noticed an irregularity in the snow—it seemed to be a little hole. My ice ax went through it. This is a frequent occurrence on glaciers. I stepped over and kept going. Suddenly Bob yelled "WHOA!"—as if he were riding a horse. My rope jerked strongly. Crevasse!

I looked around. He had sunk in up to his chest. I anchored my ax and held fast. But he didn't need help. He crawled out by himself. And he looked down into that hole and shook his head. He couldn't see the bottom.

Barry and I laughed. Crevasses are to mountaineering what sand traps are to golf; you put the ball in the sand trap once in a while, and that's part of the game.

We kicked on up the gradually steepening slope and soon arrived at Mount Kennedy's most challenging pitch —the 65-degree face at the foot of the summit pyramid. I wasted no time working up it.

Bob asked later, "How did you feel about that pitch?"

I said I felt great. That face made the whole climb, as far as I was concerned. It was very stimulating to have that thing. I was glad Mount Kennedy had such a problem. It made it more of a mountain. To mountaineers, a technical pitch like this is a candy bar.

### Final Steps to Crest Taken Alone

Once above the pitch we had the summit in sight. We paused on the small level place, and when the rest of the party drew near, we pushed on through the snow. Presently I stopped.

The Senator and then Barry came up to me. I said, "It's all yours, Bob."

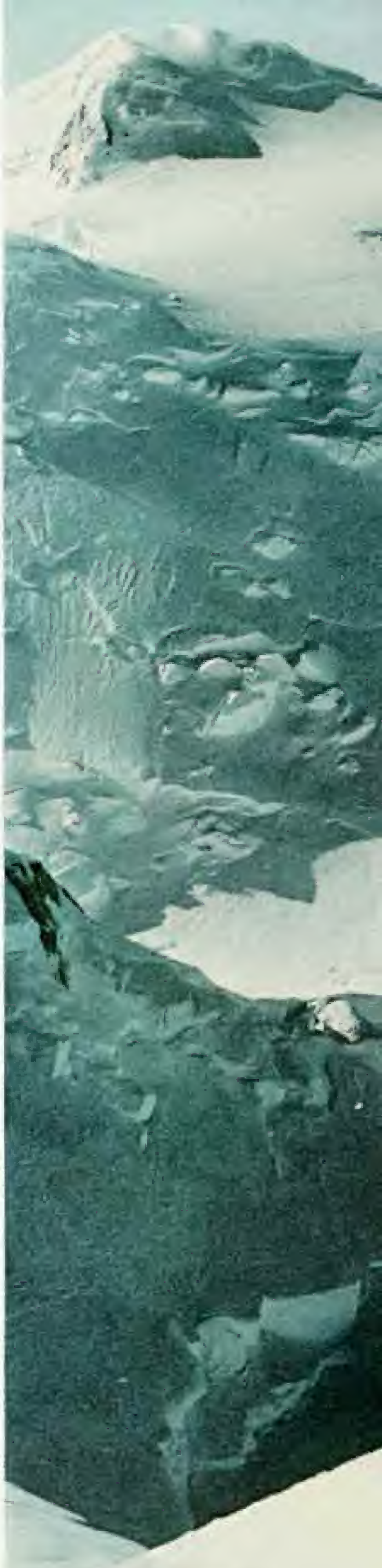
"Can I go the rest of the way now?" he asked.

I said yes, and Barry said, "Fine. It's O.K. now."

We stood there while Bob walked out along the crest, breaking trail. He stretched out the rope until he was 60 feet ahead of Barry and me. We started walking. Two hundred feet to go. It was 1 p.m. last March 24.

Bob moved on ahead, alone, working up. He took a minute's break, getting his breath. We were tired; we were sucking the thin air into our lungs.

Then Bob walked up to the summit, and he stood there



**Physically spent,** Kennedy rests against the snow after scaling the steepest part of the peak, near the summit. "While going up it," the Senator later admitted, "I stopped and held on to the mountain with both hands and asked myself, 'What am I doing here?' Then Jim Whittaker called to me, 'Come on, it's not much farther,' and I moved ahead."

Beyond the climbers rises the snowy head of Mount Hubbard, with Cathedral Glacier cradled between its flanks and those of Mount Kennedy.

**Standing on the peak,** Senator Kennedy unfurls a banner displaying the family coat of arms—three gold helmets on a black background—and photographer Allard holds the hand-stitched National Geographic Society flag. The first climbers flew Canadian and United States flags on the summit.

**Mementos of a President** lie on the mountain named in his honor. Senator Kennedy carried up John F. Kennedy's Inaugural Medallion, Address, and three PT-boat 109 tie clasps. The Senator's children, who adored their uncle, asked their father to bring the objects back. He did—all except one tie clasp, which was left in a hole in the snow.

about five seconds, ten seconds, and reached back over his shoulder, just the way I had reached back for my American flag on top of Everest. I remember thinking of that when he reached back, without looking. He groped for it, felt it, and pulled out the pole around which was wrapped the Kennedy flag and streamer. He jammed it into the snow.

Senator Kennedy stood there alone, silent, looking down. He made the sign of the cross. It was his brother's peak, and he stood there a long time.

I wanted him to get that peak. I stood there 60 feet below him, watching, and I was really glad that he got it.

Finally I moved up to him. I gave him a hug and congratulated him (page 4). "You did a tremendous job," I said. "Your brother would be very proud of you, but not any prouder than I am."

I felt very good about it all. It had been different for me on Everest. I couldn't enjoy that peak. My oxygen was gone, and both my Sherpa partner, Nawang Gombu, and I were nearly done in physically and mentally.

Here on Mount Kennedy I was tremendously thrilled. "This can never be taken away," I said to Bob. "There will never be another who will be first on Mount Kennedy."

"Yes," he said. "I know what you mean."

Now everyone else came on up. Dee Molenaar had carried the survey marker to the summit on his back. It consisted of two pieces of bright orange plywood, each one foot square, attached to an eight-foot-long 2 x 4. Dee drove the post firmly into the wind-packed snow.

Soon all was confusion: eight jubilant climbers, on three ropes, criss-crossing one another to take pictures. Our ropes looked like a batch of spaghetti.

We festooned the peak with flags—Canada's two flags, the old and the new; Old Glory; the Kennedy coat of arms; the handmade National Geographic flag; Dee Molenaar's ice ax with his children's socks flying from it; a climbing club's pennant. Also resting on the summit: a copy of John F. Kennedy's Inaugural Address, his Inaugural Medallion, and three of the late President's PT-109 tie clasps.

Several planes circled low overhead. Expedition leader Brad Washburn flew in one of them, watching us and making photographs.

### PT-109 Will Lie There Forever

We spent about an hour and a half on top. The weather was fabulous. It was 5° above zero; the sky was clear, the sun sparkled against ridges and pinnacles, ice falls and rock cliffs (pages 30-31).

We were terribly thirsty. One's lungs give off water vapor at a great rate during a climb, and we also had been perspiring heavily for hours. I chopped a hole through the ice in the neck of my canteen to get at the orange drink in it. I gave Bob a swig, and he said it was the best orange drink he had ever tasted.


THE
INAUGURAL
ADDRESS
OF
JOHN
FITZGERALD
KENNEDY

**ANTLIKE FIGURES** *of six climbers dot the summit of Mount Kennedy as two other members of the party approach the top. An airplane carrying expedition leader Washburn circles the peak at left. Craggy tips of unnamed mountains loom like islands in the sea of clouds that often washes over the Yukon in spring.*

There is great personal satisfaction in standing on a point of earth that commands all else about it. You can see all around—everything seems at your feet: here it is silent and still and completely peaceful.

At last the time came to turn back. Everything was downhill now. Barry sank an ax shaft deep into the snow, and pulled it out. Then he dropped a PT-109 tie clasp far into the hole. PT-109 will lie there forever.

We headed down. Ours was the last rope. Barry led, then came the Senator, then me. As we moved off the summit, Bob turned and waved farewell.

"**As we neared the summit,** I stepped aside and let the Senator trudge ahead through the fresh, untrampled snow," reports Whittaker. "I thought he should be the first man on Mount Kennedy. For some time he stood alone at the top. Then I went up to him and congratulated him."

**On a mapping marker** atop Mount Kennedy, Frailer writes the names of the eight climbers who reached the summit. Expedition members placed a target pole here and on Mount Hubbard to help surveyors pinpoint their photographs for precise mapping of the area.

At the 65-degree pitch, I asked Bob to look down it—down more than 6,000 feet to the head of Lowell Glacier. As he did, he said, "You can feel it all the way to your toes."

"Mountaineers grow to like that feeling," I said, "when they know they can handle it."

We belayed down the face and kept going. A little farther on, Barry fell into a crevasse. His momentum was sufficient to carry his upper body forward; he twisted, rolled out of the crevasse, and moved on. This time it was Senator Kennedy's turn to laugh.

At 4:30 p.m. we reached High Camp. Four hours later we trudged into Base Camp, where we would spend the night. Bill Allard was our only casualty—his feet were badly blistered. Even so, he was so glad to be down that he tried to run the last few feet. For eight exhausted, dehydrated mountaineers, we were a pretty happy bunch.

Next morning we heard the RCAF helicopter thumping its way to us just as we

turned on the stove at 6 a.m. Breakfast was out. Hastily we loaded the chopper with our tents and other equipment and supplies that the mapping expedition could use in the weeks ahead. Then the Senator, Barry Prather, Bill Allard, and I hopped aboard. The other members of the party would follow in ski-planes of the Yukon Flying Service, which had flown in our advance party and all our supplies.

**"It Takes a Special Brand of People . . ."**

Twenty-five miles down the glacier we dumped the supplies at a cache Barry had established, and then flew on to Whitehorse.

There the first order of business was liquids —water, milk, coffee, chocolate shakes. All we could drink. We were still very dehydrated. Then we ate breakfast.

A number of congratulatory telegrams had arrived, one of them from Mrs. John F. Kennedy. She wired that she was proud of the Senator's role in the ascent.

A little later, bathed, shaved, and once again in street clothes, we talked to a group of Whitehorse school children. I was proud to hear Bob say this:

"It takes a special brand of people to climb mountains. They have courage. We came to a corner and I said to myself, 'I will have to turn back,' but Whittaker was going ahead. I wondered if there was an elevator to get me up. But Whittaker was still climbing. He stopped, anchored himself, then turned to me, and said, 'Now you climb.'"

So ended the first phase of the Mount Kennedy Yukon Expedition. We had accomplished our task, and achieved the camaraderie of mountaineers in doing it. Soon the air and ground surveys would begin.

Someday, climbers by the hundreds—or even thousands—may ascend the beautiful mountain named for our late President. I for one am glad that the first footsteps in its summit were made by his brother. THE END

# Down the Danube by Canoe

By WILLIAM SLADE BACKER

*Photographs by*
*RICHARD S. DURRANCE*
*and CHRISTOPHER G. KNIGHT*

NO ONE SPOKE. Our paddles trailed uneasily as the Danube drew our four canoes toward an invisible border stretched taut across the river. Where did Austria end and Czechoslovakia begin? The silken water offered no sign. But we sensed it when our bows pierced the Iron Curtain: an odd brief chill in July's noon heat.

A foolish feeling, I told myself. But glimpses of barbed wire, guards, and gaunt watchtowers hadn't helped.

And now a Czechoslovakian patrol craft bore down on us, black swivel gun menacing on her foredeck. Sailors

armed with rifles, knives, and pistols, but costumed as if for H.M.S. *Pinafore* in striped shirts and blue caps, gestured us toward a city shadowed by great castle ruins.

Mike broke the silence: "That's where we're supposed to put in—Bratislava."

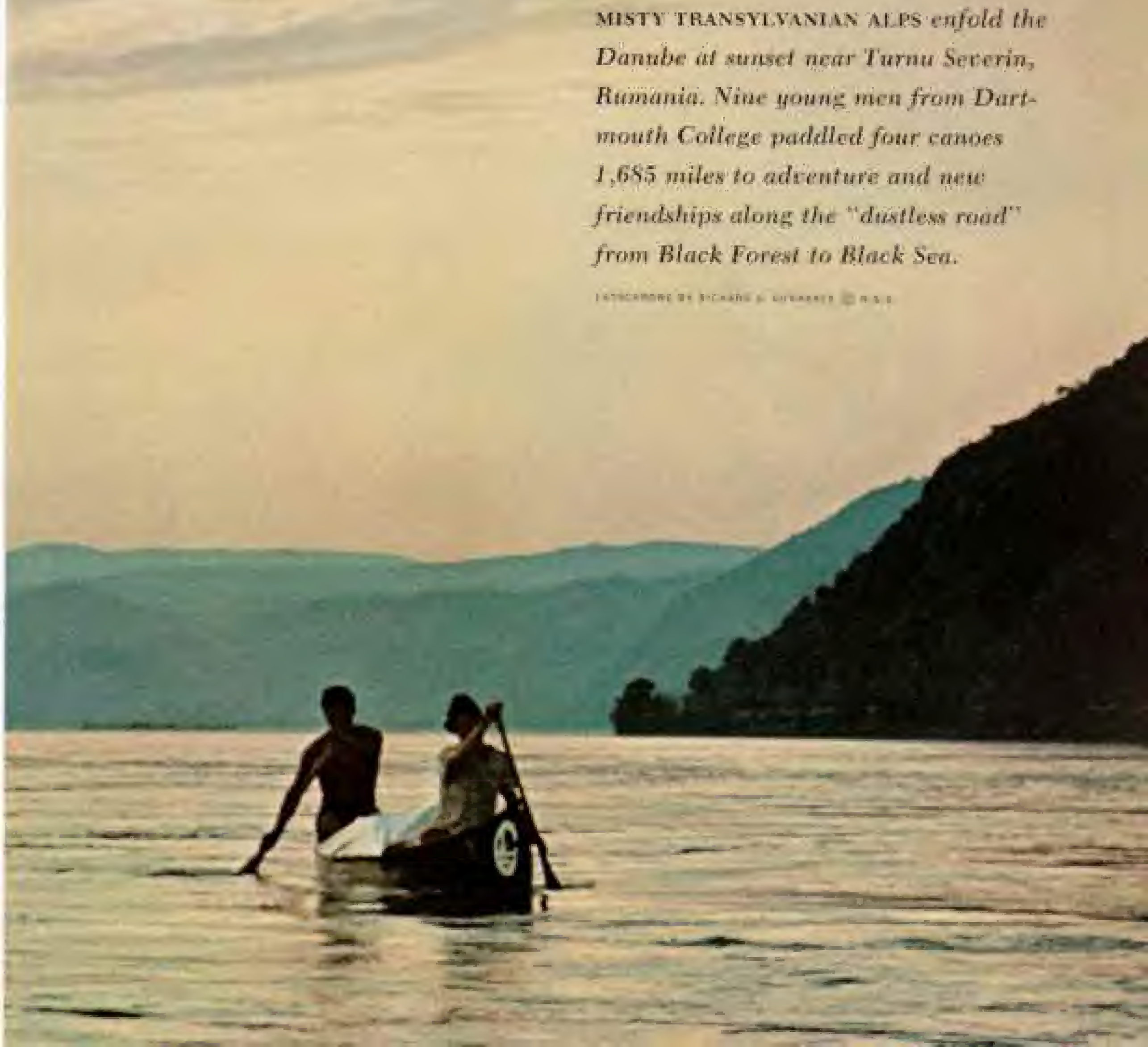
What kind of scrutiny and questioning awaited us? Would authorities find excuses to knot us in red tape? Would the people we had come so far to meet show us mere icy politeness—or even hostility?

We were bound on a canoe cruise of the historic Danube, from its headwaters in southern Germany to its mouth on the Black Sea (map, pages 42–3). The nine of us, all from Dartmouth College, hoped to meet people who rarely see Americans; to weld mutual respect, perhaps friendship.

The police boat led the way to the Bratislava waterfront, where nearly 100 persons waited on the pier of the Tatran Sports Club. Suddenly we realized, with a shock, that all those people had assembled to greet *us!*

Girls, boys, men, and women, mostly in swimsuits or rowing uniforms, waved and shouted a welcome. Half a dozen boys carried our gear into the





**MISTY TRANSYLVANIAN ALPS** *enfold the Danube at sunset near Turnu Severin, Rumania. Nine young men from Dartmouth College paddled four canoes 1,685 miles to adventure and new friendships along the "dustless road" from Black Forest to Black Sea.*

PHOTOGRAPH BY RICHARD A. SCHNEIDER (C) N.G.S.

clubhouse, where a customs official quickly put us through the formalities. Anton Daštinsky, vice president of the Tatran Sports Club, introduced us to the other members.

"Ever since we got your letter three months ago, we have been waiting," he said. "We are delighted to see you."

Faced with such hospitality, our tension dissolved. Presently we were diving off the pier, laundering clothes, and eating roast rabbit washed down with red wine.

At least for the time, the supposedly mailed fist held us in a velvet handclasp.

Three weeks earlier we had put into the infant Danube at Ulm in picture-book southern Germany on a voyage conceived the year before by two ardent river-runners of Dartmouth's Ledyard Canoe Club, Dan Dimancescu and William Fitzhugh.

With Bill named expedition leader, ten months of planning, fund raising, and equipment gathering followed. Dartmouth's President John S. Dickey gave us enthusiastic support; retired diplomat Ellis O. Briggs, a Dartmouth alumnus, helped us immeasurably with arrangements.

Boat clubs in four Danube countries responded warmly to our inquiries. When Na-

GERMANY **Blond fräulein** at Ulm gives the expedition a champagne send-off by dousing one of the canoes. Here the Danube becomes navigable for small boats. Christening by breaking a bottle over the bow might have torn the canvas.

**Concrete corridor** dwarfs canoes and kayaks in a lock below Ulm. Escorted by German friends who joined them for the first leg of their voyage, the Americans wait while a hand-operated gate swings open. Well-wishers crowd a walkway 50 feet above. Political sticker reflects canoeist Dave Donnelley's Illinois origin.

TIONAL GEOGRAPHIC expressed interest in the trip, our crew grew to nine, including Richard Durrance and Christopher Knight, our expedition photographers, David Donnelley, Michael Lewis, Bruce Irvine, Edmund (Terry) Fowler, and myself.

### Spring Gives Birth to Mighty River

All of us knew that the way would be long, and often windy, hot, and hard. The Danube drains a region almost three times the size of the British Isles; among the rivers of Europe, only the Volga is longer. Still, the Danube presents few hazards to experienced canoeists. Except for a perilous rush through the gorges of the Iron Gate between Yugoslavia and Rumania, most of the river is broad-backed, slow, and majestic.

At Ulm, our take-off point, the Danube becomes navigable for small craft. Here stands one of the proudest monuments of Christendom, the Ulm Cathedral, whose spire soars 528 feet—the world's tallest church tower.

We first traveled some 75 miles upstream by bus to the traditional source of the great river—Donauquelle, or Danube Spring, near Donaueschingen. On the way we drove along a rock-strewn stretch of the Danube that





FIRST WHITE WATER *tests the skill of Dick Durrance (in red hat) and Bill Fitzhugh as they spurt past the walled town of Neuburg. Spray cover protects their gear. Voyagers who follow play it safe by navigating in calmer water near the river wall.*

**City of three rivers.** Passau sees the Danube come of age. The Ilz (foreground), rushing down from Bohemian forests, and the murky Inn (upper), born in the snow-capped Alps, join their waters with the young Danube. Barges and excursion boats chug past the rock-anchored fortress of Niederhaus

**Round-cheeked resident** of Passau views passers-by. She greeted Dick Durrance with a cheery *"Guten Tag*—good day."

sometimes runs dry—its water seeping through porous limestone to end up in the Rhine River, and eventually across the continent in the North Sea!

We found the spring itself to be a formal walled pool flanked by baroque statues of a fleshy mother showing the baby Danube its eastward course. Enterprising German youngsters, with tin cups fastened to poles, were fishing for coins that visitors had tossed into this "wishing well."

### Black Sea Seems Far Away

Back at Ulm, friends from the Ulm *Kanu-Klub* helped celebrate our departure (page 36). As we built a cheery bonfire from our canoe shipping crates, one of our hosts recalled that in the Middle Ages trade goods from France and Italy were transferred here to clumsy, shallow-draft boats called "Ulm boxes," bound for Vienna and Budapest. Unable to sail their boats upstream, crews broke them up at journey's end and sold them for firewood.

On a gray and sultry Sunday, June 21, 1964, we dipped paddles into rippled, racing waters. We were off and running, armed with bug repellent, guitars, cameras, and the words in a number of languages for "Please," "Thank you," and "Where is the bakery?"

"Ahoy!" called Ulm's Sunday strollers and boaters as we swept by. "Ahoy!" we answered.

As we dropped through a lock above Lauingen, a German in charcoal suit and starched collar asked where we were going.

"To the Black Sea," answered Chris Knight, perhaps a bit too casually.

The man's jaw dropped; his expression went stiff. Then a knowing smile crossed his face. "*Jawohl!*" he said, going along with our "joke." "To the Black Sea. *Natürlich!*"

To these people the Black Sea lay in another world. Dan expressed our own misgivings when he said, in sudden realization, "Lord, we have a long, long way to go!"

The swift current of the youthful river did its bit to hurry us on our way. The shores raced backward as we bounced along on swells and fought gurgling swirls with our paddles. We camped that night with aching muscles, and with rain drumming on our tents.

For ten days the river led us on through Germany. Villages huddled around massive baroque churches. Vohburg especially charmed us in morning's light. Yawning dogs, darting swallows, and parades of ducks set sun-baked streets in motion. Through a stick fence I saw a housewife throw a few leaves of cabbage to a rabbit. A pretty girl in a blue skirt swept manure off the street. Potatoes boiled in back-yard oil drums; roosters crowed, women gossiped across fences.

At Kelheim, we passed the junction of the Danube with the Rhine-Main-Danube Canal. This man-made artery links Western Europe's major waterways.

A few miles below lies Regensburg. Tugs can tow barges of up to 1,000 tons to this river port, 1,200 miles from the Black Sea. The place was a crossroads of Roman traffic, too, known then as Castra Regina.

Outside Regensburg's splendid cathedral a bevy of little girls, faces smudged with dirt

# Dartmouth Students Canoe 1,685 Miles Down the Historic


Beached beside the Black Sea, nine members of Dartmouth's Ledyard Canoe Club grin in triumph at the end of their two-and-a-half-month odyssey. They paddled through eight countries, six of them (marked by red type) under Communist rule. Crouching from left: Edmund (Terry) Fowler, Bruce Irvine, Michael Lewis, Richard Durrance, and Christopher Knight. Standing: Dan Dimancescu, William Backer, David Donnelley, and William Fitzhugh

and candy, eyed Dave Donnelley in wonder. This strange *Amerikaner* wore blue-jean shorts, T-shirt, and sneakers—yet carried a briefcase! Where expedition treasurer Dave went, our traveler's checks went too.

The big Kachlet Hydroelectric Station just above Passau blocks the Danube with the first of four major installations which, over the next 100 miles, harness the river to provide power for homes and industry.

At Passau the Danube swept us along to its union with the Rivers Ilz and Inn, the latter rolling in from Austria's Alps (pages 40-41). As guests of Mayor Franz Kern, we dined on *Zigeunerschnitzel*, or gypsy cutlet, smothered with a Magyar sauce of mushrooms, tomatoes, peppers, beans, and onions.

### Stonecutter's Task May Take 30 Years

Dan and I climbed a wobbly scaffold 125 feet up the façade of Passau Cathedral to talk with stonecutter Matthias Blöchinger. He was replacing weathered blocks and chipping out new *Kreuzblumen* (literally, "cross flowers") with a chisel and a wooden mallet—earning $1.00 an hour.

Matthias, in his mid-forties, told us he had been at the job for eight years.

How soon would he be finished?

He rubbed his chin. "Maybe thirty years."

Leaving Passau, we crossed our first international frontier into Austria, whose celebrated "blue" Danube flows a pastel brown.

Linz we recall for the view from the crest of Pöstlingberg of the distant snow-capped Alps, and for its giant complex of steel mill and oil storage tanks. Here, too, for the first time we saw barges from Russia and Rumania.

Dick Durrance, proud of his German, helped read the menu in a Linz restaurant.

## AUSTRIA

**Like the brim** of a peaked hat, striped grain fields rim a tortuous bend below the German-Austrian border. Here at the Schlögener Schlinge—or loop—the Danube swings 180 degrees, from southeast to northwest.

**Thirsty musician** pauses for refreshment during a village concert at Pöchlarn, Austria.

**Swimming sports car,** West Germany's Amphicar plows upriver at 10 knots. Front wheels act as rudder; twin screws churn the wake. On land the vehicle can speed at 70 miles an hour. "Gypsies call the Danube the 'dustless road,'" Chris Knight said, "but we never dreamed we'd see a car drive up it."

Chris asked the waitress what *Nierndln* were, and the girl grabbed her lower back. Dick loudly announced "Pork chops!" and ordered some. Dismayed by the plate of kidneys she brought, he asked somewhat less confidently, *"Haben Sie quack-quack!"*

*"Nein, aber wir haben cluck-cluck,"* and the waitress produced chicken.

At Mauthausen, several Austrian youngsters asked Mike Lewis, the Negro member of our team, "Are you an African, the spear-throwing kind?"

"No, I'm an American," Mike answered. A few steps of the twist eased disappointment.

Between Melk and Krems, through the enchanting stretch of the Danube called the Wachau, we drifted along in a setting of vineyards, orchards, and tumbled hills (page 48). Ruins of castles, built by robber barons and aristocrats of old, perched on riverside crags. Men and women spraying and pruning the vines expressed surprise when we told them we came from the United States:

"But you are neither tourists nor GI's!"

We wandered through the vast, ornate abbey of Melk, one of the largest monastic structures in the world. From the abbey came Yale University's copy of the Gutenberg Bible. Downstream at the castle of Dürnstein we climbed over fallen walls of the stronghold that once held Richard the Lionheart captive.

### Sparkling Gateway to Eastern Europe

A few more miles of river, then—Vienna! The city of Strauss, *Sachertorte*, and sobbing violins turned on us her familiar wiles of grandeur, femininity, and lighthearted sophistication. Sachertorte, should you not know it, is a melt-in-the-mouth chocolate cake, a Viennese specialty.

Just to stroll in the evening through this sparkling city was to gain magical respite from hectic days. We made the rounds of famous cafes—Demel's, Gerstner-Köberl's, and Lehmann's—to drink coffee and stash away sugary pastries.

We missed the renowned Vienna State Opera; it was off season. But we drove out to historic Kahlenberg, north of the city in the Wiener Wald—the Vienna Woods.

In 1683 an army of 200,000, led by Turks but including a motley horde of Slavs, Tartars, and restive Magyars, swept up the Danube Valley and laid siege to Vienna. Sultan Mohammed IV of the Ottoman Empire sent a challenge threatening fire and sword:

"We shall destroy you and wipe all trace of infidels off the face of the earth. With no regard for age, we shall put all through excruciating tortures before we give them death. . . ."

At stake were the Holy Roman Empire and the Christian world.

Emperor Leopold I found a strong ally in John Sobieski, King of Poland. A force of 80,000 Europeans under Sobieski and Duke Charles of Lorraine assembled on Kahlenberg and then deployed in the Vienna Woods. On September 12, 1683, the Turks, under attack from two directions, fled in general panic.

### Grim Relics of Sarajevo—1914

History seemed closer at hand in Vienna's Heeresgeschichtliche Museum. With President Kennedy's assassination indelible in our minds, we were struck silent by the relics of the murder of the Archduke Ferdinand and his wife. Here were the uniform, with bullet holes and bloodstains, that the Archduke wore and the automobile he rode in the day the bullets cut him down in Sarajevo.

Exactly half a century had passed since that violent act lit the fuse of World War I.

We visited with Willy Dirtl, family man, teen-idol, globe-trotter, and first solo dancer of the Vienna State Opera. Wearing blue jeans and a T-shirt, Dirtl sprawled barefooted on a couch in his living room.

"Some of you hard-boiled foreigners," Dirtl cheerfully pronounced, "think it's a romantic dream that Vienna is a city of woods, superb wines, and people happily in love. But it's true, every bit."

Fritz Meznik, Chief of the Austrian Government's Press Service, briefed Dave and me in his resplendent office on the countries we were yet to see.

"So many people lose sight of the fact that Eastern Europe is not an entity," he said. "Few regions display such a diversity of cultures, races, and geography."

Dr. Meznik, chain-smoking and peering through thick glasses under white hair, spoke with the authority of one widely traveled in the Communist countries.

"In relation to Moscow, a new sense of independence stirs Rumania. Yet the country has not had much experience of democracy. The Rumanian masses historically have been poor, their rulers rich.

"You'll like the Hungarians—they're proud, diligent, imaginative, strongly individualistic. They have a strong sense of destiny."

**Collapsing sail** saves a canoe from capsizing as it races toward Schloss Schönbühel in the castle-studded Wachau region. Bill Backer and Bruce Irvine jury-rigged the sail to take advantage of a following breeze. A gust proves too powerful, and Bruce releases saplings he has held together by hand.

**Master of the castle surveys his ramparts of sand beside the river near Lauingen, Germany.**

Once more afloat and eastbound, we drifted lazily along in the shimmering heat haze of midsummer. We felt as stuffed as Vienna sausages—filled with fresh memories of pastries, schnitzels, and sweet cold milk; of gaiety, grandeur, and good conversation.

I have told earlier with what unexpected warmth Bratislava welcomed us to Communist Europe. But there was more.

"Tomorrow you will dance and sing with club members. Tonight you are my guests."

This was our invitation from Dr. Konštantin Čársky, president of the Tatran Sports Club and professor of surgery at the Bratislava Medical School. He had visited leading medical colleges in the United States.

In a plain but comfortable home in a modern section of drab and dusty Bratislava, his wife stuffed us with Bryndza cheese and Prague frankfurters, served with horseradish, pickled red peppers, and a wine our host had made. A mounted boar's head witnessed a verbal free-for-all, joined in by Dr. Čársky's daughter and son-in-law, and by three colleagues and their wives who dropped by.

### Folk Songs Link Two Continents

I think we had expected to find all stolid, gloomy people here—not this worldly, witty, and stimulating company. In snatches of four languages—English, French, German, and Slovak—we talked for five hours.

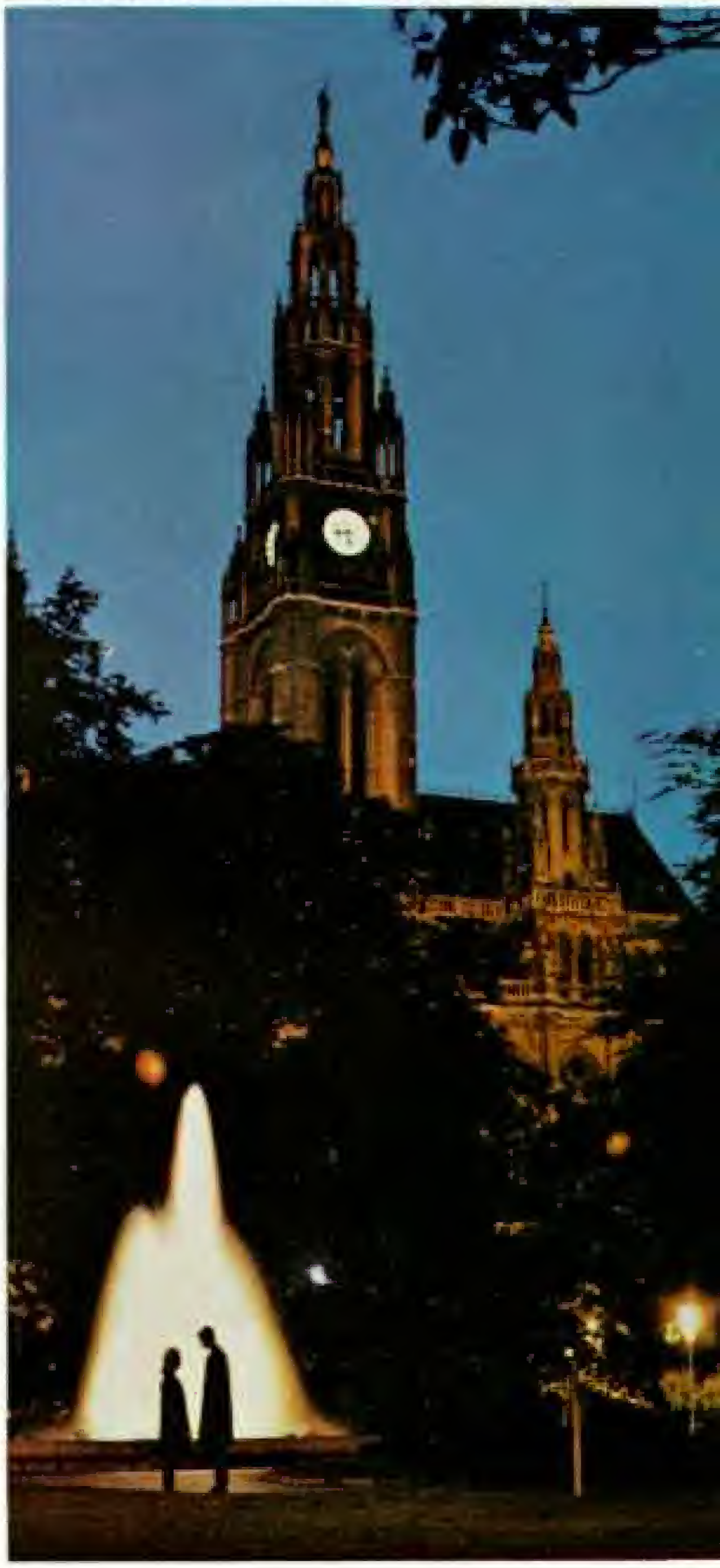
"There are good people and there are bad people," said Dr. Čársky. "But let us not discuss sad things and old wars. We should not spoil a wonderful evening." He poured us a glass of slivovitz, the ubiquitous plum brandy of Danube lands.

"You can tell everything about a nation by the way it sings," said Anton Daštinský, the Tatran club's vice president. "The farther down the Danube, the more passionate the music."

Our hosts sang lustily themselves, and Terry Fowler, to his own guitar accompaniment, won applause for a sad song about the Civil War, "Two Brothers."

Russia's image as "liberator" is fading in most Soviet-sphere countries, and Moscow's political and economic grip grows weaker. In Bratislava, handsome apartment blocks that have been a-building for five years aren't yet finished. A Bratislavan told us that "they look nice but are really junk." Czechoslovakia's limping economy has been diagnosed as a case of overcentralization, and decentralization and flexibility key new policies.

In 1964, Czechoslovaks for the first time



**Young lovers rendezvous** in a park beside the towered Rathaus, Vienna's Town Hall. Ten years after occupation troops quit the city, Austria's capital sparkles again beside her "Beautiful Blue Danube."

**Treading a steep slope,** an Austrian sprays grapevines that have made the Wachau one of the most famous wine districts of his nation. Here the river runs through a 20-mile defile below hills clothed in vineyards and orchards, and capped with the ruined bastions of medieval robber barons.

were able to travel outside their country in large numbers. But while a visit to a neighboring Communist country is simple enough, currency restrictions make trips to non-Communist lands virtually impossible.

### Common Folk Know U. S. Leaders

All down the river, we were to find universal admiration, even affection, for John F. Kennedy—and a belief that he was the victim of a conspiracy. A shopkeeper in Yugoslavia, a pig farmer in Bulgaria, and fishermen in Rumania leafed through American magazines we showed them, and readily recognized the Kennedy family, Defense Secretary Robert McNamara, and President Johnson. They seemed well aware, too, of the Congo and Viet Nam as international trouble spots.

Five Czech students, two boys and three girls, paddled along with us when we left Bratislava. On a breezeless, sizzling day we abandoned the canoes in midstream for a time as we swam and played water polo.

At a collective farm near the village of Palkovičovo, we bought two live ducks to roast on spits that evening (right). Two of our

# CZECHOSLOVAKIA

**Gray hulk of castle** dominates Bratislava, the canoeists' first landing place in Communist territory. The city seemed forbidding until a welcoming committee from the Tatran Sports Club met the expedition with the warmth and enthusiasm of young people everywhere.

**Ducks for dinner** swing from the hands of Maria, one of five Czechs who traveled through their country with the Americans. Bill Backer escorts Maria from the collective farm where they purchased the birds. Although unwilling to kill the ducks themselves, the soft-hearted Dartmouth boys did help pluck them.

PHOTOGRAPHED BY CHRISTOPHER S. RUGBY © N.G.S.

Czech companions interpreted for us in a talk with the bookkeeper of the farm. We had heard that agriculture was lagging, and that collective farmers seemed short on incentive.

"Are the men happy being farmers for the state?" I asked.

"They are satisfied," came the answer. "The farm is a success, but the young people go away to city jobs or to attend a university."

All along the Communist Danube we were to find this tug of war—so familiar in the West—between the needs of agriculture and the lure of the burgeoning cities.

We weren't in Czechoslovakia long. The Danube flows for only 14 miles with Czech territory on both sides. We stayed on the Czech side of the river another 50 miles, to Komárno. There we shook hands with our Czech friends, who paddled ashore whistling and waving, to return home by train.

Our first Hungarian landmark was the impressive cathedral at riverside in Esztergom. Here begins the Dunakanyar—the Danube's elbow, or bend—where the river swings south between the Börzsöny and Pilis Mountains to emerge on the Great Hungarian Plain.

# HUNGARY

**All aboard** for the other shore. Wagons, trucks, and pedestrians push onto a motorized ferry at Mohács. Steamboat *Kossuth*, reminiscent of 19th-century Mississippi side-wheelers, churns upriver to Budapest. Behind schedule, the Americans caught a ride on the steamer from the capital to Mohács. Near here 28,000 courageous Hungarians suffered defeat in 1526, when they audaciously attacked 300,000 Turks.

**Music by the mile:** Mike Lewis, an enthusiastic musician, fingers the keys of his melodica, a small lung-powered organ. Dave Donnelley steers along a stretch of river below Esztergom, Hungary. A motorboat tows in tandem the American canoe, a Hungarian racing shell, and an Austrian kayak.

**High-stepping counselor** improvises a dance with Dave Donnelley, to the delight of boys and girls at a Young Pioneer Camp near Esztergom. Mike twangs out rock-'n'-roll music on his guitar.

Horse-drawn coal carts rolled past as we sought refuge from searing heat under the awning of the Espresso Var Café. There we met a down-on-his-luck artist, Sándor Olay, a man of about 65 with stubby iron hands, who accommodatingly sketched five of us while gulping down as many cognacs. A former soldier, sportsman, and prominent portraitist, he had spent 10 years in jail as a political prisoner.

### World Falls Short of Hungarian's Expectations

"Hungarians are alone in Europe," he said, "surrounded by people with whom we have nothing in common. Our world is not what it might have been." His cold blue eyes flashed with resentment as the words tumbled out.

"But I am an artist, not a politician or social scientist." He took a final gulp of cognac.

"No matter," he said. "Gulls fly. Let me paint!"

Days passed, days of abandonment to the broad, onsweeping stream. Thursday, July 16, put this in my diary:

"Heavy wind in the morning, coming across the flat plain, curls the water with choppy seas. But soon the air falls dead.

"Geese today. They parade in flocks along the muddy shores. Farm women in black dresses and white kerchiefs herd them slowly with straight sticks. Now and then a goose will halt, straighten its back, spread and flap its wings, then strut forward, squawking as it goes.

"And there is loneliness. A woman walks down to the water with a sack of clothes for washing and a basin. In the distance, the solitary figure moves, unhurried. Nothing else in the whole vista of the river. Then she is over the shoulder, and then out of sight. There is not a sound on the water, or in the distance.

"The women come from nowhere and return in silence. The



BURNISHED BY THE SETTING SUN, *Hungary's Neo-Gothic Parliament Building adorns the Danube at Budapest. Completed in 1904 under Emperor Franz Josef I of Austria-Hungary, the domed and spired structure houses murals, paintings, and statues; 440 pounds of gold gild its stairs and halls. Hungary's National Assembly and the Council of Ministers meet here. Liberation Monument, towering above the Citadel on distant Gellért Hill, honors Soviet soldiers who died in the battle for Budapest during World War II.*



image persists, long after we have passed, of wet fabrics—white, black, and red—spread out on the hot white pebbles of the beach."

Budapest: Our rustic river turns urban and sprightly. It is love at first sight.

We paddled into the heart of the city on a sunny Sunday afternoon, threading through a tangle of motorboats, kayaks, and enormous paddle-wheelers, past shoreside boulevards, and the great Neo-Gothic Parliament Building (preceding pages); past laughing children and spouting fountains. Couples strolled the sidewalks arm in arm. Tanned girls sunbathed on the river beaches.

Budapest seemed a song.

### Birthrate Reflects Tragic Past

Yet a tragic past hangs over the enchantment. Not ten years ago Russian tanks ruthlessly crushed the Hungarian revolt here.* Soviet and German troops pulverized the city during two months of siege and street fighting in World War II. Centuries back, Huns and Turks washed streets in blood.

Hungary's women are a reminder of all this. They outnumber the men, 5,157,000 to 4,804,000. Sadly, the birthrate—only 13 per 1,000 residents—is Europe's lowest.

To get better acquainted with Hungarians, we attended a backyard bacon roast at the home of Marin Szent Györgyi, an employee of the Academy of Sciences in Budapest. There was good talk—and singing and dancing. We watched a graceful girl whirl through a dance called the *üveges tánc*—the bottle dance. It called for intricate body movements while balancing a bottle on her head. Another guest sang a Hungarian lament so beautiful that I asked for a translation. It went:

*Even the leaves cry for where I*
*am going.*
*Please ask the wind to take*
*away my dust*
*So there can be no trace of me*
*after I am gone.*

Miss Szent Györgyi passed us tomatoes and cucumbers, and onions and fat bacon from the spit. We dripped the hot pork on slices of brown bread and washed it all down with sweet, amber Tokay wine. It was delicious fare.

Through an American friend, we met Gedeon Dénes, an important figure in the Min-

*See "Freedom Flight From Hungary," by Robert F. Sisson, NATIONAL GEOGRAPHIC, March, 1957.

**Hungarian hospitality:** Mike Lewis and Dave Donnelley join the Sándor Jánosis for dinner in their Budapest home. Mr. Jánosi, an expert on Hungarian folk art at the Museum of Ethnography, and his son sit at the head of the table. Mrs. Jánosi and Miss Maria Szent Gyorgyi (right) serve succulent beef stew, roast potatoes, and string beans. "For the beverage," said Mike, "we had homemade raspberry syrup, a spirt of seltzer, and *pezzi*—Hungarian soda pop." Bookshelves line the three-room apartment. Among the volumes, a ten-year collection of NATIONAL GEOGRAPHIC.

**Dribbling grain** through his fingers, a young helper in Esztergom's market eyes the balance of a scale as he weighs an order.

**Dark-eyed gypsy children** haunt the automat in one of Budapest's railway stations. A passer-by offers them a treat from her bag of sweets. Authorities estimate some 20,000 of these wanderers live in Hungary. Efforts to settle them have met with little success.

istry of Culture. Dénes told us that Budapest once again was a satisfying place to live.

"Before World War II, Hungary was a land of beggars," he said. "Then we were cut off for so long. During Stalin we couldn't sneeze. Since the 1956 revolt, we've been able to relax more and more.

"Now we can be happy with free medicine and inexpensive streetcars. Even the profit motive is working again."

Budapest looks prosperous and acts free. We saw no long queues at stores; food and some manufactured goods seemed more plentiful than in Czechoslovakia. There has been a steady economic upturn since 1956.

Still, in the streets a war veteran who recognized me as an American complained that at his wages it took more than a week to earn the price of a pair of good shoes.

At a dinner the Meteor Boat Club gave for us, husky Ferenc Kiss, former European single-scull champion, was talking to Dan.

"It doesn't matter any more what system I live under," I overheard him say, "so long as I get enough to eat and have some fun."

Lights twinkled into life on passing barges as we left Budapest. We had hauled our canoes aboard the Hungarian paddle-wheeler

*Kossuth* for an overnight voyage to Mohács, close to the Yugoslavian border (page 52).

By pleasant coincidence, eight attractive girls showed up as shipmates. They were returning to Mohács after winning the four- and eight-oar women's junior rowing championships. Far into the cool, starry night the deck resounded with American and gypsy songs and the strumming of guitars.

Mohács, a comfortable country town, once was the scene of disaster. On August 29, 1526, Louis II of Hungary recklessly attacked 300,000 Turks. Louis drowned in his armor, and only 4,000 of his 28,000 Magyars survived. Now Hungarians shrug off trouble by saying, "More were lost at Mohács."

the American Food for Peace program, were stacked against the wall.

From its mountainous hinterland, Yugoslavia feeds to the Danube two great tributaries, the Drava and Sava. At the Sava's mouth stands Belgrade—the "white city"—capital and showplace of Marshal Tito's nonaligned Communist republic.

An American, long resident in Belgrade, told us: "Yugoslavs on the whole aren't fanatical Communists. The people—especially the young people—are more interested in American movies than in local politics."

To us, Belgrade seemed to lean toward the West, in both its busy pace and its aluminum-and-glass modernity (page 61).* We found

Quickly clearing Yugoslavian customs, we were welcomed by two sturdy lads from the Akademski Kajak Klub of Belgrade, who in their own red craft kept us company to the capital city.

Only chains of barges broke the monotony of the riverscapes, but the villages were absorbing. People in the smallest places had heard on the radio of our coming; at times 150 to 200 would close in on our camp.

Often we snapped a Polaroid picture in trade for directions to the local bakery, where hot bread from the brick oven was always superb. At some village bakeries bags of U. S. flour, marked with the clasped-hands seal of

sharp contrast in the Kalemegdan, the great 18th-century fortress on a bluff originally occupied by the ancient Celts. We made camp close beneath it.

Yugoslavs are early birds (office hours: 7 a.m. to 2 p.m.) and great coffee drinkers. In cafes everywhere we saw workers pouring coffee from individual brass pots, gulping it down with bread, sausage, and eggs.

In such a cafe, frank answers about Yugoslavia were given us by another American friend in Belgrade.

Q. "Are the Yugoslavs content?"

*See "Yugoslavia, Between East and West," by George W. Long, NATIONAL GEOGRAPHIC, February, 1951.

# YUGOSLAVIA

**Unexpected friend,** the Russian captain of the cruise ship *Amur* invites bearded Bill Fitzhugh and companions to breakfast aboard. In return, Bill presented the skipper with a Polaroid portrait.

**Popping up like genies,** visitors appeared at every campsite. Outside Veliko Gradište, grandmothers and their grandchildren watch the author set up camp. Like wagon trains in the American West, the travelers arranged

tents and canoes in a circle with gear piled in the center. To keep out the curious, they tried to confine all interesting activity to the outside of the perimeter. But even simple camp chores proved fascinating to the callers.

**Danube shallows** (opposite) near Novi Slankamen fill a farmer's barrels and provide bath and drinking trough for horses.

**Munching fresh corn** on the cob, Dan Dimancescu entertains an audience of 75.

A. "They often criticize the government, but they are usually reticent about expressing their feelings to foreigners. They like progress, and want it faster."

Q. "What kind of Communists run the country?"

A. "Pragmatic people. 'If it works, let's do it,' is their motto."

Q. "What's distinctive about Yugoslavia?"

A. "Paradox. They make a great point of how democratic their society is, yet the publication of the wrong kind of article can land a writer in jail."

An invitation came to us for 7 a.m. breakfast on the Russian cruise ship *Amur*, moored at a Belgrade quay (preceding page). At Capt. Simon Livschitz's table we were served beef fillets you could cut with a sharp look. There were red and black caviar and toasts in two kinds of vodka. Dick Durrance pushed himself away from the breakfast table with a contented smile. "I will never eat cornflakes again," he announced.

With the *Amur* and a sister ship, the *Dunay*, the Russians operate the only through service for passengers between Vienna and Ismail, Soviet port in the Danube Delta. Far more urgent, of course, is the river's busy freight traffic, largely raw materials—coal, oil, and iron ore—bound upstream from Russia and Rumania. The 1964 cargo total on the Danube exceeded 23 million tons.

Reprovisioned with such staples as American peanut butter and ballpoint pens, we paddled away from Belgrade, passing under a bridge that carries a railway to Rumania and the north. It was the last bridge across the Danube for 400 miles.

### Price of a Watermelon: One Picture

Beginning at Bazias, the river's left bank belongs to Rumania. That country would be with us the rest of the way to the Black Sea.

About every 1,000 yards along the Rumanian shore stood a sentry box on stilts. These guard points appeared to be manned only sporadically. Only the tinkle of bells from the flocks and the clear notes of a shepherd's flute indicated life among the hills.

Holding to the Yugoslav shore, we paddled 10 miles to Veliko Gradište, a place none of us is likely to forget. An unprepossessing little

**Glass façade** of the Hotel Slavija towers above Dimitrije Tucovic Square in Belgrade. Heavily bombed in World War II, the Yugoslav capital on the banks of the Danube and Sava Rivers has replaced rubble with modern buildings, broad boulevards, parks, playgrounds, and promenades.

**Beads of water** arch over the backs of husky Yugoslav women flailing hemp. They soak the stalks for as long as two weeks, depending on the temperature, and then beat each bundle in the river to loosen the fibers. After drying, the hemp goes into coarse fabrics or rope.

farm village, it gave us the heartiest, most exuberant reception of our trip. Maybe part of the reason was the height-of-season price of watermelons—four cents apiece. We quickly established a trade rate: one Polaroid picture for one melon.

At our riverside camp, friendly crowds pressed in on us as nowhere else. We counted 253 curious onlookers just before supper. They unzipped our tents, pored through our magazines, stood entranced as Terry Fowler plucked his guitar. Dan eating an ear of corn drew 75 children (page 59).

In the town youth center, under portraits of Marx, Engels, and Marshal Tito, we staged a rock-'n'-roll session. The villagers joined us with gusto.

In a dairy shop we met a retired Yugoslav Airlines pilot who had just returned from a fishing trip in the Iron Gate.

"I suggest you take the Sip Canal instead," he advised. "You might make it through the Gate, but I have seen waves there eight feet high, and the current is at least 15 knots."

We had heard others speak of this stretch of the Danube, and none of the comment had been encouraging.

The Iron Gate, strictly defined, is a shallow, rock-studded stretch at the eastern end of a twisting trough the river has cut through the mountains. But the name is loosely applied to a coiling, eddying, surging section where the river drops about 100 feet in 70 miles.

### Tourists Ride "Rockets" to River Gorges

With some trepidation, we launched for the passage through the Iron Gate.

Russian-built *rakete* (rockets), 80-passenger hydrofoil boats, flashed past us at 40 miles an hour as if gliding on wings of water. These step-riding craft, with daily shuttle runs on a service out of Belgrade, have made the sullen but spectacular Danube gorges newly accessible to tourists.

Beyond Golubac Castle and Babakai Rock (page 64), the mountains gained height. Forest



**Shooting rapids.** Mike Lewis and Dan Dimencescu fight the swirling foam of Yugoslavia's Drina River. Steep, rocky banks add to the danger. Often compared to America's Colorado, the Drina rushes and cascades through deep gorges. Canoeists took a 170-mile train ride from Belgrade to the Drina for the fun of running white water.

**Sudden dunking** surprises the boys moments later. Although they navigated the rapids safely, a treacherous eddy flipped their canoe, dumping them into the stream. They had left their gear ashore for this passage. Only casualty: Mike lost his glasses.



**Serene stretch** of the Drina gives the boys a respite from rapids. Towering limestone cliffs, garnished with evergreens, reminded Dick Durrance of the Canadian Rockies.

Lumberjacks float logs to mills along the Drina's lower reaches. Vacationers eager for a thrill may go to Foča and take a wild 70-mile ride on log rafts. Plans to dam the Drina threaten an end to white water.

PHOTOGRAPHS BY CHRISTOPHER S. WREN
AND JAY ULLAL AND RICHARD H. DURRANCE II (C.N.S.)

**Picnic on a peak.** Canoeists scale disputed Babakai Rock, claimed by both Yugoslavia and Rumania. A lightning rod (also seen below) serves as a centerpiece for their luncheon of sun-ripened tomatoes and tangy cheese. Rumanian guards soon spied the young men and chased them away.

**Canoes slip** around Babakai Rock into the Iron Gate region, where the Danube narrows to 200 yards and dashes headlong through mountain canyons. Terraced ruins of Golubac Castle guard the entrance to the gorges. Seventy miles downstream the river roars through a two-mile-long ravine into the Iron Gate proper, a reef that almost blocks the river. The adventurers bypassed the rolling caldron by taking the Sip Canal, a ship channel cleared of rocks in 1896.

clung to cliff and crag, and great white-tailed eagles soared above the dark summits. As if by magic, we seemed transported to a Norwegian fjord.

In a rapid, Dave, Mike, and Dick missed the ship channel, marked with log buoys. Swept into heavy swells, their canoe was quickly swamped, filled to the gunwales. They soon worked it ashore for dumping.

Now bare cliffs of 2,000 feet or more swallowed us. The river, choked at one point to a width of only 200 yards, but in places 170 feet deep, picked up speed.

"Look!" Chris called out. "There's a ledge that must have been a road."

### Trajan's Road Hewn in Cliff Face

The narrow shelf carved out of sheer cliff on the Yugoslav side was, indeed, Trajan's Road, built by Romans between A.D. 28 and 102. About twelve miles long, the road was engineered as a combination notch and shelf. The rock was cut away to a depth of six feet, then the road was widened with a six-foot cantilevered section of planks supported on timber braces.

That night we camped on a slice of sand under an



aspen tree. The moon lit the cliff walls, giving the effect of a vast cathedral. Silence and stillness were its hymns, its ceiling the Milky Way. I fell asleep like a tired pilgrim in a sanctuary.

The Danube gorges end in a froth of rapids where the river, shallowing, lashes down over ledges in wild, unnavigable fury. The white water tempted us, but the river was dangerously low. We took the airline pilot's advice, bypassing the rapids with a swift run through the Sip Canal.

Even through this leveed stretch of the river an 8-knot current flows. A railroad track parallels the canal, and a locomotive helps tugboats tow their barges upstream.

Soon the Iron Gate will have lost much of its character. In the vicinity of the Sip Canal, Rumania and Yugoslavia have just begun work on what will be Europe's greatest hydroelectric power station outside of Russia, scheduled for completion in 1971.

The dam, 150 feet high, will back up the Danube's waters in a lake almost to Belgrade. Its power will feed new industry in both countries. Shipping will bypass the huge dam in a pair of locks.

### Bulgaria Bars Mike's Sunflower Seeds

Below the Iron Gate the Danube becomes an old, lazy river, wandering across a great plain. From here on, it would be clear sailing to the sea.

Paddling in rain, we passed a series of flour mills footed in mud and powered by battered waterwheels turning ponderously in the slow current. The great wheels groaned as men wearing stubble beards and tattered, whitened clothing waved to us from under flour-dusted cobwebs.

Above Novo Selo, Yugoslavia yielded to Bulgaria on the Danube right bank. We hurried along to Vidin, Bulgaria, where we cleared customs and entered our sixth country.

No place we saw was more immaculate and orderly than the customs office in Vidin. The chief inspector, a husky, dark, contented-looking man, sat behind a bare glass-topped desk. Behind him hung pictures of Nikita Khrushchev and of Todor Zhivkov, the Bulgarian Premier and Communist party leader. The chief's deputies—shoes shined, uniforms sharp-creased—flanked him smartly. On a small table sat a powerful transocean radio receiver.

"You will tell me everything and I will believe

## BULGARIA

**Lonely fortress of Belogradchik guards a pass** 20 miles from the Danube. The Americans took a side trip by car to this stronghold, built by the Ottoman Turks, masters of Bulgaria from the late 14th century until 1878. Embrasured walls, partly of stones from Roman ruins, link fantastic sandstone pinnacles used by the Turks as watchtowers.

you," said the chief. "But if you do not tell the truth, steps will have to be taken."

We presented the inventories of our gear. After sober deliberation, the officers ordered Mike to throw away the dried sunflower seeds he had brought along for snacks.

At Vidin—a city of spires, cupolas, and minarets—we took aboard Jordan Krustev, a bright, friendly student from Sofia. Jordan came to us from the Dimitrov Young Communist League to be our interpreter and guide in Bulgarian territory.

Jordan helped overcome the reluctance of Bulgarian people to talk with us. Most Bulgarians we met seemed to regard the Soviet Union as a benefactor, and viewed travelers from the West with reserve.

Nevertheless, the Vidin sports association challenged us to play the American game of basketball against a local team. We suited up informally, in T-shirts and swim trunks, only to find our hosts in natty uniforms and backed by 300 fans. The score at the half was 20 to 2—in their favor. And our only basket was intended to be a pass!

"Another two points for you," Dave shouted as the home team sank a basket. The Bulgarians shook their heads from side to side.

"But you scored!" Dave insisted. Still our opponents shook their heads negatively.

After several such episodes, it dawned on us that in Bulgaria head movements for "yes" and "no" are the reverse of ours.

### No Beards, No Rock 'n' Roll

In Lom a Communist youth delegation met us at the shore and took us in a bus to see the local beet-sugar refinery. A dozen pretty young girls in overalls presented us with bouquets of roses. The factory, built four years earlier, was operating efficiently.

In Bulgaria, many factories never close. In such plants, days off are staggered, making Sunday just another work day.

Our hostess at dinner, the daughter of a local Communist Party official, told us frankly

# RUMANIA

**Clean shaven** for the first time in three months, Dick Durrance views himself in the mirror of a Budapest barbershop. Chris Knight films the event.

**Other-world strangers:** The nine young Americans attract a crowd as they break camp at Ostrov. Bruce Irvine took Polaroid snapshots of the throng, and in the crush to look at the pictures, Bruce and camera almost landed in the river. The appearance of the students on Rumanian television brought throngs to their campsites. The youths named one of their canoes Bahakai for the rock above the Iron Gate, and another Ulmer Spatz—Ulm Sparrow.

in excellent English that her countrymen are "advised" not to talk to Americans. Also, beards are discouraged. Dave's query, "How about the beards that Marx and Lenin wore?" drew only a shrug.

"Rock 'n' roll is frowned on too," the girl said. "But I have piles of Beatles records. No one knows, and it wouldn't make any difference if they did."

Jazz apparently draws no criticism. The band played the Brubeck Quartet's "Take Five" and other modern pieces.

If the young lady had any influence at all, it almost failed next morning when she went with Dan to several bakeries, trying to buy bread without a ration ticket. Up and down went the Bulgarian negative head shake, but eventually they returned with bread, butter, a cake, and sweet rolls.

A few miles above Oryakhovo we spotted a man and woman on shore energetically waving a flag. It was an American flag! Instinctively we knew this could mean only one thing—mail from home. We swerved toward the riverbank and there the Williamses, Warren and Nancy, from the U. S. legation in Sofia, held out hands to grab ours.

To make the rendezvous, the Williamses had driven for several hours over terrible roads. There had been no certainty of finding us. We were deeply grateful. It was wonderful to talk without restraint to fellow countrymen.

### Free Discussion Flows on Wide River

Jordan, our Bulgarian comrade, had sensitivity. A glorious sunset elicited from him, "It's beautiful—perfect. I can never see anything this splendid in Sofia!"

An articulate, intelligent fellow; Jordan enjoyed frank discussions about communism, socialism, and capitalism. Out on the wide river, as we relaxed and let the current carry us, he asked about our beliefs and discussed his own.

"Ours is a special problem you don't have," Jordan said. "After World War II we had to revive our economy by whatever means were possible. We are willing to sacrifice some human privileges to achieve specific material gains."

Later he voiced, unconsciously, an old Balkan suspicion when he said: "I don't like Rumanian. It sounds like Chinese!"

We hitched a ride on a coal-stoked local river boat, the *Christo Smirnensky*, which had a permanent starboard list and a surprisingly good cook. At village stops, dark men and pigtailed farmwomen got on and off. On the open top deck elderly couples sat with only handkerchiefs to shield their heads from the broiling sun. Young men played cards. Sun-cracked faces, threadbare clothes, and gnarled, stubby fingers told of lifetimes of unremitting labor.

At Ruse the boat's engineer, blackened with soot, came up



**Dawn's tawny light** suffuses morning mists at Ostrov. Twitching a stripped branch, a woman drives a flock of ducks. In the distance, men row to island farms that dot the three-mile-wide Danube.

**Cloud of wool and dust** follows a shepherd through the streets of Tulcea, an industrial town at the head of the Danube Delta. Down from the hills, the sheep will be ferried across the river to market.

**Attention riveted,** Rumanian children watch television through a store window, which reflects the screen (above). Youngsters come each night for free entertainment; few families, living on an average income of $80 a month, can afford a $225 set, but installment buying is sparring sales.

**Like black diamonds,** eyes flash beneath raven locks of a spectator at the 1964 Balkan Games in Bucharest. Held each year in one of six participating countries, the games help determine Olympic contestants.

**Battle on the board:** Rumanian soldiers maneuver their forces in a game of chess. They play on a bench in Republic Stadium during a lull in the Balkan Games.

out of the engine pit and shook my hand.

"Good luck, *Amerikanets*," he said.

The new Friendship Bridge, completed in 1954, vaults the river from Ruse, Bulgaria, to Giurgiu, Rumania. Here we left the Bulgarian side of the Danube.

Dan Dimancescu, whose parents left Rumania early in World War II, took off at Giurgiu for the short side trip to Bucharest, the capital city, 40 miles north of the Danube. Later Dan rejoined us, reporting that Bucharest was experiencing an upsurge of pride and self-sufficiency.

"But housing can't keep up with the birthrate, plus the people moving in from the country," Dan told us.

Clinging now to the Rumanian side of the Danube, we found the river vast and lake-like, swept by the mighty northeast wind. The sky and shore seemed alive with waterfowl—herons, spoonbills, cormorants, and graylag geese.

**Phalanx of apartment buildings** edges Tonola Park in Bucharest. Rumania's State Circus, one of the city's most popular entertainments, performs nightly under the concrete-scalloped dome at right. Like other Eastern European capitals, Bucharest suffered extensive damage from air raids in World War II. Modern buildings such as these rise beside the many lake-studded parks for which the city is famous.

Frequently, shirtsleeved guards popped out of watchtowers. Throwing on jackets and caps, they hustled down to the riverbank, shouting at us and waving us inshore at rifle point to examine our papers.

It always turned out that they were on the lookout for Bulgarian "wetbacks," people from across the river trying to sneak illegally into Rumania. When Chris explained our mission in basic Rumanian to one group of guards equipped with machine guns, they cheerfully gave us a tow downriver behind their patrol boat.

At Galiţa a vineyard engineer of the leading Rumanian winery gave us crates of juicy grapes. Not far away we visited a fantastic archeological dig at a place called Island of the Sun, where excavation had exposed bases of huge pillars, apparently the foundations of an enormous Byzantine shipping terminal. Fragments of fine pottery were coming to light, and a treasure of coins. Nearby, test trenches had located ruins of a Roman village.

### Russian Sentry Cuts Visit Short

Tied on behind two successive barge tows (petunias in window boxes, pairs of wooden sandals at the doors of curtained cabins), we rode grandly down the widening river.

We were impressed by huge Russian barges pushed by powerful square-prowed tugs. Far better, obviously, than pulling the tows through the propeller wash. In the lower river we saw beamy Russian tankers driven by

**Beating clothes clean,** women of Ivanova, a fishing village, toil in the broiling sun of the Danube Delta. After soaking garments in the river, they flail the dirt out of them.

**Grizzled fisherman** scoops water from his boat before rowing out for carp, catfish, or pike in the delta marshes.

**Agile fingers** of a delta woman twist raw wool into thread at Carasuhatu de Jos. The widow invited Chris Knight to breakfast on hot milk with melted sugar, roast corn, and bread. "I will cook for you," she said, "like I did for my husband." Her daughter sets out a round loaf of bread.

engines so strong that the craft planed swiftly across the water.

Russian barges stood out in other ways. The deckhands of Austrian, Rumanian, and Yugoslav barges swabbed decks with mops, using water lifted from the river in buckets. Not Ivan. He used a high-pressure hose.

The Russians even set themselves apart by their choice of music. Austrian deckhands would listen endlessly to radio-rendered rock 'n' roll. Serious classical music was the fare of Russian crews; it was piped over a public-address system.

Beyond the busy port cities of Brăila and Galaţi, we pitched camp on a sand bar. Across the Danube lay the Soviet Union.

We had no visas for Russia. Still, with that country just a river's width away—

"It would be a shame to travel this far and not even set foot on Soviet soil," Mike and I agreed.

On the pretense of fishing, we paddled to the forbidden bank and stepped ashore with an odd tingle of excitement and guilt. Almost immediately we came to a broad, plowed path, where I almost stumbled across a wire.

A trip wire? Had we come upon a mine field? We never found out. At that instant I spotted a sentry slowly patrolling his beat!

We had hardly returned to the Rumanian side, rejoining the others, when two Rumanian army officers rowed up in a small boat.

"That's Russia across the river," said one.

"Is it really?" responded Fitz innocently. He unfolded our prewar map, drawn before Russia acquired the left bank of the Danube.

Dave gave each officer a Ledyard Canoe Club pin, and they rowed off quite cheerfully.

### Birds Find Haven in Danube Delta

Turning eastward now, the river soon split into three main channels: the Chilia (northern), Sulina (middle), and Sfintu Gheorghe (southern) mouths of the Danube.

At Tulcea, we separated into two groups. Two canoes took the Sulina channel, the dredged and straightened ship route (above). Fitz and Chris, Bruce and I headed down the Sfintu Gheorghe (St. George) channel, then scattered among reedy sloughs and lakes to look for birds.

The Danube Delta is one of Europe's greatest bird sanctuaries, clamorous with egrets, pelicans, flamingos, and herons during the breeding season. Pointing out nesting sites to casual tourists is a civil offense!

**Route of commerce,** the Sulina channel opens a way for freighters through the delta, a wilderness of marshes and reed islands that serves as one of Europe's largest bird sanctuaries.

**Gourmet's delight,** frogs line Bill Fitzhugh's paddle. Delta villagers, who believe only starving people would eat frogs' legs, offered their own plain fare.

**Gathering water chestnuts,** a father and his three children pole along the edge of the Sulina channel. Mother will roast the spiny nuts (*Trapa natans*) or grind them into coarse flour.

But it was September now, and we wore ski parkas against the chill wind that blew from the north. Delta fishermen told us, "You'll find the birds lower down." Or, "They're in the next lake." Or, "You haven't seen any?" And then finally, "They flew away with last week's cool weather."

We did see egrets and herons, and at any time the delta, choked with reeds taller than a man, is a fascinating wilderness. Glowing sunrises and fishermen in enormous furry hats; rowboats moving under picturesque lateen rigs, bee farms, fishing nets drying beside thatched and whitewashed cottages—these are elements of the delta scene.

At night, near a tiny village with the grand name of Carasuhatu de Jos, we caught a couple of dozen fat frogs, blinding them with

flashlight beams (page 77). A bearded shepherd named Zak visited our camp and was startled to hear the frogs thumping against the pollid that held them captive. We explained that we planned to have fried frogs' legs for dinner.

The shepherd, bulgy in an ankle-length sheepskin coat, reappeared next day with a gift of sheep's milk and a big pot of cheese. A woman who took a fancy to Chris led him into her cottage for a special delta treat—hot milk and melted sugar. Two local schoolteachers brought an offering of fried fish and chicory coffee. One of them finally set the record straight.

"In this country," she said, "no one eats frogs' legs unless he is starving!"

One day we rounded a bend just like a thousand others, and there was the Black Sea.

At the timeless, dusty fishing village of Sfintu Gheorghe, our flotilla reassembled. We watched, fascinated, as the great sturgeon were brought in from the Black Sea. The fish obviously thrive in the puree of water and muck stirred up here as the river dumps 100 million tons of silt each year. Fishermen snag them on gangs of sharp hooks dragged over the shallows off the Danube mouth.

### New Hope Stirs in Danube Lands

Trains of tarred, eight-oared boats are pulled in by tug every day from the fishing grounds. The catch may be 50 sturgeon, many weighing 500 pounds or more. Perhaps only one fish out of twenty yields the roe that becomes caviar, but she may furnish a bushel. The fish themselves go to domestic market—fresh, canned, or dried; some are exported.

Coast guards probably kept us under watchful scrutiny as we paddled into the Black Sea at sunrise on our last downriver day.

Eight countries, 1,685 miles, 73 days on the "dustless road," as gypsies call the Danube. I recalled something Fritz Meznik had said to us in Vienna:

"The old nationalism of each of the Danube countries is reasserting itself, as once-harsh control from the East is being relaxed."

Our view from the Danube had shown us new hope, new vitality—and perhaps new frictions—among the countries of Eastern Europe, both free and Communist-controlled.

I wondered. Would these lands ever unite in common peaceful purpose, as the waters that flow from them pool placidly at last in the wide Black Sea?

THE END

**Piercing the saffron haze,** the sun's white eye witnesses journey's end at the Black Sea. "It was more than just an exciting vacation," said Chris Knight. "It was a lesson in people. Despite political differences, folks all over the world are warm, friendly, and eager to help strangers."

# *Home to Arran* Scotland's

Mosaic of a memory relived: Verdant hills, cloud-dappled peaks, and whitewashed villages like

# Magic Isle

By J. HARVEY HOWELLS

**Lamlash called the author back to Arran after 20 years abroad and claimed his heart once more.**

# Dour Scots? Not

THERE IT WAS, close in to port. The Mull of Kintyre, a rocky headland like a crouching lion, dwarfing the ship. Fifteen hundred feet high, barren and rugged, yet soft in the dawn sun that pastelled every color—the browns, the greens, the blues, the yellows.

I drank it in for a long time, for this was my first sight of Scotland in 20 years and three days. I had left it as an emigrant with a hole in the seat of his kilt. The two decades had brought a modest success on the slick surface of Madison Avenue, but never enough free time to return. Not until now, and nostalgia had grown with the years. American citizenship hadn't weakened the yearning. Why should it? Does one love one's mother less because one takes a wife?

But could the mother country be as beautiful as memory's painting? The warning of Thomas Wolfe's novel *You Can't Go Home Again* had dirged in my ears all the way across the Atlantic.

"Och, it's bonny, bonny!" whispered a little old lady beside me. No sleeping-in for the Scots-born this day.

"Aye. It is that." I gave her back the dialect, not to break her mood—or mine.

### War Leaves Relics as Calling Cards

After six days on the Atlantic, *Parthia* cruised a calm sea with a following wind to still the air of a perfect August morning. The Firth of Clyde is 35 miles wide, and there was no other land in sight except the dim blue cloud to starboard that was Ireland. The Mull is all one sees of Scotland at this point (maps, pages 86-7).

We leaned on the rail in the morning sun and let it all wash over us.

*Parthia* altered course to the north at the Sanda lighthouse. Sanda. I remembered the light, but not the two sunken ships careened below it, red-rusted obscenities against the rocks. A war had come and gone, and this had been the northern route to the European Theater of Operations.

"That'll be Arran," said the old lady, pointing, and I nodded.

"Johnny Morey's island?" Jeannie asked softly, joining us at the precisely correct moment. She had our six-year-old son by the hand.

I nodded again and put Jamie between us.

*Johnny Morey. Johnny Morey.* A Glasgow flat in winter and my mother's knee at pajama time, my bare feet to the kitchen fire. Mellow gaslight popping and the long, gloomy December night rattling its sleet and rain against the window.

SPELL OF ARRAN, luring visitors to its shores summer after summer, lies not only in the island's beauty but in its people. With their wry humor, shy smiles, and genuine ways, they make the off-islanders feel like friends, never strangers.

John Henderson, "the quiet one," rents boats and bathing huts on Brodick Beach (top left). "I asked him what happened to Gracie, prettiest girl on the island," recalls the author. "He grinned and said, 'I married her!' "

Sandy Kibbeck (top right), a boyhood idol of Mr. Howells, feeds his Sealyham.

Wee Geordie, as islanders and outsiders alike call George McCabe (left center), meets the ferry. Recently retired, he helped haul in the hawsers for decades.

Each Saturday, Brodick's "big night of the week," the bartender of the only pub (right center) keeps busy passing ale and stout.

"My ancestors believed in the fairies," says Bess Macmillan, a hairdresser of Brodick (bottom left), "and I too believe there are fairies still on Arran. I am very interested in island folklore." She makes tea in her spotless "wee house," a small annex behind the cottage that she rents to summer visitors.

In an old church in Whiting Bay, sculptor Claude Gill (bottom right) fashions a carving. His family shop, Arran Gallery, produces jewelry with Scottish stones and prints greeting cards.

Arranites. They wreathe their welcome with a smile.

*Chase away the winter. Bring back the summer. Tell me a story about Johnny Morey.*

And the stories always came. For my mother loved Arran, too, and the tales of Johnny Morey transported us there in a flash.

Johnny was courage, duty, kindness, honesty, fun—everything a mother could want a boy to be. He saved stray lambs from eagles. Lit the lamp when the lighthouse keeper broke his leg. Rescued daft climbers on the mountains. Dived off the pier to save a boy who'd gone too near the edge. Every telling had a moral that slipped in as easily as ice cream.

To me, Johnny Morey was as real as the bracken and the heather and the crystal water of the rushing burn, the reek of the pigsty and the clang of hammer on horseshoe in the smiddy. As real as falling off the jetty and running home, soaking salty-wet and crying. As real as the Island of Arran itself.

I have taken Johnny to America with me. Now it is my turn to hear *Tell me a story about Johnny Morey*, and I do nightly and gladly. And every telling takes me back to the island that means Scotland to me.

### Palms Grow on a Scottish Isle

Now, at last, no child's tale was needed. Arran itself lay ahead off the port bow. Its jagged granite mountains soared 2,800 feet straight out of the river-sea, their stone a deep blue against a fleecy bank of cumulus. That is the north end, the wild and rugged home of

### Dahlias Bloom Where an Exiled King Once Plotted to Regain His Crown

From here Robert the Bruce, deposed monarch of Scotland, rallied his followers in 1307 and laid plans to return to the throne. Sir Walter Scott visited hermit Brodick Castle while cruising western Scotland in 1814; he found "the situation of the castle very fine" but thought the gardens too formal. The estate now belongs to the National Trust for Scotland and welcomes visitors.

the red deer and the grouse, the retreat of the solan goose, or gannet.

The south end is gentler—rolling moors and arable land, a lush garden warmed by ocean currents. Here, a thousand miles farther north than New York City, unbelievably, palms grow.

All around, hugging the 60 miles of shoreline, are villages with singing names, each a story in itself: Kildonan, Largybeg, Drumadoon, Catacol. Inland there is only the rare whitewashed farmhouse, the shooting box, the stone pens for sheep.

For there is no industry on Arran. It was a royal hunting preserve for centuries, and ancestors of today's 3,450 islanders lived off the regal favor, the sheep, the cattle, and the fishing. On the heels of the industrial revolution came the fashionable revolution that said a solid businessman should send his wife and bairns away for the summer.

The Arranite built a small house and rented his farm to the cityfolk. Then he built a lean-to and rented the small house. And if he were greedy, he rented the lean-to and moved in with the cows. At least that's what my father used to say when he was sour from paying the bills at holiday's end.

No one tried to turn Arran into a conventional resort. The native's attitude was "take it or leave it," a thrifty approach that preserved the island's beauty unsullied, the way we visitors wanted it.

But all that was 20 years and a war ago. I could only pray that it had not changed.

### Porpoise Escorts *Parthia* to Brodick

We neared the southern tip, and a porpoise came to greet us. Enormous in gray and silver, he surfaced and dived in our bow wave for a long mile, not ten feet from *Parthia*'s flank.

Past Whiting Bay. Past Kingscross. Robert the Bruce sailed from here early in 1307 on the road to Bannockburn and the founding of the Stewart dynasty. (It was Mary Queen of Scots who made it "Stuart" to suit her French-ified tongue.)

Past Lamlash Bay, the best anchorage for miles around.

And then Brodick Bay, my own bay, the loveliest of all (pages 96-7). A two-mile crescent of rock with the wide beach in the center, the village on the left hand and, on the hill above, the tiny fields quilted square by dry-

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**The Author:** J. Harvey Howells, born and educated in Scotland, moved to the United States as a young man. A former New York advertising executive, he switched to writing in 1955. Since then he has produced numerous television plays and two novels. He lives in Brunswick, Maine.

stone walls. I wished that *Parthia* would land us here, now. But her port of call was Greenock on the mainland, up the firth.

*Patience, man. You've waited 20 years.*

Behind Brodick's golden sand, the green of moor and pine mingled with the purple of new-blooming heather. And to north and west loomed the mountains. Goat Fell—in the true Gaelic, Goadh Bhein, Mountain of the Wind; Cir Mhor, the Castles, Ceum na Caillich (the Witch's Step), and the range called the Sleeping Warrior, a granite giant, armor-clad, lying at rest.

### Clyde Steamers Race No More

All my summers I spent here. And my mother hers, and her mother and father before that.

Here I learned to swim and fish and handle an oar. We boys "kept the boats off"—rowing them about near the shore—for John McBride, the boatman. It saved him hauling them up and down the beach with the rise and fall of the ten-foot tide, kept them ready for the bob-an-hour renters.

My feet never saw shoes, except for the kirk, until I was older and set out to climb every mountain. I went the easy ways first, like the walk up Goat Fell, the harder rappelling ways later. There are a hundred different climbs, from an old lady's saunter to a young man's challenge.

Here, too, I kissed my first girl. I stole the kiss from Mary in front of others, and it angered her. But later she whispered that her sulks were for the theft, not for the kiss. She'd wanted it. What an epoch-making discovery that was in the art of growing up!


As Brodick Bay fell astern, clouds dropped a first-act curtain over the mountains, shrouding them in mystery, leaving only the green foothills and the glens rising up into the mist. I went below for breakfast.

At 10 a.m. *Parthia* dropped her hook at the Tail of the Bank, where the tender waited to land us at Greenock.

GI's had debarked here, too, on the long journey to England and their rendezvous in Normandy. Then this great basin was filled with the ships of war, the cruisers and destroyers, the aircraft carriers, submarines, even the *Queens*, and the endless, vital freighters. But now the only ships were those of commerce and pleasure. Rolling mountains surrounded us, pierced by the lochs that wind back into the hills.

Once ashore, it took but ten minutes to clear customs and rent a car, but a hectic week of "remember . . . remember . . . remember . . ." delayed us. At last we broke away from boyhood friends and drove to Ardrossan to catch the Arran boat.

The Clyde is famous for its pleasure steamers. I remembered when there were three lines, with thirty ships and more flashing between piers and islands, racing for the waiting passengers. Was it Ian Hay who wrote of seeing one creaming up the Clyde "under the


forced draft of triple competition"? Dented bows, splintered piers, and heavy bets were commonplace. Now all but one wear the yellow-and-black funnel of British Railways. They nationalized the pleasure fleet, too. I may be wrong, but they seem to steam more slowly now.

### Boat Time Still a Big Event

We boarded *Glen Sannox*, a brand-new car ferry with elevator and turntables that can handle 60 cars in minutes. On the old, stately *Glen*, the rare car boarded her over two wooden planks, a dodgy business calling for real driving skill. The new way is better, but the other was fun to watch.

Brodick lay west across 13 miles of azure estuary. At 18 knots, the mountains of Arran grew ever more intimate as nearness pulled their mystery aside and exposed their scarred flanks and individual shapes.

The *Glen*'s engines went hard astern as she took the pier. So help me, Wee Geordie was

there to catch the lines as he had in my father's time! He hauled in the heavy hawser as if it were thread and he still a boy (page 83).

No change either in the day's big event—"meeting the boat." The holiday crowd stood waiting: men in flannel shorts, ladies in cashmeres, and school-blazered children with their bikes. The pier had a concrete surface now. A good thing, that. Many's the skelf I rammed into my bare feet on the old plank deck.

I saw a few more sheds at the shore end, and beyond them stood two or three more boardinghouses.

But a puffer, stubby mast forward, funnel aft, and the rest one great bunker, still squatted on its bilges by the stone quay and unloaded coal (page 95).

A dozen shiny cars at the Douglas Hotel, where before there were none. Unpacking was an agonizing delay. Let's go! Let's go!

We climbed a black-top road—it used to be a path between rows of hawthorne hedge—our backs to the bay. The old Dowager Duchess wouldn't permit any building here. It would have spoiled the view from her castle bedroom across the water. But she's gone now, and the new homes are gay and light. One even had a lawn of heather shyly purpling with early bloom.

"This is the first house where I remember staying, Jamie." I indicated one of ten red stone cottages, all of them connected, all with

**Spikes of stone** set in a circle on a moor near Tormore may have witnessed ceremonial rites of a prehistoric people. They probably date from the time of England's Stonehenge, 3,500 years ago.


**Rugged mountains** mark Arran; some say its name means "high island." The sea beats here, all around and ever present, scoring the rocky flanks with wave-washed bays. Kidney-shaped, stretching only 20 miles long by 10 miles wide, the isolated island provided a refuge for political exiles and smugglers of earlier times.

# The Island of Arran


PREPARED BY
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tall twin chimneys. The Duchess liked them. They belonged.

"Is that the one where Johnny Morey brought you the eaglet with the broken wing?" asked my son.

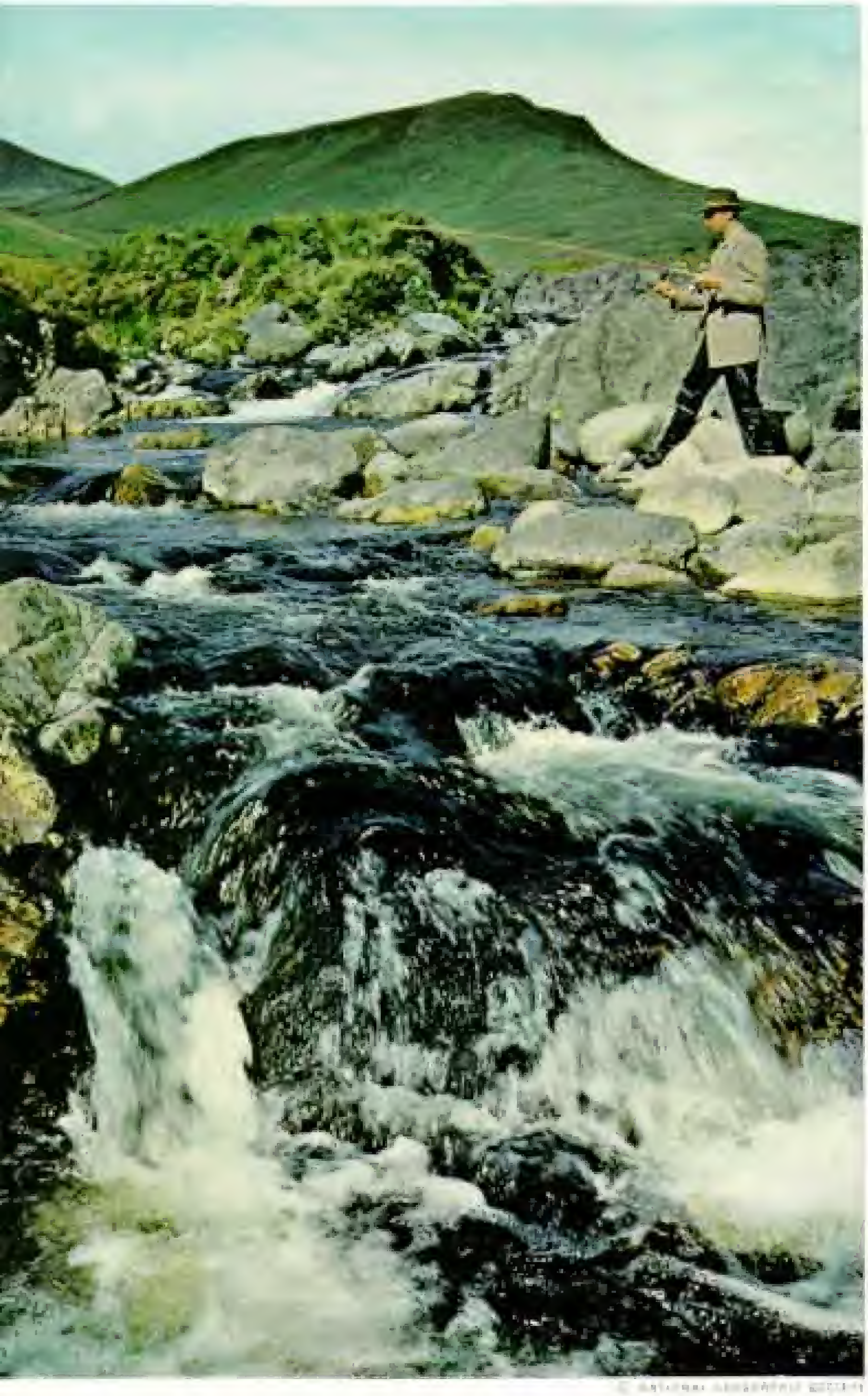
"That's the one." I've made up my own fables, too.

"Where's the stable where he kept Nell?" His face was solemn.

Would the reality of the island destroy the reality of Johnny?

We went round to the back, but the byres and stables that had sheltered the cattle and horses were tool sheds now. I thought the animals' fragrance still lingered in the lane where long ago I had learned, very badly, to milk a cow.

Along the row of memories, hand in hand with my son, who looks like me. Would he see like me? Past the Mayish Farm—the best place we ever stayed. Past the house the Williamses rented, the house where Jack lived—Jack Buchanan, the actor, my first brush with glamor. Mary's house. Which was her win-



dow? We used flashlights and Morse code to signal our plans for the morning.

The pigsty was gone, the smiddy too.

### Dreams Come True on "the Roost"

Down to the heart of the village now, to the one-sided main street of shops interspersed with homes, boardinghouses, and tearooms. A wooden railing that once was gray and weathered separated street from beach. We called it "the Roost." Here boys used to perch in the morning and watch for girls. At night, too, but then the Roost was for contemplation, and a man of 19 could turn his back on the road to gaze along the deserted beach up over the green of Glenshant Hill to the near-perfect pyramid of Goat Fell. Smoke a pipe here in the long gloaming, and dreams were not only possible, they were certain.

But nobody sat on the Roost this day, perhaps because they had painted it gleaming white.

Along the beach ran the line of bathing huts, the colors varied to help a child find

"**Put some muscle in it, laddies!**" A kilted coach exhorts his team during a tug of war in the Highland Games at Brodick. All wear the Royal Stuart tartan. The annual test of balance and brawn derives from the days of the clans, when young warriors fiercely competed for family honor. Modern games include marching, pipe bands, and Highland flings, along with the traditional sports.

**Grimacing with strain,** a contestant at the Brodick Games (left) tosses the *caber*—Gaelic for pole. He tries to heave the tree trunk so that it will land on its upper end and fall away from him. Scottish record toss is 42 feet.

**Solitude soothes** a trout fisherman along the North Glen Sannox, and brings to mind the words of Izaak Walton: "These crystal springs should solace me, To whose harmonious bubbling noise I with my angle would rejoice."

Mother. Four brown, four red, four blue, four green, then brown again. The rows of dinghies were there, too, and the small boys keeping them off.

Children still scampered down the beach and hurled themselves into the bay. They still ran back to parents in deck chairs, ready with huge, enveloping towels and a piece of toffee to pop into a blue-lipped mouth to cushion chattering teeth. "A chittering bite," it's called. Did I really swim in that torture water?

One hut still bore the same sign, although the owner's name had changed. *Bathing Huts For Hire. Also Boats and Fishing Tackle. John Henderson, Prop'r.* We walked over to it. On a bench outside, boys shelled mussels for bait, as always, a pile of handlines beside them.

I stepped inside. "Do you have a boat for me?"

"No' the noo. I'm sorry." John's graying head turned, and slowly his great hand came out. "Harvey Howells!" he said, and my cup overflowed.

John sent a bait boy to fetch Sandy Kibbeck (page 85). Sandy was an island man, too, but all mixed up with Johnny Morey, when I was very young. It was Sandy who first let me harness a pony, he who met me at the pier, and when I put a face on Johnny Morey, it was always Sandy I saw.

His joy in reunion was overwhelming. Not only for me but what I stood for—the days when the families came to Brodick for months at a time, the Glasgow middle class to whom Brodick in summer was as immutable as Christmas on December 25.

"It's no' the same," said Sandy sorrowfully. "Two



**Steeped in the romance of time,** a castle's stark ruins crown a finger of land jutting into Loch Ranza. Here, says a local tale, Robert the Bruce found his first haven after retreating from the mainland in the early 14th century.

**Towheaded toddler** frolics in the shallows at Brodick Beach. His less adventurous elders (below) sit out a morning on the sands, well bundled against the chill of wind.

**Castle builders** ignore the ferry sailing to Brodick pier. The 14-mile run from Ardrossan provides Arran's only regular link with the mainland. Ferries make four trips daily in summer, only two a day in winter.

**How much am I bid?** Annual auction of Highland crossbred sheep at Brodick attracts buyers from all parts of the island. The hardy animals, first introduced here in the late 18th century, produce exceptionally long fleece. Arran's highest peak, 2,866-foot Goat Fell, rises at extreme left.

weeks they come for, the folk we get now. The auld families are a' split up. Oh, they come for a weekend, for auld times' sake."

"Maybe they'll come again," said John, the quiet one. "They'll want a place for their ain bairns to grow up properly, too."

At the hotel, Jamie found three who were doing a fine job of growing up. Michael, 10, Colin, 14, and Michael's brother, Forbes, 16. They treated our young one as an equal, but with a paternal eye for his tender years. The oldest boy asked ours to go for a walk one day. Think of that! A teen-ager welcoming a six-year-old as a companion.

It was raining, clouds right down on the ground. (If you let Scotland's weather run your life, you won't have any life at all.) An hour later they came back up the drive, raincoats buttoned, hair plastered down, arms swinging, feet in step, jaws chewing in time, too. You could hear the pipes. A complete communion was in them, and if Jamie ever puts a face on Johnny Morey, I'm sure it will be that of "Forbesy—he's my friend."

### Scottish Breakfast: Tea and Baps

We dined with the parents of Michael and Forbes, while the boys at their own request ate at a separate table, a real holiday treat.

We fed well. Gloriously. Scottish beef has a firm but tender texture that comes from lush grass eaten regularly. On board *Parthia* a man had said that the only good things to come out of Scotland were beef and whisky. "And the train to London," said his wife brightly. But they were English, poor souls.

Try a shoulder of lamb some time, instead of the leg. It's a better cut, I think. With fresh mint sauce, tangy and tart to bring out the true sweet flavor of the meat.

Fish right out of the sea, flakes white enough to dull the napery. Fresh-picked peas, marble size, with a dry, mealy center. Broad beans we don't grow in America. And the potatoes! Like a bag of flour inside. Arran potatoes are famous. Donald McKelvie bred a strain whose seed went all over the world. Gooseberries, too, do all right here. Spoon clotted cream and powdered sugar over them, and you have a dish of summer sunshine.

Scotland's the home of the baker. For breakfast, try a bap: a Scottish roll, hot, with four pats of sweet butter and scrambled egg inside. And tea, lashings of good, strong tea. Forget coffee till you're back in the States.

Fresh boiled salmon. Breast of grouse, after the season opens on August 12. Watch out for the bird shot, though. Wiltshire bacon, tasty lean. Herring fried in oatmeal. And always a cheese tray with six different varieties, each one ripe and fragrant.

*It's no' the same.*

*But Sandy, it hasn't changed that much.*

Little boys still row boats. Jamie took me from beach to pier, and that's a full half-mile, a long pull for a young fellow. On the stern of the clinker-built dinghy I read "John Henderson, Brodick." Under the "Henderson," ever so faintly, I made out "McBride," and I knew I had rowed her myself.

They still herd sheep to the pier. We saw them from our bedroom window, a wool jam on the road between the hotel wall and the rocks. We helped the shepherds steer the foolish animals onto the gangway, spreading

**Fresh-washed by a shower,** Brodick's quiet main street holds few hazards for cyclists even during the height of the summer tourist influx. Most visitors depart in late August.

**Forced ashore by "Scottish mist,"** as islanders call wind-driven rain, a family beaches a sailboat at Brodick. Briefest bolt of sun sees them shed foul-weather gear and take to the water again.

**Brave bathers dare an icy dip** in the Glen Sannox. But most sun-seekers, arriving by bicycle, car, or on foot, prefer to laze on the rocky banks of the stream.

our arms wide and shouting, "Sho! Sho!" while the collie dogs nipped and barked.

The Duchess of Montrose has gone, but her castle still stands magnificently. We went to see it at 2/6 a head—35 cents. The Lady Jean Fforde gave the estate to the National Trust for Scotland in 1958, in part payment of the death duties of her mother the Duchess. The Trust now maintains Brodick Castle and its gardens to "ensure the safe keeping of these superb national assets as a single entity in the future." Lady Jean moved into the factor's house. A sad way, maybe, to perpetuate a line of occupancy that runs from 1503, but better than nothing.

Built and destroyed and rebuilt over the years, the castle is a four-story building of sandstone, with square, crenelated tower and broad terraces for peacocks. The guidebook calls it "a perfect example of the Scots Baronial style." That it is (pages 84–5).

### History Peers From Castle Walls

Most of the rooms were open to the public. In the entrance hall, one white wall is entirely covered by antlers, hundreds of them, from stags shot on the island.

Lining the long gallery, deep shadow boxes show the crystal, the miniatures, and the Dutch and Flemish wood carvings. Exquisite old china, including a bowl gifted by Napoleon. Furniture I have not the knowledge to describe. The great ceiling wholly covered with the crests of the families who made up

the line. On the walls, portraits of the beauties who bore the line, ending in the life-size oil of the late Duchess herself, gazing serenely down on the interlopers.

What was it like, living here with history? In the ninth century a Viking fort looked over the bay from this height. We saw the table marked by tradition as the very one where the Bruce, by then King Robert I, dined in 1326. The great kitchen, gleaming with copper, could still feed an army, though now it's tea for tourists instead of venison for soldiers.

Cromwell's men headquartered here, and some of them were murdered. The stone-vaulted prison has a bloody record.

With all that, the castle gives the feeling of having been a home. The Duchess of Montrose's real monument is the wild garden she loved and cared for—a riotous waterfall of subtropical shrubs and plants cascading down to the bay. And the back garden is 7,000 acres, with Goat Fell for overlord.

### Carved Message Awakens Memories

*Save, Sandy, I liked it the old way, too, when the Duchess was here and the islanders owned everything.*

Now the hotel is owned by a mainland corporation. The bakery is part of a Glasgow chain. So, too, are the grocery store, the sweet and tobacco and ice cream shops.

*You'll no' be goin' to the dance*, said Sandy, *It's just a bluidy rabble noo.*

I remember when the Saturday dances at the Village Hall were the high point of the week for the visitors. Girls were permitted a dab of lipstick, we boys shined our shoes, and mothers coached from the sidelines with a wary eye on the spinning flirtations.

Installed in the balcony now is a projection booth. The Beatles in Brodick? The old Duchess would never have allowed it!

We wandered through the building. On an impulse, I turned in to the men's locker room. Initials scarred its wooden walls. On one I read, "Harvey Howells loves Mary . . ." (Her full name is there, but you'll have to go to Brodick to read it.) Thirty-odd years ago I blacked the eye of the boy who carved it. I should have thanked him instead.

*How are you now, Mary?* Slainte mhór—*Good health!*

In Arran there is no law of trespass. Cool climate, moor, and sheep track encourage use of the legs. Each beauty spot is hard by the next, and the road between is beauty, too. Walk five miles up the Rosa Glen, with its clear rushing water and straight-up mountains, and the word "beauty" itself takes on a

**Beached by a 10-foot tide's fall,** a flat-bottomed boat unloads without benefit of wharf. When the tide comes in, the vessel floats free and sails off. Coal-burning craft like this one, called puffers, haul supplies between Arran ports and the mainland as well as other coastal islands.

**Red deer** browse the moor at twilight. Arran served as a game preserve for lords of old.

**Heather-clad slopes** rise like an amphitheater behind Brodick and its crescent bay.

**Dew-spangled web** calls to mind the legend about Robert the Bruce, which Arranites claim for their island. Defeated six times by English armies, the exiled King of Scotland lay in a cave, watching a spider weave her web. Six times she failed to throw her frail threads from one beam to another. On the seventh attempt she succeeded. Taking heart, Bruce rallied his forces for a seventh—and victorious—battle in 1320.

new meaning. The nearness of everything breeds an intimacy, a personal sense of ownership in glen and burn and hill.

There's something for everyone. Game, brown trout, birds, harbors. Rock-climbing, tennis, golf, Highland games (pages 88–91). Ancient monuments are strewn all over—earthworks, stone circles, mysterious slab-roofed cromlechs, and, by the Machrie Water, the foreboding Standing Stones of Tormore, as high as 20 feet and upright still (page 87).

Then, too, a geological fault misplaced Arran; it belongs far away with Skye and Lewis and Harris, as students of geology know. Endlessly they poke around its granite of the Tertiary Period to uncover mica, pyrites, and semiprecious stones.

The historian can find everything. On the west there's the King's Cave with sketches of the chase on the rough walls—drawn, some say, by the Bruce himself. For the modernist, near Corrie there's the birthplace of Daniel Macmillan, grandfather of the Right Honourable Harold.

No matter how long the stay, the last day in Arran comes too soon, and it passes with the speed of sound. We had no time left for walking. We drove to the ruins of the Bruce's hunting castle, on a spit of land jutting into Loch Ranza. Two square towers of stone—yellow-gray for a change, partly tumbled down, empty, and strangely menacing. A place of harshness, screams, and bloody death it must have been (page 90).

**Heather Stays Fresh in Raw Potato**

The loch itself is different. Some think it the loveliest arm of the sea in all Scotland. I rowed my beloved Cousin Wilma across it once in half a gale to catch the steamer, and narrowly made it. In my family that's the real importance of Loch Ranza.

We came back by The String. (Only outsiders add the redundant "Road.") Nine miles long, like thin hemp it winds its way up the glen to the high point of the 768-foot pass. Here, where the foothills make a swelling breast on either side, I pulled off the road to gather heather for a homesick niece in London. It would reach her fresh, for we stuck the ends in a potato to wet-nurse the blossoms.

I was well off the road up the brae when once again I felt the heart-stopping moment of fright as a red grouse whirred up at my feet. He shot away, close to the heather, and I wondered how I could ever have gunned such a bird. Eat them, yes, but let someone else do the killing.

The red deer are thick now, and the stalking is good. But hunters must lease land for stalking, and not many can afford it.

Jeannie spotted the deer first. On the green crest of An Tunna. Not one or two, but a herd silhouetted against the blue sky, two of them stags with great soaring antlers. They looked down at us, 300 feet below, and showed no concern, for they'd forgotten the fear of guns (opposite).

And this only two hours of surface travel from the teeming throngs of Glasgow!

We drove on through Brodick to Whiting Bay, where we had heard of a craft center,

Arran Gallery. We found it in an old church, pulpitless and pewless now, but in a strange way still sanctified. Perhaps because in it a family toiled together with their hands (page 83). A father and three talented sons, they worked in wood, in Arran's semiprecious stones, in gold and silver, in oil and canvas, and made Christmas cards on a hand-fed, foot-operated printing press. We bought a ring or two and a brooch; not nearly enough, for their arts were truly lovely.

### Journey Ends at Johnny's Lighthouse

South now, to prove that palm trees really grow here, tall against the whitewashed stone of the inn at Lagg, beside the Kilmory Water. The stream thundered, swollen and peaty brown from a noontime rain squall. Bank on bank of flaming yellow 'mums surrounded the 500-year-old lawn.

We saved the best for Jamie to the end—Pladda light off Arran's south end. Johnny Morey's lighthouse. Johnny rowed out here one foggy night when Mr. McGregor, the keeper, broke his leg, and Johnny lit the light and saved all the big ships from Belfast and Liverpool and even America from crashing onto the rocks. (I hope Her Majesty's Coast Guard will forgive me.)

Pladda didn't let us down. A mile off shore, a haze lifted the low island off the water, and the tall white tower was a faery column (below). A seal obliged, too, by poking its doggy head from the sea.

*You don't know how lucky you are, Sandy. None of this has changed.*

**Gulls wheel above fresh furrows as a golf course takes shape. Granite cone of Ailsa Craig**

We had the right weather for leaving Brodick: rain. On a fine morning the heartache is not to be borne. Michael, Colin, and Forbes, in sou'westers, were there to see Jamie off. A real Highland honor that was, for we sailed at 7 a.m.

### Arran Farewell: a Song and a Penny

They gave us even more. As the *Glen* cast off, Michael's soprano lifted in the traditional "Will Ye No' Come Back Again?" and sweetly, softly, the other two boys joined in. Your dour Scot will sing the yearning lilt at the drop of a hawser—any hawser.

We leaned over the rail and waved and waved and waved till the handkerchiefs could be seen no more and the only sound was the roosh of the bow through the waves.

There was mist in more than the air of Scotland that morning.

"This trip was supposed to get Scotland out of your system," snurfled Jeannie, "but I'm afraid it has put it into mine instead."

I gave Jamie a penny and told him to throw it over the side. "So we'll come back again," I said.

Sentiment struggled with another Scottish trait, but his reluctant hand opened and the coin fell into the waters of the Clyde.

"Thank you for being born in Scotland," he said. "If you hadn't, I wouldn't of got to see where Johnny lived."

I blew my nose like a trumpet.

You were wrong, Thomas Wolfe, so wrong. I could and I did and I will go home again.

THE END

**(Paddy's Milestone) rises 13 miles off Arran's south coast. Pladda light sweeps the Firth of Clyde.**



ELSIE MAY BELL GROSVENOR 1878-1964

Granddaughter, daughter, wife, and mother of National Geographic Society Presidents. Mrs. Grosvenor was identified with the Society longer than any other individual in its 77-year history. In 1903 she designed the Society's flag [opposite and text, page 116]

# First Lady of the National Geographic

By GILBERT HOVEY GROSVENOR, Litt.D., LL.D., Sc.D.
Chairman of the Board, formerly President, National Geographic Society,
and Editor of its magazine, 1899-1954

SHORTLY AFTER the death of Elsie May Bell Grosvenor on December 26, 1964, a letter arrived in my office at the National Geographic Society from the sixth-grade class of a school in Illinois. It expressed sorrow over my wife's passing and ended: "We are all sorry we lost her."

"Dr. Grosvenor," wrote a Roman Catholic nun to my son Melville, "pardon an utter stranger for getting personal; I believe your mother, Mrs. Elsie Bell Grosvenor, belonged to all of us members."

As the letters poured in from every part of the world, I felt a growing sense of hands outstretched, not merely from friends but from a vast family. Many of the messages bore familiar signatures; countless others began simply, "You do not know me . . ."

### Linked to Four Presidents of the Society

Such an experience moves a man beyond mere gratitude. To me it reaffirms the unique spirit of the National Geographic Society as my wife and I envisioned it together nearly seventy years ago—the spirit of a great and enduring family dedicated to knowledge and understanding.

From her early childhood to her last year at 86, Elsie Grosvenor's life was uniquely linked with our Society. She was the granddaughter of its principal founder and first President, Gardiner Greene Hubbard, the daughter of its second President, Alexander Graham Bell; the wife of a long-time President and Editor; and the mother of its present President-Editor, Melville Bell Grosvenor. Thus in a very real sense she did indeed belong to all of us who are members of the Society.

Elsie Grosvenor's restless energy led her into many fields. She became a tireless traveler, a gifted author and lecturer, a champion of the friendless and the handicapped. To her, injustice and man's need for knowledge offered endless and irresistible challenge.

**Young globe-trotter.** Elsie May toured Japan in 1898 with her mother and father, Alexander Graham Bell, inventor of the telephone. "Elsie was equally at home with a coolie or a mandarin," a friend said of her, "for she was interested in the viewpoints of both. By her responsive attitude, she would have each of them trying to explain his life experiences to her."

In lace and black velvet, three-year-old Elsie posed for French artist Timoléon Marie Lobrichon

At ease in her new role of wife and partner to Gilbert Hovey Grosvenor, Elsie found time for club work, lectures, and civic duties. Often she scouted interesting speakers to find material for possible National Geographic lectures or articles.

Looking back upon those years of dedicated service, I often think of Elsie Grosvenor in terms that her famous father, Alexander Graham Bell, used to describe an inventor:

"The inventor is a man who looks around upon the world and is not contented with things as they are. He wants to improve whatever he sees; he wants to benefit the world."

Among the letters that flooded in after her death, I received expressions of sympathy from geographical associations, civic organizations, charities, explorers' clubs, universities, and scores of other professional groups—each mourning the loss of a valued colleague.

Yet for all the range of Elsie Grosvenor's interests, her heart lay closest to the National Geographic. In the Society's days of trial and uncertainty, her faith and quiet courage brought it hope. Later she helped to lift it from obscurity into a world-wide force for knowledge, with a membership of four and a half million.

When in 1899 I was engaged as managing editor—and the only paid employee—of the faltering young NATIONAL GEOGRAPHIC, the Society was small and poor. But with Mr. Bell as its President, it was rich in vision.

### Stout Ally in Early Struggles

Geography, the telephone's inventor believed, could be made a fascinating subject—not a musty collection of textbook treatises, but a living and endless adventure in discovery about man and the universe that surrounds him. "Geography," he once said, "is the world itself and all it holds."

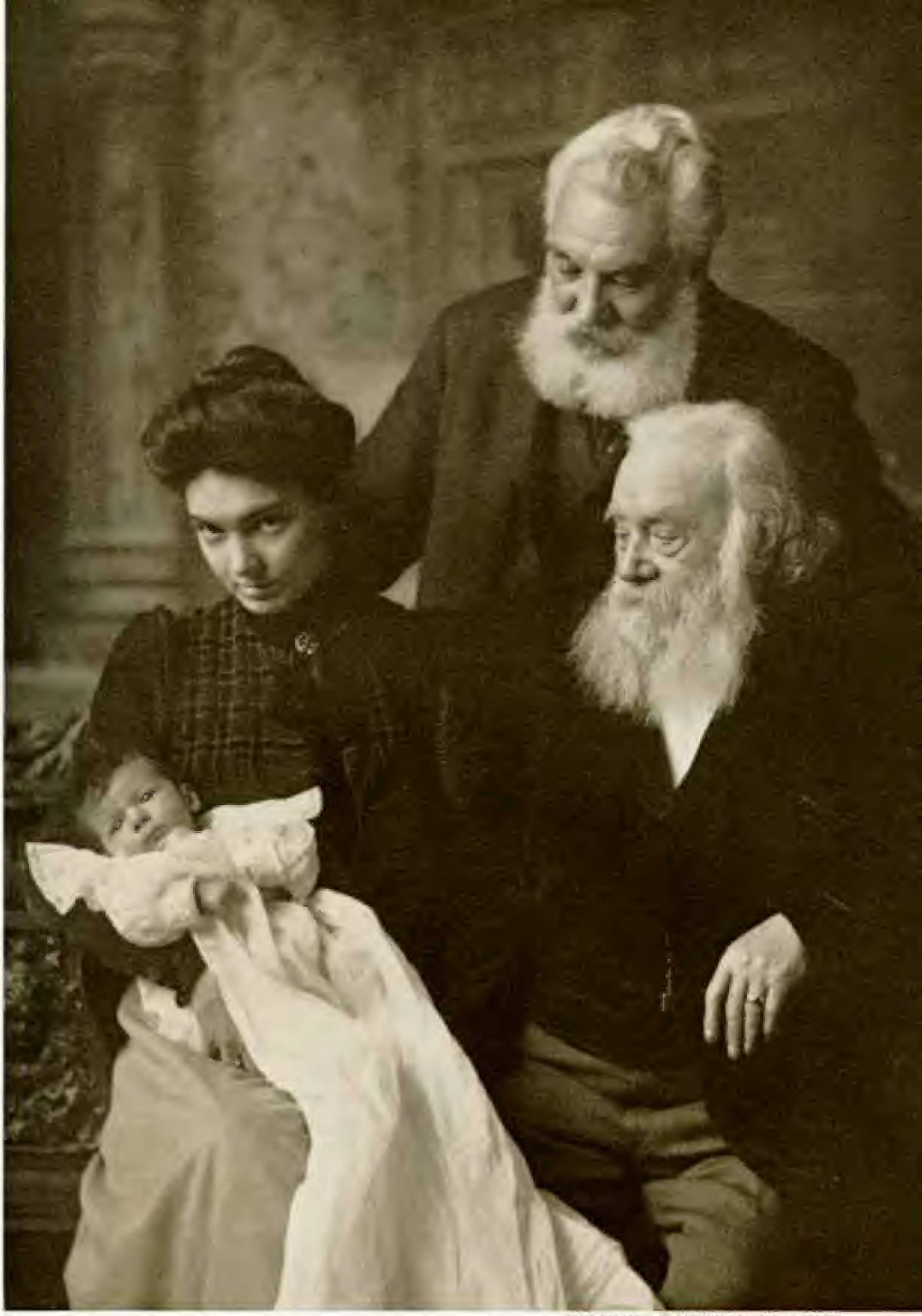
Moreover, Mr. Bell pointed out, the increase and spread of geographic knowledge would draw men and nations together in common purpose and understanding of one another.

Such a magazine, he insisted, should not rely upon subscriptions or newsstand sales; instead, it should seek members in a nonprofit society, men and women eager to learn, interested in increasing human knowledge, and willing to help support exploration and research through modest annual dues.

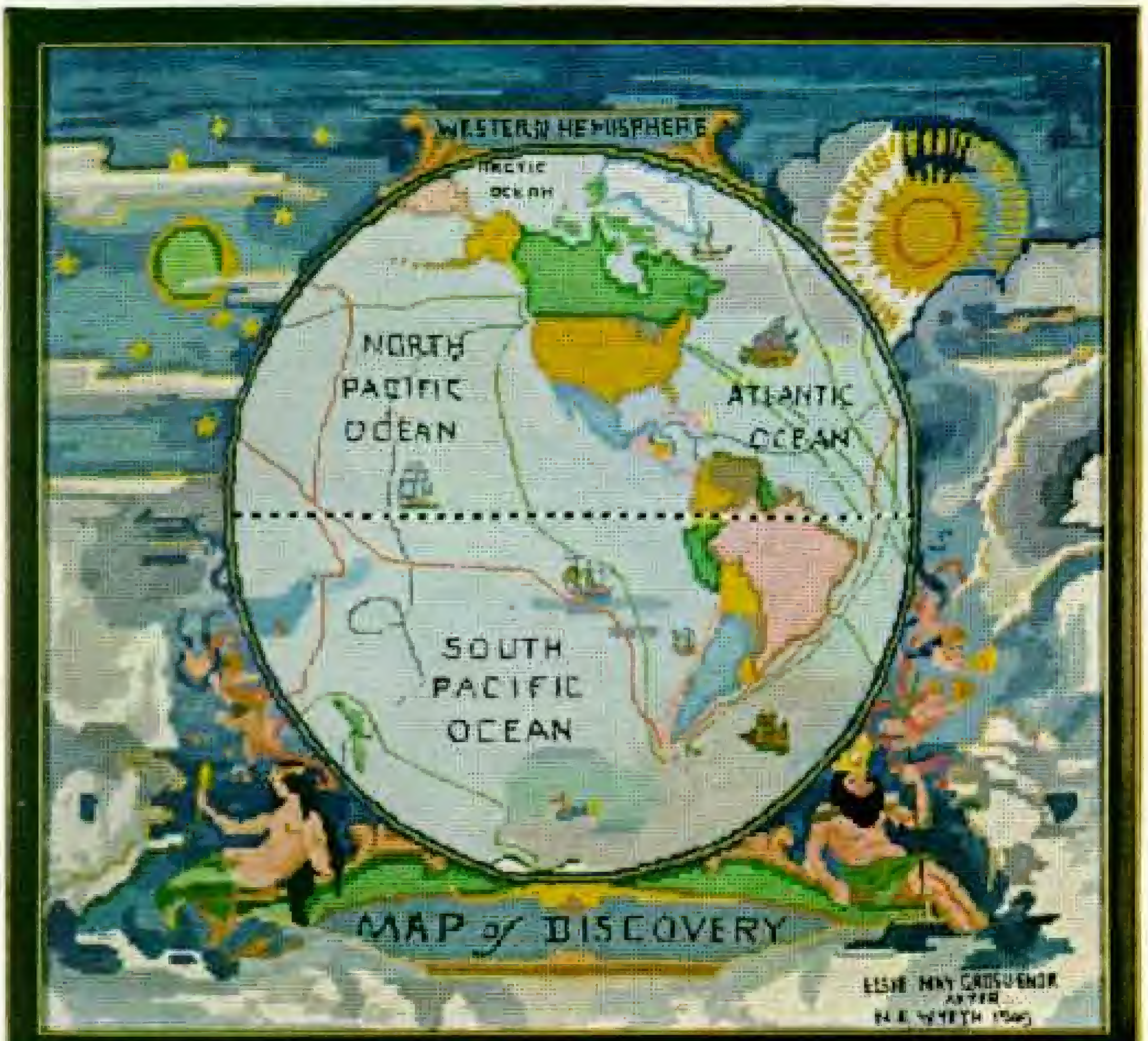
To me the logic of Mr. Bell's argument was overwhelming. Unfortunately, it met with fierce opposition among some of the Society's more conservative Trustees. The whole character—and perhaps the very existence—of the National Geographic Society hung precariously in the balance.*

In addition to Mr. Bell, who left the crusade for his idea largely in my hands, I had one

*See "The Romance of the Geographic," by Gilbert H. Grosvenor, NATIONAL GEOGRAPHIC, October, 1963.



**Four generations:** Elsie cradles her first child, Melville Bell Grosvenor. Her father Alexander Graham Bell (standing) served as the Society's second President, succeeding his father-in-law Gardiner Greene Hubbard. Elsie's grandfather, Alexander Melville Bell (seated), pioneered for the deaf by inventing Visible Speech, a phonetic system that provides a symbol for each sound-producing position of the vocal organs.




**Myriad stitches map voyages** of discovery to the New World in a piece of needle point executed by Mrs. Grosvenor for her son. The design copies a mural by N. C. Wyeth in Hubbard Hall, the first home of the Society, in Washington, D. C.

**Exploring the Nation,** Gilbert Grosvenor and his wife discover that Mirror Lake in Yosemite National Park lives up to its name. Daughters Mabel (left) and Gertrude, and a friend, Lilian Burke, accompanied them on this 1915 swing through the West.

steadfast and loyal ally—Mr. Bell's own daughter Elsie May.

I had met Elsie Bell two years before, through the friendship of her parents with mine, Dr. and Mrs. Edwin A. Grosvenor, of Amherst College, Massachusetts (page 109). Her radiant spirit had captured my heart.

While the battle raged over Mr. Bell's revolutionary idea, Elsie and I decided to conduct a quiet experiment on our own. Each of us drew up a list of prominent friends we felt sure would welcome the chance to support the Society and its journal. To each we mailed a dignified brochure soliciting National Geographic membership.

Even we were surprised by the response: Nearly every reply brought an enthusiastic acceptance, and—to our delight—a check for dues, which we gleefully deposited in the Society's then almost nonexistent bank account.

As we exhausted lists of our own friends, my parents contributed countless prospects and Mr. Bell supplied many more. Occasionally he sounded mildly annoyed by my endless requests for names.

"Perhaps he's forgotten he started all this," Elsie said one day with a smile. "Never mind, Bert, let him complain all he wants—we'll win him around with the rest!"

The membership campaign was a foundation on which to build, but the real challenge lay in the magazine. No promotion, however inspired, would sell a journal that could not sell itself. While the drive for new members went forward, I threw even greater energy into improving each page of the GEOGRAPHIC.

ALBERT H. GROSVENOR COLLECTION © NATIONAL GEOGRAPHIC SOCIETY

**Romping with their children,** Elsie and Gilbert swing Mabel, Melville, and Gertrude on a broom handle. But summers at Beinn Bhreagh, the Bell estate near Baddeck, Nova Scotia, were far from carefree. Dr. Grosvenor spent hours editing copy and reviewing pictures for the GEOGRAPHIC—tasks his wife supported with great enthusiasm.

We constantly sought fresh ideas for timely articles, worthwhile interviews, and unique photographs to capture our readers' imaginations. The enthusiastic response, of course, lent impetus to the membership drive, and the two ideas produced a chain reaction.

In the end we persuaded not only Mr. Bell but even the most skeptical Trustee. Within a year we had doubled the Society's membership from 1,000 to more than 2,000. Soon afterward, the Board unanimously elected me permanent Managing Editor of the magazine and Director of the Society, with all responsibility for its growth.

Over the years that followed, many spirited battles had to be fought before the Society's future was secure. But behind it all lay that quiet experiment and the faith of two young but determined people.

The early crisis that threatened the Society had one very welcome effect. Recently I came across one of my letters to my father from those early days of 1900.



*(Continued on page 112)*

**In line of duty** as her father's representative, Elsie bids farewell to the Peary Relief Expedition on July 21, 1899. Robert E. Peary, who was to discover the North Pole a decade later, had been unreported for more than a year when Russell W. Porter (standing), Robert Stein (left), and Fullerton Merrill set out to help him. They found the explorer in northern Greenland and brought him supplies. Mr. Bell often used his daughter as a reporter "to give her experience and to prepare her for the hard work in the NATIONAL GEOGRAPHIC," Elsie's husband notes.

After climbing the house-high trunk of a fallen sequoia, the Grosvenors began a fight to save California's giant trees in 1916. As a result of that campaign, the Society and its members gave funds for land deeded to Sequoia National Park.

"**A superb horsewoman,** my wife could handle any animal." Before they were married, Gilbert was invited to go riding with Elsie on his first Sunday in Washington. "I explained," he remembers, "that my only experience with horses was on farm plugs in Turkey. Miss Bell assured me that the stable master would give me a gentle mount. Unfortunately, the horse assigned threw me twice. I was sure that after such a performance, I had lost out with Miss Bell. But she most kindly blamed the stable master . . . not me."

Here Mrs. Grosvenor rides sidesaddle on her favorite, the high-spirited Water Lily, a former racing mare.

# SUFFRAGIST ARMY INVADES CAPITOL

Five Hundred Members of National Association Make Plea for Vote.

TO CONTINUE THE FIGHT

MRS. LIBBEY GROSVENOR.
Vice chairman local arrangements committee.

Five hundred members of the National American Woman's suffrage association, which opened its forty-sixth annual convention at Poli's Theater this afternoon, visited the Capitol this morning to present arguments in their plea for constitutional suffrage and in favor of the passage of the federal suffrage amendment.

### Mrs. Grosvenor Fights for the Right to Vote

An officer in the local branch of the National American Woman's Suffrage Association, Elsie opened her home to a meeting in 1913 to plan the annual convention and a protest march on the Capitol. On March 3, she rode with four of her six children in the "great parade of earnest-minded women" (right), as her father described it. At one point a group of young men vented their displeasure at the demonstration. "The crowd closed in on us and... began smashing the balloons out of the children's hands," Elsie testified at a Senate hearing, decrying the lack of protection by police.

Mrs. Grosvenor's staunch advocacy of women's rights influenced Geographic employment practices; the Society was among the first organizations in Washington to offer good jobs to women. "The girls loved to work at the Geographic because they knew—their parents knew—they were taken care of," recalls the author.


As hostess at a luncheon for Mrs. Herbert Hoover, the retiring First Lady, Mrs. Grosvenor (right) walks beside the guest of honor. Mrs. William Howard Taft, a former First Lady, accompanies them, and Mrs. Charles Evans Hughes, wife of the Chief Justice of the United States, follows at left.

GILBERT H. GROSVENOR COLLECTION © NATIONAL GEOGRAPHIC SOCIETY

Family reunion at Amherst, Massachusetts, finds Elsie flanked by her husband's mother and father, the distinguished historian Dr. Edwin A. Grosvenor. Gilbert's identical twin brother, Edwin P., stands at right; the children: Mabel at center and Gertrude. Ex-President William Howard Taft, a cousin and close friend, smiles at left.

LIBRARY OF CONGRESS (LEFT) AND GILBERT H. GROSVENOR COLLECTION © NATIONAL GEOGRAPHIC SOCIETY

**Ever questioning,** Mrs. Grosvenor learns about the medieval Cité of Carcassonne, France, in 1950. Her daughter Gloria (far right) lived in Paris at the time.

**In Venice,** mother and daughters feed pigeons in the Piazza di San Marco.

**Mighty Mauna Loa** volcano proved a challenge during a 1920 tour of Hawaii. To view the crater, she spent three long days in the saddle, becoming one of the first women to attain the volcano's rim. Only months earlier it had exploded fire and lava. This tortured desert proved rough going; mules sometimes sank to their bellies in the razor-edged clinkers and splintered glass.

Few people reach the crater even today. An unpaved road ends at 6,500 feet. From there the route to the 13,680-foot crest follows a tortuous 18-mile trail of loose lava, passable on foot but not recommended for casual visitors.

# Around the world with Elsie Grosvenor

TRAVELING through five continents during six decades, she gave the GEOGRAPHIC's editor extra eyes and ears. Drawing on experience, she helped him plan many of the features published in the magazine. In 1913 she appears to hold up a 40-ton cannon at the Kremlin, Moscow (left).

Dawn on Mount Fuji in Japan (right) finds her smiling in spite of bitter cold. She stands with the GEOGRAPHIC's Japanese photographer K. Sakamoto, the chief priest of the sacred mountain's crowning temple, her husband, and daughter Carol. After riding horses to 10,000 feet, the visitors hiked the final 2,388 feet to the summit.

**Intrigued by antiquity,** she gazes at the Parthenon's Doric columns during a 1947 stay in Athens.

**Turkey at last!** Gilbert and Elsie had planned to visit his birthplace, Constantinople, on their wedding trip in 1900. But pressing business at the GEOGRAPHIC called them back to Washington. By 1947, when they were finally able to visit Turkey, the city had a new name: Istanbul. Here in a boat on the Bosporus they stop at Anadolu Hisar, or Asiatic Castle.

**Army of "Geographics"**—150 employees of the Society—follow Elsie, Gilbert, and Assistant Secretary George W. Hutchison (left) up Pennsylvania Avenue in the Preparedness Parade on Flag Day, June 14, 1916. Rank on rank of ladies in white, flanked by straw-hatted male colleagues, march in the procession of nearly 60,000 citizens personally led by President Woodrow Wilson to alert the

"In a way," I wrote of the membership battle, "this little scrap has been a godsend. It has done more to win Elsie than the three years I have known her put together. The fact that . . . I was for the time an underdog, was the strongest argument to her sweet heart." I closed the letter with what to me, after 65 years, are still the most enduring words I have ever written.

"You and I," I told my father, "in fact, all men, agree about her."

In those days of rigid Victorian etiquette, moments alone with a young lady were rare. I still smile at recollection of one such occasion, during a visit to Beinn Bhreagh, the Bells' summer estate on the Bras d'Or Lakes of Nova Scotia. On my last afternoon Elsie found she had lost the Amherst fraternity pin I had given her. She thought it might have dropped on one of the paths around Beinn Bhreagh, and we set out to look for it while there was still light.

To our joy, no one volunteered to help us, so we strolled the paths alone for a blissful hour, trying—perhaps not very successfully—to concentrate on the pin. We failed to find it, and the next morning when I awoke early, I slipped from the house for a final but useless search.

Unknown to me, Elsie's mother had seen me from one of the upstairs windows. Months later, when I had bought and presented another pin, Mrs. Bell told me with a smile:

"You know, Bert, at the time, I suspected Elsie might have dropped that pin on purpose, just so she could look for it with you. But when I saw you the next morning, tramping around alone in the cold and the dew, I felt like apologizing to you both!"

In the autumn of 1900 I received the most important letter of my life. Elsie wrote me from London that she would marry me—if I hadn't changed my mind!

Some months before, I had confided my


Nation to defense needs prior to its entry into World War I. Standard-bearer Gratton Rice (right) gets ready to step off, he arrived at the assembly area four hours early to claim for the Society the lead position in the 8th division, composed of the Capital's scientific, social, and literary organizations. At the end of the march, the Grosvenors stood by to review their parading companies.

hopes to Mr. and Mrs. Bell, and they had received the news with affectionate approval. They merely counseled us to undergo a few months' separation to be sure of our hearts, and took Elsie on a summer trip to Europe.

Our wedding in London recalled fond traditions. Elsie herself had been born there during her parents' visit in 1878, when Mr. Bell demonstrated his remarkable invention to Queen Victoria. Moreover, Elsie and I had chosen our wedding date, October 23, to coincide with my parents' anniversary. Even King's Weigh House Church, where we were married, proved symbolic—it stands a block from Gilbert Street, just off Grosvenor Square.

One aspect of that day seemed deeply prophetic. Morning had dawned bleak and cold, and afternoon brought a chilling rain. Then at the end of the ceremony, as Elsie and I emerged hand-in-hand from the church, the clouds suddenly parted and we stepped into bright sunlight.

It proved the happiest omen of my life, for in all the 64 years that followed, however dark the day, Elsie Grosvenor's hand brought me sunshine.

In marrying Elsie Bell I had won the heart of a true child of the National Geographic Society. As a girl of ten, she had accompanied her Grandfather Hubbard, its first President, to the Society's historic initial lecture, and in 1898 Elsie's father, Mr. Bell, succeeded Mr. Hubbard as President.

### Lifelong Interest in Aiding the Deaf

To the Bell home on Connecticut Avenue in Washington came many of the world's leading scientists, explorers, and men of letters. Such visits, with their fascinating conversations on the widening world of Spanish-American War times, became a familiar part of life to Elsie and her younger sister Marian.

But perhaps the deepest impression was made earlier, while Elsie was eight. An

ALBERT M. BOSSCHER © N.G.S.

**To the far corners** and from there . . . to the heights. Touring the Far East in 1937, Gilbert and Elsie followed the traditional path of Confucius to the summit of T'ai Shan, China's most sacred mountain. Seated in shaded chairs and lifted by bearers (below), they rode up the 6,700 steps of the world's longest stairway (left). On the top by dark, they slept on wooden tables in a small monastery (above), using their coats to ward off the cold. Dogs howled throughout the night. But memory of discomfort faded before the unsurpassed loveliness of sunrise on the holy pinnacle that Chinese for four millenniums believed to be "nearest Heaven."

. . . **And to the depths.** In clefts at Chou K'ou Tien, southwest of Peking, China, they watch excavations on the site that yielded the remains of Peking Man, a primitive human who lived about 500,000 years ago and knew the use of fire. They were among the last Westerners to visit the dig before the Sino-Japanese War of 1937-45 cut off sightseers. Peking Man's bones disappeared from China in 1941.

**Pioneers in flight** arrive in Hong Kong by Pan American Clipper, a four-engined Sikorsky flying boat, on May 14, 1937, the first married couple to fly across the Pacific as paying passengers

Army officer named Arthur H. Keller brought his six-year-old daughter Helen from their home in Tuscumbia, Alabama, in 1886 to see Mr. Bell. Little Helen Keller's handicap was a fearfully cruel one—she had been deaf and blind since infancy. On a later visit, Mr. Bell, a leading authority on problems of the deaf, consulted with Helen's father, while Elsie and Marian, known to the family as Daisy, took Helen off to play. Half an hour later, the Bells were horrified to find the trio on the roof of the stable.

"Helen had a wonderful time," Elsie recalled, "but Daisy and I got the lecture of our lives."

This early meeting with Helen Keller was only partly responsible for my wife's lifelong concern for deaf children. Her mother, Mabel Hubbard Bell, had lost her own hearing and part of her sense of balance from a childhood attack of scarlet fever. Throughout Mrs. Bell's life, Elsie instinctively took her mother's hand to steady her in the dark or on moving trains and carriages.

With the same cheerful courage characteristic of her daughters, Mrs. Bell made light of her affliction. A gifted lip reader, who had also learned to speak, she could always bring

UNIVERSITY OF ALASKA © N.G.S.

**Academic acclaim** comes to Elsie after publication of her last GEOGRAPHIC article, "Alaska's Warmer Side," in 1956. The University of Alaska conferred an honorary degree of Doctor of Laws for "her ceaseless and devoted efforts in pushing back the frontiers of the physical world [during] the long years of association with the National Geographic Society, its expeditions, and its publications." Dr. Grosvenor, beside her, also received a Doctor of Laws degree.

order at the dinner table when Elsie and Marian clamored for her attention.

"Children," she would say in a firm voice, "if you don't behave, I'll close my eyes and then I won't hear a thing!"

In later years, Elsie gave unstintingly of her time and resources to her father's Volta Bureau in Washington, D. C.—now the Alexander Graham Bell Association for the Deaf—and organizations devoted to similar work.

From her earliest years Elsie traveled widely. A voyage when she was seven brought near disaster. One foggy morning while the Bells were touring the Newfoundland coast in search of a summer homesite, their steamer, the S.S. *Hanoverian*, crashed onto rocks. In the confusion Mr. Bell helped to lower his wife and daughters by rope into a lifeboat, and the family eventually landed safe ashore.

Characteristic of the stout spirit I was later to know and love, Elsie never gave way to fear. Asked afterward how she felt in the lifeboat, her eyes sparkled:

"It was the best part of the trip."

Almost as if to prepare his daughter for a lifelong association with the National Geographic, Mr. Bell had sent Elsie abroad to study at schools in France and Italy. On her return, she became his unofficial secretary, witnessing many of his brilliant experiments and occasionally representing him at scientific gatherings.

Thus, to her marriage at the age of 22, my wife brought a unique background. In the Victorian tradition, she never attended college, but her education proved the equal of most formal ones.

### Always Found Time for "Eighth Child"

Our early years of marriage were crowded and thrilling, for our private family seemed to grow almost as fast as our professional one. Our first child, Melville Bell, who was to follow me brilliantly as President of the Society and Editor of the magazine, arrived in 1901. He soon was joined by five delightful younger sisters—Gertrude, Mabel, Lilian, Carol, Gloria—and for a tragically short time, a brother, Alexander.

"Our eighth child," as my wife always called the Society, grew lustily. By our fifth wedding anniversary, the membership had passed the magic 10,000 mark and continued a steady climb.

Our two families, the personal and professional, filled the days to overflowing. Many a night, with the children long in bed, I reviewed endless stacks of photographs and manuscripts, my wife always by my side.

As time and the children allowed her greater freedom, Mrs. Grosvenor became a voluntary talent scout. At lectures given before her many clubs and associations, she took notes for me on outstanding subjects and speakers. Many of her recommendations eventually led to fine NATIONAL GEOGRAPHIC articles.

"Don't thank me," she said once. "Just pay me back by lecturing to one of my clubs!"

By 1903, as the Society grew to prominence, I decided that we needed our own flag. Most organization banners I had seen were marvels of confusion and cryptic symbols. Clearly, what the Society needed was a simple and

**Honorary life membership** goes to the Geographic's first lady at a dinner marking her husband's retirement as President and Editor in 1954; on that occasion he said that his wife "consented to give her magic touch to the Society by marrying me." Secretary Thomas W. McKnew presents the certificate; new President John Oliver La Gorce (center) and Rear Adm. L. O. Colbert applaud.

**Golden days together** add up to fifty years on October 13, 1950. In honor of the anniversary, their six children present a gold coffee service. They gather at Wild Acres, the family home near Washington, D. C. From left: Mrs. Lillian Jones, Melville Bell Grosvenor, Mrs. Carol Myers, Dr. Mabel Grosvenor, Mrs. Gertrude Gayley, and Mrs. Gloria Olterdal.



dignified standard, both attractive and instantly recognizable. Mrs. Grosvenor volunteered to draw up a design.

The result, of course, was a flag that in 62 years has become recognized and respected in every corner of the globe. My wife's simple arrangement of blue, brown, and green stripes symbolizes sky, earth, and sea—realms into which more than 285 National Geographic-sponsored expeditions and research projects have since carried the Society's name with distinction. At my suggestion, Mrs. Grosvenor added the Society's name in white block letters (page 101).

I like to think of Elsie Grosvenor's flag today as the Board of Trustees recently described it—"one of the rare Geographic emissaries more widely traveled, though not more widely loved, than its designer."

For Elsie Grosvenor that era was one of gallant crusades. The outbreak of World War I found the United States sadly unprepared. Elsie and I felt strongly about this and proudly marched a contingent of Geographic staff members up Pennsylvania Avenue in a stirring Preparedness Parade led personally by President Woodrow Wilson (pages 112-13).

My wife was an early demonstrator for woman suffrage (pages 108-9). With rare wisdom she took our own children with her for a memorable lesson in equality.

Unlike many crusaders, however, she remained ever tolerant and gentle. Recalling her part in that bitter struggle, her pastor, the Reverend Dr. Edward L. R. Elson of Washington's National Presbyterian Church, said at her death: "She was an unapologetic suffragette, but remained completely and unalterably feminine."

One of my proudest memories of those years is my wife's determined battle to rid Washington of a grave threat to its children—bacteria-laden milk. In 1910, city health authorities could inspect milk, but they had little power to enforce purification. Newspapers largely ignored the problem for fear of losing advertisers.

With fellow members of her Twentieth Century Club, Elsie Grosvenor launched an ingenious campaign. The ladies issued a periodic bulletin listing the milk companies that passed minimum health standards, and simply omitting those that failed the test.

The "white list," of course, had the effect of a black list. The owner of a substandard dairy whose business began to suffer telephoned me one day and threatened court action. I knew he had no case.

"Go ahead," I told him. "It takes a brave man to sue 500 angry women!"

I never heard from him again. Within a few months, Washington's milk supply was wonderfully improved, and Congress later passed a strong milk act.

**Sharing a love of sailing,** the Grosvenors set out on Baddeck Bay in 1948 aboard the *Elsie* with three grandchildren for crew. The couple explored the Bras d'Or Lakes and coast of Nova Scotia in the 54-foot yawl during many summers at their home, Beinn Bhreagh Hall (background), built by Alexander Graham Bell.

### Gave the Editor the Woman's Viewpoint

When our children grew old enough to spare us, Elsie and I embarked on what was to become nearly half a century of exciting travels. "The name Grosvenor means 'great hunter,' " my wife used to tell our friends with a smile, "and Bert and I became hunters of knowledge."

That thrilling quest led us hand-in-hand to remote reaches of the world on behalf of the Society and its magazine.

In that endless search for articles and photographs for the NATIONAL GEOGRAPHIC, for

fresh challenges to research and exploration, Elsie Grosvenor's keen eye was a priceless asset. She had an unfailing sense of what would interest the women of our growing family of members.

"I can hardly remember being in a place," she once explained, "where there were not things that women see which men do not: things about the life and ways of people which only a woman would notice."

### "Detours Make Life Exciting"

Her woman's interest occasionally led her into some more-than-womanly adventures. Elsie Grosvenor is still the only lady of my acquaintance who has ridden an ostrich—at any rate, at the age of 74. Then there were African Pygmies who might have made her a member of the tribe if I hadn't suggested that we had our own tribe at home. She was one of the few women to climb to the top of the famous Green Mosque in Bursa, Turkey, and to reach the summit of Mauna Loa (pages 110-11).*

From the beginning, I placed only one condition on my wife's travels with me—that she should never take needless risk. Still I realized that to reach some parts of

*Mrs. Grosvenor's own articles, "Safari Through Changing Africa," August, 1953, "Safari From Congo to Cairo," December, 1954, and "Alaska's Warmer Side," June, 1956, have been among the most popular ever published in the magazine.

**Flute solo by a Pygmy** near Beni in the Congo entertains Elsie during an African safari in 1952. She recorded the trip in two memorable articles.

**Sailing across the Nile,** holding onto her hat, coated against spray, and braced for misadventure, Elsie grins! Crewman balances on a hiking board to keep the felucca from capsizing.

the world, one would occasionally have to blaze a trail.

"If Bert had let the timid and cautious advise us," Elsie once said, "we would never have gone anywhere. There is always an expert on hand to tell you that you mustn't detour from the beaten track.

"But detours," she observed, smiling, "are what make life exciting. What is our own NATIONAL GEOGRAPHIC if not an endless and thrilling detour from the old into the new and the untried?"

### Tropical Storm Spices Pacific Flight

One such "detour" came in 1937 when we were the first married couple to cross the Pacific by plane from California to China (page 115). Our four-engined Pan American Airways Clipper was the last word in comfort and safety, but still a far cry from today's jets. Between Manila and Hong Kong we encountered a tropical squall, and the plane bucked and thrashed like a mustang. In an attempt to reach less turbulent air, the pilot went down from our cruising altitude of 7,500 feet to a mere 200 feet or so above the water.

The maneuver seemed to make little difference. The Clipper continued to yaw and plunge as we skimmed above a raging seascape of combers lost in their own spindrift. I feared Elsie might be injured in the shaking up, but she paid no attention and pressed closer to the window in order not to miss the excitement. Finally we left the squall behind and flew safely on to Hong Kong.

Years later when my wife recalled the experience, one of our grandchildren remarked proudly that modern jets fly high above such storms. "Yes, I know, my dear," Mrs. Grosvenor answered sadly. "Just think of all the fun they miss!"

Hardship alone never daunted Elsie Grosvenor; she could not resist a true challenge. On that 1937 tour of the Far East, we ascended the 6,700 stone steps leading to the peak of China's sacred mountain, T'ai Shan (page 114). Our guides urged us to break our trip overnight at a small way station.

Both Elsie and I, however, had determined to see the sunrise from the peak, as Confucius was supposed to have done. We pushed on, even though it meant a dreadfully cold night in an inhospitable temple at the top.

"We spent the night . . . on quilts laid upon boards," my wife wrote home to the children. "But we saw the dawn on T'ai Shan!"

Our years of high adventure together have left me treasured memories. I can still feel the brittle crunch of volcanic glass underfoot as we stood together on Mauna Loa's grim summit. I recall the rich taste of an omelette made from a single ostrich egg that fed a table of 24 in South Africa.

I remember, too, dogs howling like lost souls in the chill night atop T'ai Shan, and I see once more the long flare of an autumn sunrise on another sacred peak, Fujiyama.

Other memories close to home recall years bright with laughter. I still smile over the memory of a great blue heron in Nova Scotia that Elsie and I brought home to the children. It grew so fast that within a few weeks we were all fishing furiously for perch and flounder to satisfy the giant family pet.

There was the day long ago aboard *Elsie*, our 54-foot yawl, when, with only three of us aboard, we sighted a swordfish off the coast of Nova Scotia. The vision returns of my wife, a slender and graceful helmsman, steering down on the target while a friend stands ready with the harpoon. That night a jubilant crew brought the *Elsie* home to her berth with a 500-pound trophy hung in the rigging—to the amazement of our children, who had fished the same waters for weeks in vain.

### Courage Writes a Final Chapter

Younger memories crowd up with the old—memories of the same gay and indomitable companion, now weakened by illness but determined once more to feel the roll of that yawl underfoot; memories of a day only weeks before her death when she insisted on leaving her bed to go to the polls and vote.

Elsie Grosvenor's last thoughts turned not upon the past but to the future and to those she would never see. Among the gifts she left to all her family, there were bequests for any great-grandchildren who might be born within a year of her death.

To her eighth child—the Society and its great family of members—she gave a lifetime of devotion. As so many of our members have said, she belonged to us all.

In his moving farewell, one of her dearest friends, the Reverend Dr. Elson, spoke for all who knew and loved her:

"We gather here to thank God for a life so full of serene grace and beauty and transcendent usefulness—a life that was utterly complete. Nothing needs to be added; nothing can be taken away."

THE END

PHOTOGRAPHED BY GILBERT M. GROSVENOR (ABOVE) AND WILLIAM H. HALL GROSVENOR © N.G.S.

**With long thoughts** back into the history of mankind to the Incas who built the massive-blocked throne overlooking Sacsahuaman fortress near Cuzco, Peru—with long looks out to an infinity of mountains and sky. Thus did Elsie and Gilbert Grosvenor tune their spirits to an understanding of the earth and its myriad miracles.

"I always tried to protect her," the author recently said of his wife, recalling with distress her slogging trek through snake-and-alligator-infested Corkscrew Swamp in Florida (right). But Elsie was looking for birds, whose forms and flights filled her with a wonder that endured a lifetime. And on such a search, nothing could stop her.

"I believe," Mrs. Grosvenor wrote to a friend, "travel must be shared with others to be of value." As first lady to her devoted husband, first lady to the National Geographic Society, and first lady in the house of geography, Elsie May Bell Grosvenor shared with us all a life of uncommon value.

Like Roman candles, incandescent rocks shoot from Irazú.

**Beneath smoke-darkened skies** a Costa Rican farmer and his oxen move corn along a dirt road blackened by volcanic ash. Cart's painted wheels, fashioned from wedges of durable alligator wood, a scaly-barked citrus, are so carefully seasoned and fitted that the play of wheels on axles makes them "sing" with a rhythmic rattling and clacking.

**Plume of gritty smoke** streams from Costa Rica's Irazú volcano. Erupting after a 45-year sleep, the crater in March, 1963, began to hurl millions of tons of ash over the Central Plateau, where three-fourths of the nation's 1,400,000 citizens live. Since December, 1964, Irazú has subsided, breaking forth only intermittently and throwing out much less ash.

# COSTA RICA

## Free of the Volcano's Veil

By ROBERT DE ROOS

IT TOOK ME almost half a century to get back to Costa Rica, the country where I was born. And, after all that time, I made the trip twice within a year.

The first landing was the special one, of course. As the jet's wheels touched down, Costa Rica filled my mind. Although I was just a child when I left, I felt I had spent a long time there. I remembered sunny days on the *sabana,* the green meadowland where my missionary parents rented a small summer cabin; a pleasant confusion of days in San José, the capital, a city of sparkling light, bright flowers, and smiling people.

Yet it was a bad time to return. In March of 1964, San José was choking under a fall of *ceniza*—ash from the nearby volcano Irazú. The people of the city were subdued and apprehensive. Irazú, 11,260 feet high, one in a chain of volcanoes that form the Cordillera Central of Costa Rica, had been in eruption since early in 1963. By February, 1965, when I returned again, Irazú had quieted—whether permanently or simply catching its breath no one knew—and San José had dug itself out from the deluge of ash. As this is written, the little country gives thanks for four months of sunshine.

### Fallout Spreads a Gray Blight

On that first revisit, in the spring of 1964, I felt Irazú's angry presence the moment I stepped from the plane. Wind-driven ceniza stung my face and got into my eyes. "There are tons of it everywhere," my taxi driver told me. "It is an abomination."

Next morning in San José I hired a jeep and headed east for the volcano, a 33-mile drive. I wound past San Isidro, in the district of Coronado, where mild highland coffee grows. The coffee bushes, their leaves coated with ash, looked dirty and desperate. As I climbed higher, I saw pasture grasses covered with ceniza (page 135). The village of Rancho Redondo, downwind from the volcano, was a desolation. Some farmhouses were boarded up; the cattle were gone.

"Rancho Redondo always catches the fallout," said a rancher surveying the wasteland. "Beyond here the ceniza may go either right or left, but it always hits us."

In a few minutes, I saw for myself the capricious nature of the fallout. The ash fields came to an abrupt end, and cattle grazed in meadows in the shadow of Irazú.

By the time I reached San Juan de Chicuá, a hamlet on the shoulder of the volcano, ash several inches deep covered the concrete road.

THIS PAGE FOLDS OUT





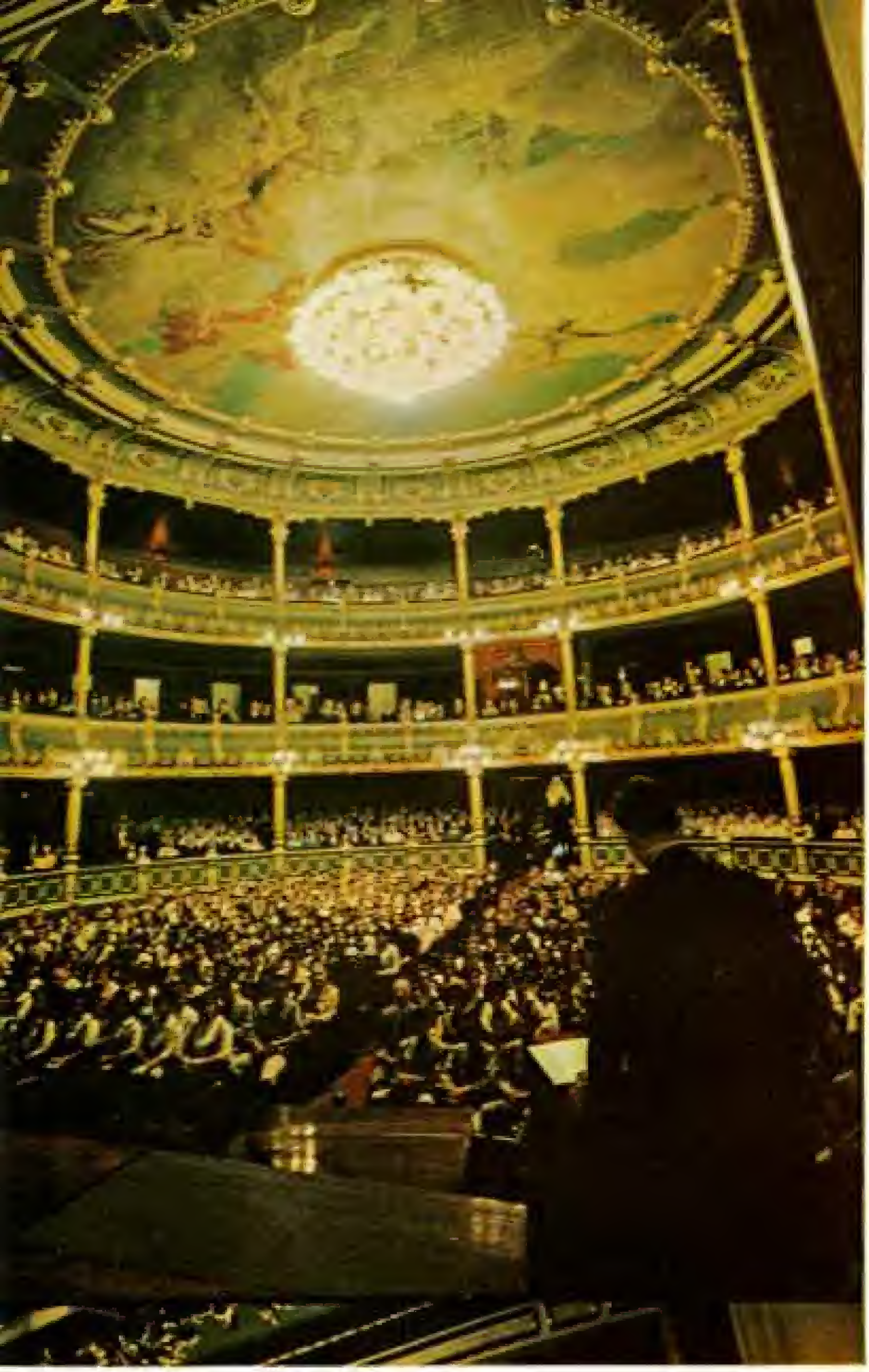
**Grotesque gnome,** a clay figurine 3⅞ inches tall, demonstrates the art of a nameless people in Costa Rica about A.D. 100 (pages 144-5).

**City in distress:** On the streets of San José, Costa Rica's capital, the grit from Irazú fell like a silent, persistent rain, choking the air and clouding the sun. Winds off the Atlantic wafted it from the volcano, 15 miles to the east.

**Face veiled** during an eruption, a San José girl goes shopping. Residents used handkerchiefs, paper bags, even gas masks for protection.

**Puff of powder** rises as a San José homeowner mows his lawn during the height of the fallout.

**Sunshine Hoods** San José before Irazú's rampage (far left). A similar aerial photograph, made during one of the frequent eruptions, shows the pall that shrouded the capital. The ash seeped through windows and doors, fouled automobile carburetors, covered golf-course fairways, and clogged the city's drainage system. As the ash fall waned, the city began to live in the sun again.



I shifted into four-wheel drive and slewed through the drifts. A few more kilometers and I was in the *zona muerta*, the zone of death, near the summit. Here the ceniza was an inundation. I saw no living thing. Tall grasses were stiff and dry, trees leafless.

I slogged ankle-deep across a field of ceniza to the lip of the crater and stood with a group of Costa Ricans, some wearing brown paper bags to shield their hair from falling ash. It was an eerie and hypnotic place. The smoke roiled in endless billows, expelled by explosions deep in the mountain (pages 154-5). Rising above the crater for more than a thousand feet, it formed a great cloud. Then the prevailing easterly caught it and sent it streaming toward San José and the Meseta Central, the Central Plateau.

A Costa Rican engrossed by the spectacle turned to me. "It is an emotion, that," he said, gesturing toward the crater. "It feels as if it is leaning on you. It makes me dizzy to watch."

### Creeping Death Afflicted the Land

Frequently a commotion of shattering rock within the crater rattled like rifle fire. Then the volcano lofted hot boulders into the sky, and spectators ran for their lives (pages 156-7). In April, 1964, Irazú loosed an extraordinary burst of blistering rocks. Two men were

JOSEPH J. KOBERSTEIN (ABOVE); HERBERT GEHRMANN © N. G. S.

killed, the only direct casualties of the volcano.

Day after day, month after month, the ceniza poured from the volcano and covered the land. Coffee, the country's largest source of export revenue, was the crop most severely affected, with ten million plants damaged. Introduced early in the 19th century, coffee had transformed Costa Rica from the poorest of Spain's Central American colonies to a land of relative prosperity. The dairy industry, an important one, was also affected; production dropped by almost a third.

On the fertile slopes of Irazú, 4,000 persons —most of them potato and onion growers and dairymen—were dispossessed by the eruption.

**Queen of the bullring,** Olga Murillo reigns during a fiesta in Heredia. Strictly for amateurs, the fights featured bulls with blunted horns and youthful matadors with no swords.

**Fat pineapples and papayas,** purple granadillas, and other tropical fruits await shoppers in Cartago, Costa Rica's colonial capital.

**Richly ornamented National Theater,** pride of San José, copies the Paris Opera on a smaller scale. This capacity crowd meets on the anniversary of the Conference of Central American Presidents, and honors John F. Kennedy, who had attended as a guest in March, 1963.

Many were resettled north of San José in Alajuela Province

Agriculture Minister Elías Soley told me that a steady 15-day fall of ash destroyed the entire tobacco crop around Santiago in the Puriscal district. "There were 1,700 producers, and all 1,700 went out of business," he said. "That one fall cost them $200,000."

### Cattle Fed on Laundered Grass

Figures alone do not tell the story of Costa Rica's troubles.

Lilly List is a schoolteacher who also owns a dairy farm near Rancho Redondo. "Our first bad ceniza storm was on March 21, 1963," she told me. "The pasture was just knocked over by the ash. I cried. There was nothing else to do. I thought it was the end of the world."

Half of Mrs. List's ranch was in imperial grass, which may grow as tall as a man, the other half in *gigante*—called elephant grass in the United States. "The first fall of ceniza was corrosive," Mrs. List said. "It killed all the imperial grass, which is the most nutritious. The gigante resisted the ceniza, but the cows could not eat it because of the coating."

Luckily, a stream cuts across her land. By damming the creek, her workmen formed a basin in which to wash the grass they cut every day. Then they safely fed it to the cows.

Ranchers without water to wash feed did not fare so well. The United States sent corn and sorghum in an effort to save the herds, and the Costa Rican Government spent nearly $200,000 for green forage and molasses. Still, most cattle had to be moved, and almost 2,000 were slaughtered.

The fallout had one bright side. Dr. César Dondoli, professor of geology at the University of Costa Rica, told me that though ceniza is not a fertilizer, it remineralizes the soil. The

President of Costa Rica, Francisco J. Orlich stands beneath a portrait of Simón Bolívar, Latin American hero of independence

# COSTA RICA

THE "RICH COAST" counts its wealth not in great gold deposits, as discoverer Columbus supposed, but in fertile soil and a proud and peaceful people.

Costarricenses properly boast that their country has more teachers than soldiers; a fourth of the budget supports education. Stable government nourishes democracy.

Coastal jungles, timbered slopes, and thriving Central Plateau lie flung like a saddle blanket over Central America's rugged cordilleras. In this fortunate land, even today's plague may become tomorrow's bounty. Gritty ash from occasional volcanic activity restores minerals to the soil of coffee fincas and cattle pastures of the highlands. Plantations of bananas, sugar cane, and cacao thrive in the alluvial coastal lands.

**GOVERNMENT:** Republic. **AREA:** 19,575 square miles, about the size of Vermont and New Hampshire. **POPULATION:** 1,400,000; largely of Spanish descent; mestizo minority; some Negroes. **LANGUAGE:** Spanish; English spoken widely. **RELIGION:** Roman Catholic. **MAJOR CITIES:** San José (population 150,000), capital and industrial center; Limón, Caribbean port; Puntarenas, Pacific port. **CLIMATE:** Caribbean coast has temperatures of 100° F. with year-round rain; Pacific coast hot but dries. Central Plateau has April-November rainy season; temperatures seldom leave the equable 70's.

"ash" is actually a very fine sand—a mixture of silicates, potassium, calcium, sodium, magnesium, and other elements.

Dr. Dondoli calculated that 80,000,000 tons of ceniza have fallen during the months of Irazú's activity. In a year or so, he believes, it may cause crops to double. "This effect may last ten years or more," he said.

### Ash Blighted Lawns, Crushed Roofs

Under the ash, San José was smudged like an overworked water color (pages 126-7). Lawns looked dead. The bright colors of flowers were grayed by a layer of sand.

Every breeze stirred up tempests of ceniza from roofs, window ledges, and streets. It seeped into refrigerators and hospital operating rooms, grated against moving parts of machinery, and inflicted minor torture on those who wore contact lenses. "Clean" dishes had to be rewashed before every meal. Corrugated metal roofs collapsed under the ash.

I walked through the business district on my way to see Guillermo Castro, then Governor of San José Province and Mayor of the city. Conical piles of ceniza dotted the sidewalks. Men shoveled spumes of ash from the roofs. Big yellow street-cleaning machines—flown in from the United States—swept a wide swath on the streets, and trucks loaded with ash rolled out of town.

At the mayor's office, I said, "What you need are seven maids with seven mops."

Guillermo Castro smiled wryly. "Our budget is not big enough to cope with the ceniza," he said. "The cost of cleaning the streets and the storm drains and protecting the water supply is more than $1,000 a day. That does not sound like very much, but it is 32 percent of the budget."

Fortunately, the drain on the budget has ended. When I revisited San José in February,

the volcano was a whisper of its former self—emitting only small puffs of steam. There was still dust in the air, but it came from ditch-digging for an automatic telephone system for the Central Plateau. The work is being rushed to completion. By 1967 the $11,500,000 communications net will cover the country.

### Volcanic Disaster Brings Blessings, Too

The volcano was still worrying people, however. Had it really stopped?

Francisco José Orlich, the President of Costa Rica, told me, "We must wait and see. The eruption has been disastrous to our economy. It has cost the republic 200,000,000 colones." That amount, equivalent to about $30,000,000, represents more than 6 percent of the annual gross national product.

Some knowledgeable men, however, see benefits in addition to enrichment of the soil. They contend that Irazú brought Costa Rica to the world's attention at a critical time. Millions of dollars in aid, chiefly from the United States, have poured into the country.

While the eruption of Irazú was a private catastrophe for many, the country as a whole prospered as the ash fell. An increase in world coffee prices reduced the nation's overall losses for that crop. And Costa Rica's economy is booming under the stimulation of the new Central American Common Market.

"With the common market, which has removed tariffs from 90 percent of all goods, our market has increased from 1,400,000 consumers, Costa Rica's population, to 12,000,000, the population of the five participating nations," said Rodolfo Silva, director of President Orlich's Office of Planning. Member states are Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

I revisited the volcano and was amazed to see how rapidly nature is repairing the ravages of Irazú. The fields of ceniza were yielding to the tough kikuyu range grass originally brought here from Africa. On the slopes of the mountain, ox-drawn plows furrowed the land, and fields of potatoes, peas, and onions burgeoned in the sun.

In Cartago, 14 miles southeast of the capital, I saw a massive by-product of the eruptions. Lt. (jg) Hans Zassenhaus of a United States Navy Construction Battalion explained that he and a crew of 32 Seabees, plus heavy equipment, had been flown in from Davisville, Rhode Island, in May of 1964 to save Cartago from a flood of mud.

"When the volcano's explosions loosened the soil and destroyed ground cover, the run-off into the Reventado River, on Irazú's flank, promptly doubled," the lieutenant told me. "Every time we had a heavy rain, there were tremendous landslides and heavy mud flow. We've had 80 floods since we arrived."

Lieutenant Zassenhaus and his men have moved 741,000

**Incense perfumes** the spring air as the Procession of the Nazarene winds through San José on Good Friday. Priest and acolytes lead with a statue of Christ crowned with a halo and carrying His cross.

**Benediction opens** the Carnival of the Flowers in Desamparados, near the capital. President Orlich and his wife kneel at right. Each embassy in Costa Rica sets up a shop at the annual gala, with proceeds going to a children's hospital. The United States delegation sold toys in "Uncle Sam's Toy Shop" (upper right). A different community plays host to the carnival each year.

UNCLE SAM'S TOY SHOP
JOUETS

cubic yards of soil and rock to build protective dikes 12 to 24 feet high. They are credited with saving Cartago from destruction.

Even while fighting the ceniza, San José, with a population of 150,000, lost none of its bustle. Its narrow streets were a-clatter with small vehicles—Land-Rovers, Toyotas, jeeps, bicycles, and scooters. Buses, some painted gaudy colors, snorted into the capital. They bring in workers and shoppers from all parts of the country.

The dominant architectural note in San José is a glass-and-concrete-and-steel modernity, though a few 19th-century buildings remain. The most charming to me is not modern; it is the National Theater, completed in 1897. Wearing a patina of elegance, the theater is a jewel. It is so impressive that a Spanish critic once called San José "a village built around a theater." Broad staircases of Carrara marble curve to a second-floor reception room. Tall mirrors reflect the sparkle of gold-

**Boiling clouds** of ash-laden mist billowed from Irazú, while fiery stones sprayed upward from its seething maw. No lava appeared, but the acrid fallout blanketed more than 250 square miles, causing farm losses in the millions of dollars.

**Hoof-deep in ash,** hungry cattle grazed a parched pasture. Unable to find adequate forage, many died, others lost teeth. Emergency shipments from the United States brought life-saving feed.

**Caked with grime,** coffee plants suffered severe damage from leaf-destroying insects, whose numbers increased manyfold during the rain of ash.

and-crystal chandeliers. The auditorium is delightful—a miniature Paris Opera House (page 128).

To me, the other notable building of San José is the National Museum, a bullet-scarred onetime fortress, and now a showcase for the country's archeological treasures. It houses a magnificent collection of the small goldwork that distinguished the aboriginal Indian culture of Costa Rica.

San José was founded in 1737 and became the capital in 1823 after townsmen, in a brief civil war, marched on the old capital, Cartago, and forced its surrender.

Two years earlier Costa Rica had broken away from Spanish rule, which had lasted from early in the 16th century. Following the lead of Guatemala, Costa Rica—without firing a shot—simply declared her independence. Spain, her once imperial power squandered, waited until 1850 to grant the new republic official recognition.

Although it has known recurring clashes, Costa Rica has been spared the terror of general war. Today the little republic is one of the most politically mature and economically stable of all Latin American nations.

### Teachers Outnumber Soldiers

The country's most frequent boast is, "We have more teachers than soldiers, more schools than barracks." Order is maintained by a small civil guard, but technically there is not a soldier in the country. The army was abolished in 1949.

Since elementary education is free and compulsory, I was not surprised to find a high degree of literacy—nearly 80 percent. Stressing the importance of education, the government annually allocates about a fourth of the national budget for public schools.

In the past few years, the University of Costa Rica, moving to new buildings at San Pedro, near San José, has achieved high rank in Latin America. It now has an enrollment of 6,000 students—2,000 of them women.

**Hands over heads** as a protection against a shower of red-hot rocks, visitors retreated from the lip of Irazú's crater. Trapped gases caused rocks to explode with ear-splitting booms. One boulder barrage killed two men.

**Fleeing for their lives,** sightseeing nuns scurried across the ash field as Irazú loosed another burst of shattered rock. Immense clouds of smoke and steam gushed from the throat of the tortured giant.

Tourists flocked to Irazú's crater-pocked crown until authorities closed the route to the summit. Today, with the road once again open, visitors find the active crater measures 1,600 feet across—ten times its former size.

Rolando Fernández, university spokesman, said, "This is a serious place. The emphasis is not on ping-pong—or the athletic field."

Costa Rica is about the size of New Hampshire and Vermont combined (map, page 130). At its widest point it is less than 200 miles across. The smallness of the country has seeped into the language. Costa Ricans are called "Ticos," because of their frequent use of endearing diminutives. "*Momentico*," they say. "Just a little moment."

### Plateau Dwellers Enjoy Ideal Climate

Three-quarters of all Ticos live at an altitude of 3,000 to 5,000 feet on the Central Plateau. Many own their land. Not many are rich, neither are many poor. Costa Ricans are proud of their middle class.

On the plateau, Ticos enjoy an almost perfect climate. The mean annual temperature is 70° F., with a variation of only ten degrees. When it drops one degree, everyone cries, "*Mucho frio*—very cold"; when it rises one degree, they complain about the heat.

Costa Rica has a kind of soda-fountain economy—coffee, bananas, sugar, cocoa, and a few pineapples—but it also exports rice and beans to neighboring countries. Three-fourths of all Costa Rican exports pass through the Caribbean port of Limón.

In San José I booked passage to Limón on the Pachuco train—which translates roughly as "the corner-loafer train." The ride down from the Central Plateau is a swirl of sensation: The hollow sound of wheels over innumerable bridges and culverts, the ding-ding-ding of the insistent bell, the swaying of the cars as the candy-striped red-and-orange diesel beetles down the spectacular gorge of the Reventazón River. Engineer, fireman, and conductor wear gaudy sport shirts.

It took 19 heartbreaking years to build this 102-mile-long road—through a nightmare of mountains, jungle, and gorges. Minor C. Keith, an engineer from the United States, finally pushed it through in 1890 after incredible difficulties. Two of his brothers died of yellow fever, and thousands of workers

**Ten-foot-deep well** enables geneticists to study effects of radioactivity on plants at the Inter-American Institute of Agricultural Sciences in Turrialba. Four tubes contain living matter being treated by cobalt-60 in the middle cylinder. Demineralized water protects personnel against the cobalt's gamma radiation. Scientists seek to learn whether genetic alterations can produce higher yields and disease-resistant varieties.

**Relying on memory alone,** cartmaker Carlos Chaverri paints wheels with traditional designs. His patterns, drawn geometrically, resemble the mariner's compass card. Sides of the *carretas* present a riot of color—fruits, flowers, leaves, butterflies. Fourth-generation cart builder, Chaverri has practiced the art since the age of seven.



perished from fever, dysentery, and malaria.

Keith had put down about half the track when he ran out of money. He planted an experimental plot of bananas near Limón, and when they sold well in the United States, he went into banana production on a large scale. Funds from this operation helped him to complete the railway. Later Keith combined his banana interests with a Boston firm to form the United Fruit Company, today the largest foreign investor in Costa Rica.

At Siquirres, where the rails leave the Reventazón, the character of the land changes. In the shade of the forest grow cacao trees, source of chocolate. Some of their young leaves were a shocking pink, and ribbed cacao pods ranged in color from a dead oyster white through bright green and pumpkin yellow to deep red.

### Cacao a Temperamental Crop

Houses stand on stilts. In almost every yard of the small settlements along the line, a "barbecue platform" displays cacao beans drying in the sun. Each has a sliding roof which shelters the beans when it rains.

Cacao is an old crop in the Limón area. Antonio Lara, who has worked in cacao many years, told me later in Limón: "Early Spaniards found the Indians using cacao beans as money. Cacao is a whimsical plant; heavy-flowering trees sometimes produce very little. We never know whether we will get 50,000 pounds or 200,000 from the same plot."

In Limón I did not need to speak Spanish. I had some trouble, however, understanding the broad English spoken by the Negroes, most of them descendants of Jamaicans imported to build the railroad.

I heard that Parque Vargas, a downtown park, was the home of nine sloths. They lived in giant *laurel de India* trees, a species of fig. So, next morning, I peered up into the leafy ceiling of the park. But I could see no sloths. I complained mildly to a shoeshine boy.

### Sloth Unruffled by Shock Treatment

"Mahn, you don' know how to look for dey slotes," he said. He squinted upward and then pointed. Finally I made out the animal, a slowly moving blob at least 90 feet above the ground. After that I could spot the sloths by myself. They are Hoffmann's two-toed sloths, native here. Algae growing in their fur give them a greenish cast (page 149). I saw one big sloth, wedged between two branches, scratch his chest ever so s-l-o-w-l-y for 18 minutes. Then I gave up timing him.

"They's not easy to kill, they slotes," said my Limón taximan. "One day one of them he try to cross the street on the electric wires. He hold the wires, and the smoke it was coming out of his fur, and chuck, chuck, chuck, the sparks did make a noise.

"Then somebody turn off the electricity, and that slote he just move back to the tree, and he don't show nothing!"

I walked out to Limón's T-shaped pier, which juts into the Caribbean, to watch ships

loading cacao and bananas. Diesel locomotives brought trainload after trainload to shipside (page 147).

Some 30 years ago, the United Fruit Company had to give up its plantations in the Limón area because Panama disease, a fungus infestation of the soil, destroyed the plants. Now the Standard Fruit and Steamship Company of New Orleans has established new plantations—$8,000,000 worth. It plants the Giant Cavendish banana, which is resistant to the disease.

That evening, when I returned to Parque Vargas, the band was playing. I wondered whether the sloths were entertained. They are doubtless the only sloths in the world that hear band concerts three times a week.

I was eager to travel the Inter-American Highway, part of the all-weather Pan American Highway that will link Alaska with southern South America. Richard Dyer, whose San José Graphic Arts plant turns out fine printing, drove me in his jeeplike Toyota.

### Ascent Ends on "Ridge of Death"

We started from San José long before sunup. The road led us southward through Tres Ríos, where the best Costa Rican coffee grows. Here the ceniza had done great damage. We bypassed Cartago over a bumpy track, and soon began the ascent of the mountain barrier, part of the great cordilleras that form the spine of Central America.

We climbed cautiously, and suddenly we were above the morning fog. We could see the gorges of the Orosi Valley filled with milky mist. Chirripó Grande, at 12,533 feet the tallest mountain in Costa Rica, loomed like some towering rock in a Japanese print, its base lost in the sea of fog.

The temperature dropped steadily as we turned among the crags. We passed groups of woodcutters, huddled in shawls of burlap. Some strode along carrying long-handled axes over their shoulders, and black umbrellas.

We reached the Cerro de la Muerte. "It's called the Ridge of Death because of the many wayfarers who have frozen to death here," Dick said. "This is the highest point on the road, 11,000 feet, and it gets torrential rains and freezing temperatures."

From Cerro de la Muerte—also known as Cerro Buena Vista—the highway spirals into the broad and fertile Valle del General. Booming San Isidro del General is the hub of the valley. It reminded me of a town out of a Western movie. Jeeps and pickup trucks vie with horses and oxcarts for street space. Blacksmiths do a thriving business.

Beyond San Isidro we rolled through rich bottom land, and as we drove farther south, the forest gradually enfolded us—a tumble of vines, broad-leafed heliconia, anthurium, and philodendron. Bright sunlight slashed

**"Singing" cart,** trademark of Costa Rica, rumbles along a village lane, the owner prodding his oxen to step up the pace. Each region has developed its own design. Villagers can identify a wagon by sound alone, for its resonant knocking proves as distinctive as the voice of the owner.

through the canopy of leaves. Nests shaped like three-foot teardrops, built by caiques, of the oriole family, hung from lofty branches.

Once, I watched an iridescent butterfly flip and fall like a brilliant bit of blue tinsel. When we stopped, we were immediately inundated by the high, incessant whirring of insects.

### Stone Spheres Pose a Mystery

We crossed the long bridge over the Rio Grande de Térraba—one of 43 bridges between San Isidro and the Panama border—and followed the canyon of the Térraba to Palmar Norte.

The Palmar region is an archeological treasure trove. We detoured from the highway long enough to visit the flood plain dotted with monolithic stone balls. At least 70 of these mysterious vestiges of an unknown culture have been found near Palmar (page 144). They had been covered by silt until 1938, when the United Fruit Company cleared the area to set up banana plantations. Only a few similar spheres are known elsewhere—in Honduras, British Honduras, and Mexico. At Palmar they range from grapefruit-size to taller than a man, some weigh about 16 tons.

With the partial abandonment of banana cultivation in this region, land is used for corn growing, with the usual slash-and-burn technique. As a result, many of the balls are now wholly or partly exposed, and some are being



**Mantle of green,** a coffee nursery near Turrialba in the Juan Viñas district covers slopes with 250,000 young plants. Mature bushes will yield high-grade berries commanding top prices. The beans go into blends to improve the flavor of other coffees.

**Tumbling the sun-dried coffee beans** removes their parchmentlike skin. Earlier, rollers cracked the berries, and a bath in fermentation tanks sloughed off the pulp

damaged by fire. Others have been dynamited and destroyed, following a rumor that the stones contained gold.

Dr. Matthew W. Stirling of the Smithsonian Institution, a member of the National Geographic Society's Committee for Research and Exploration, was amazed at the near perfection of the stone balls during a recent archeological trip to Costa Rica. "Examples seven or eight feet in diameter vary less than a quarter of an inch from being perfect spheres," he said. "This is one of the most remarkable archeological finds in the New World.

"Our knowledge of the archeology of this region is so incomplete that we do not know at what period the balls were made," continued Dr. Stirling, long-time Director of the Smithsonian's Bureau of American Ethnology. "Pottery of relatively recent date—about a century before Columbus—has been found in association with some of them, but it is possible that the spheres themselves are heirlooms from a much earlier time. It is strange that not a word concerning them is contained in the old records of the Spaniards who first visited the region.

"Our workmen asked us how we thought the balls were made. When we confessed ignorance, they volunteered the information—based, I believe, on folklore—that they had heard the Indians possessed a liquid which they poured over rock to soften it, making it as easy to carve as cheese.

"It is known that stone figures in this area were carved from a consolidated volcanic ash, which is soft when freshly quarried, but later hardens on exposure. The balls, however, are made from hard basalt."

How were they made by a people with no metal tools? Dr. Doris Stone, Chairman of the Board of Directors of the National Museum of Costa Rica, believes that the stones must have been chipped roughly to size, and then worked with abrasives—probably sand.

### "Rich Coast" Never Lived Up to Name

The spheres, variously thought to have been religious symbols, astronomical tools, or markers for burial grounds, may have served also as guideposts on the great trade routes that converged on Costa Rica. "Just as plants and animals from north and south meet in Costa Rica, so did ancient cultures," explained Carlos Balser, of the National Museum. "The country was a natural trading mart."

As I stood beside one of the great stone balls, I envisioned feather-clad ambassadors from Mexican tribes mingling with the cotton-

**Giant basalt ball,** among the largest of hundreds in Costa Rica, baffles archeologists. Who carved it? When? Why? Weighing an estimated 16 tons, 7.03 feet in diameter, it comes within one-quarter inch of being a true sphere.

**Blue jade bird-man,** shown about actual size, stands as lustrous as on his burial day centuries ago. Costa Rican aborigines carved such figures, scientists believe, from ritual axes of an even earlier people.

**Gold frogs,** symbolic of precious water, dangled from the necks of a long-vanished people, who strung a cord through leg loops. They appear actual size.

**Excavating aboriginal graves** in Costa Rica, a National Geographic Society-sponsored expedition led by Dr. Matthew W. Stirling and his wife found many of the objects pictured. Here the Stirlings uncover a three-legged metate, or grinding stone.

KODACHROMES (IMMEDIATELY ABOVE AND TOP) BY RICHARD H. STEWART;
EXTACHROMES BY ROBERT S. OAKES © N.G.S.

**Crocodile god** with gleaming gold snout and triangular scales on his arms holds a small eagle god in each hand. A twin-tailed monkey perches atop his head.

**Cylindrical seal** of fired clay enabled ancient Costa Ricans to paint their skins with plant dyes by using it as a roller. The Stirlings found the 1¾-inch-wide artifact buried with two others like it, perhaps as offerings.

EKTACHROME (BOTTOM LEFT) BY ROBERT S. OAKES;
KODACHROMES BY RICHARD H. STEWART © N.G.S.

**Delicately wrought** gold pendants, probably made by the ancients for burial with the dead, represent eagles, frogs, iguanas, and lobsters as well as man-animal deities. Aboriginal goldwork flourished in Costa Rica, as its name, Rich Coast, implies. The Central Bank of Costa Rica in San José houses this treasured collection.

clad aborigines of Panama, and traders from Peru, the land of the proud Incas.

Palmar has yielded much of the small gold-work of the ancient Costa Rican culture: beautifully cast representations of frogs, eagles, alligators, bells, and human figures (preceding pages). The sight of similar gold ornaments is probably what led the early Spaniards to call the new-found land Costa Rica—the Rich Coast. Columbus reported that Indians told him of many mines there. But the country never quite lived up to the name. Little gold has been found outside graves.

Below Palmar we traveled a yellow gravel road, a slash through the forest. As dusk settled, unseen birds made a raucous ritual of getting to their roosts. One rapidly cried "chee-chee-chee"; another called "look-at-her, look-at-her." Luminescent beetles, lit up like miniature airliners, cruised among the trees.

Next morning we took the rocky, steep road to San Vito de Java, Costa Rica's newest town. The narrow road winds through lush forest. The roadside is a tangle of lianas, ferns,

**Picked green,** a stem of bananas rides a trolley wire from field to shed. After washing and grading they are boxed for export—8,400,000 pounds a week from Golfito alone. Plastic bag protects the bunch against insects.

**Jungle of banana plants** surrounds the homes of workers at the Estrella Valley Plantation, south of Limón. To bear marketable fruit, the plant requires 9 to 12 months of sunshine and frequent, heavy rains.

**Street lamps of Limón,** Costa Rica's principal Caribbean port, pale beside brilliantly lighted freighters at dockside. Columbus touched shore near here in 1502 on his fourth and last voyage to the New World. Friendly Indians presented him with a peccary that proved so fierce it chased the admiral's Irish wolfhound around the deck of the flagship.



**Showcase for orchids,** a *samán*, or rain tree, wears garlands of the air plants on its boughs. A dozen purple blossoms may sprout from a single stem of *guaria morada*, Costa Rica's national flower.

and flowering shrubs. This is one of the world's great orchid grounds.

San Vito was founded in 1952 by Vito Sansonetti, an Italian naval officer who married a Costa Rican girl. He organized a society for colonization and bought 75,000 acres of government-owned wilderness. He hacked his way through the forest with a machete on his first trip.

### Weddings by Proxy Aid Colony

The Italian settlers hewed out fields and planted coffee before any buildings were erected. But, with a sawmill at work, wooden houses soon appeared. Men sent to Italy for their wives. Some were married by proxy to their sweethearts at home.

Today an estimated 15,000 people—preponderantly Costa Rican—live in the area, working 150,000 acres carved from the forest. The land originally purchased for 10 cents an acre is now worth $300.

San Vito has a school, a church, daily bus and plane service, police and health services, an automatic telephone exchange. As for crops, the colony produced $300,000 worth of coffee in 1965. And 30 babies are born monthly.

In a soaking rain, a sample of an annual 200 inches, we slurred down the hills to Coto. Twenty-five years ago the Coto Valley was a

**Study in slow motion,** a two-toed sloth inches along an electric wire near a park at Limón. The animal takes its name from its slow—or slothful—manner. Greenish hue of the fur, caused by algae, helps camouflage *Choloepus hoffmanni* high in the treetops. Many Latin Americans call him *perezoso*, the lazy one. Costa Ricans have another name, *Perico ligero*, or lively Pete.

**Frost-free land of perpetual spring,** Costa Rica bursts with blooms. Hibiscus, bougainvillea, and other tropical flowers brighten the yards of homes. Podlike *raibarbo* (left, above), a relative of the castor bean and the poinsettia, bears small, brilliantly colored "antlers." Virtually every garden sprouts one or more *chayotlloa* (left, below).

**Giant *cardon*** cactus soars as high as 20 feet. Concrete curbing protects this many-spiked specimen in the middle of a road near Liberia.

swamp. Today it is a vast green sea of bananas—30,000 acres, 26,000 in production.

We were in time to catch a banana train to Golfito, the United Fruit Company's busy southern port on the Pacific. We rode mile after mile through the bright green ranks of banana plants.

Here United Fruit plants the Cocos banana, a low-growing plant—10 feet tall as compared with the 28-foot Gros Michel, the traditional banana of the trade. The Valery, a shorter version of the Giant Cavendish that is grown around Limón, is also being planted. Shorter plants are less likely to blow down.

"There are more and more blowdowns," F. A. Hatch, Jr., United's manager at Golfito, told me. "Perhaps the climate is changing because of the burning and clearing. We no longer have the old lush jungle atmosphere."

### Banana Boats Must Sail on Time

United's ships dock at the Golfito pier on a tight schedule. They load and turn around for the United States within eight hours.

"You can't store bananas," Hatch said. "You must get them to market." Every week 200,000 42-pound boxes—unpacked stems are no longer shipped—leave Golfito.

I flew back to San José over jungle trees that looked like gigantic bunches of broccoli.

**Hard-riding *sabanero*,** or herdsman of the plains, drives Brahman cattle in Guanacaste Province. Nicaragua, Costa Rica's northern neighbor, once owned this Texaslike land of ranches and cowboys.

**Sunset Cold Frames a Gamboling Dog on the Dark Sands of Puntarenas**

Next morning I set out for Guanacaste Province—Costa Rica's "Wild West"—where cattle thrive. Guanacaste also supplies the republic with rice, beans, and cotton, and is famed for its wild game—deer, paca, tapir, jaguar—and its water birds.

My good friend Mauro Fernández, assistant manager of the Gran Hotel Costa Rica, traveled with me. We drove from San José through drowsy Santo Domingo in Heredia Province, a town of adobe houses and slow traffic, dominated by an ocher-colored church. This is old Costa Rica. We watched the village milkman go from door to door, ladling milk from six cans hung from the back of his horse.

In Alajuela we went in search of the town's famous orchid tree, but paused on the way at the dramatic statue of Juan Santamaría, Costa Rica's only war hero. Mauro knew the story:

"In 1856 William Walker, the filibuster from the United States, invaded Costa Rica. He was defeated in the battle of Santa Rosa and retreated to Rivas in Nicaragua. When Santamaria set fire to Walker's fortified house there, Santamaría himself died in the flames."

What happened to Walker? A Southerner in quest of new realms for slavery, he organized more expeditions to Central America. But on his third trip he was captured in Honduras and executed by a firing squad.

We found the orchid tree in a pasture near the slaughterhouse. It is a venerable *samán* —the West Indies' rain tree. Thousands of orchids—all *guaria morada (Cattleya skinneri)*, Costa Rica's national flower—made the old tree a colorful bower (page 148)

Costa Rica's busiest Pacific port and one of its most popular seaside resorts, Puntarenas offers bathers a sweep of uncrowded, uncluttered beach. Game fish abound, and schools of tuna in offshore waters attract commercial fishermen from as far away as California.

"Now we are leaving the coffee fincas," said Mauro, as we headed north. "But we will still see lots of sugar cane, tobacco, pineapple, tomatoes, and plantains."

### Oxcart: Symbol of Costa Rica's Past

At Sarchi we stopped at Don Joaquin Chaverri's oxcart factory (page 139). Pungent smoke rose from a pit where Chaverri's sons put red-hot iron rims on alligator-wood wheels. The brightly painted and carved oxcart is a symbol of Costa Rica.* No two carts are alike, except for their hardwood durability. The wheels turn with a melodious knocking—the "voice" of the cart (pages 140–41).

"Carts like these used to make the nine-day journey between Cartago and Puntarenas, each loaded with a ton of coffee," Mauro said.

Sarchi's two shops turn out eight of these colorful vehicles a week, but the days of the carts are numbered: their job will be taken over by jeeps and trucks. The cartmakers are turning to crafting bedsteads, chairs, and home bars—but they still decorate them with the geometric and flowered designs which distinguish the carts.

Three hours later we drove into Puntarenas on the Pacific. Puntarenas lies on a slim finger of land more like a wharf than a peninsula (above)—at one point scarcely wide enough for the highway and the railroad.

"There is always the rumor that the whole city is going to sink," laughed Alvaro Gallardo Cordero, who showed us the town.

*See "Land of the Painted Oxcarts," by Luis Marden, National Geographic, October, 1946.

Puntarenas is a popular resort. At night the Paseo, the beach promenade, gleams under colored lights. Vacationers relax over coffee and soft drinks under the broad-leafed trees.

Pushing on toward Guanacaste Province, we traversed some low hills. Presently the road flattened and we found ourselves on a rolling prairie.

"There she is," cried Mauro. "Guanacaste."

Hundreds of flowering trees studded the plain. One, locally called *corteza (Tabebuia chrysantha)*, wore brilliant yellow blossoms. Later, as we drove farther north, the yellow was supplanted by the soft pink of a similar tree, *roble de la sabana (Tabebuia rosea)*.

We drove under a leafless oak at Hacienda Santa Rosa, headquarters for a 250,000-acre cattle domain. Gaetano Vallarde, the slender ranch manager, listened carefully as Mauro explained we would like a night's lodging. I heard the phrase "*Con mucho gusto*," and knew the news was good.

Señor Vallarde introduced us to Otoniel Gutierrez, his foreman, a stocky, full-chested man who wore his canvas cowboy hat at a jaunty angle. A *tigre*—jaguar—had killed a steer the night before, he told us. Did we want to go tiger hunting?

That evening we set out for tiger. The Toyota's lights picked up the flashing wings of a long-legged bird. "The clock bird—an *alcaraván*," said Otoniel. "It calls out every hour on the hour," he explained solemnly.

After a long ride, we left the vehicle and hiked through tall grass. Otoniel switched on a powerful lamp he wore on his forehead and swept the area with the beam. The shadows looked like tigers. I felt very exposed in my cotton-and-Dacron shirt.

### Toyota, Toyota, Burning Bright . . .

For an hour we sortied on the plain, slipping on rocks, thorns clutching at our clothes. Then we all saw it. A gleaming red eye!

A thrill of excitement gripped me. We crept forward silently. Then Otoniel laughed. The flashlight pinpointed the red "eye." It was a luminous sign on our car. "*Otra* Toyota," it said—"Another Toyota."

We never did see a tiger—which was all right with me.

As we reached the hacienda, the clock bird gave out a raucous cry. I looked at my watch. It was ten minutes to 10. My watch must be slow, I thought—or the bird is fast.

Next morning we drove to Mojica, another tremendous hacienda, to go caiman watching. We left the jeep and walked through a thorn forest. Doves by the dozen flew up from the tall yellow grass as we approached. Green parrots flapped by, two by two. We disturbed a group of congos, howler monkeys. They bounced up and down on the branches of a tree and cursed us for our intrusion. White-tailed deer leaped from thickets. At a small water hole, two coatis peered at us with interest. We saw only one caiman, a four-foot crocodilian afloat on a dark-green river.

Blue-winged teal, migrants from the north, fly by the thousands along the Río Cañas, a sultry, slow-moving stream south of Filadelfia. We stopped by the river at the unpainted house belonging to Gonzalo ("Chalo") Mendez. His eleven children shyly came from the house to stare at us.

The trunk of a coyol palm lay on the ground. One of the Mendez daughters scooped milky liquid from a well carved in the heavy end.

Chalo explained. "The coyol palm makes very good wine when it lies in the sun. It gets stronger every day. This one has been giving wine for 22 days—already about 16 gallons."

### Costa Rica Welcomes Foreigners

The area around the river is flat and free of trees and rocks—ideal for mechanized farming. And the machines are arriving. Outside Liberia, the capital of the province, I saw dozens of red and blue tractors for sale.

Everywhere I went in Costa Rica, I found evidence of a new surge toward economic development: New farms being hacked out of the jungle, plans for new industries, a new oil refinery, new roads connecting with the Inter-American Highway, which runs the length of the country.

"Anyone can work in Costa Rica," a U. S. Embassy official said. "Foreigners have the same rights as Costa Ricans."

"It is good to have people come in here from other countries," my friend Mauro told me. "They bring their brains with them."

But Costa Ricans are looking squarely at themselves when they speak of the future. They are a proud, literate, capable people. Young Guillermo Castro, San José's former mayor, said something that sticks in my mind:

"The Costa Rican is proud to be a man—not just a pair of hands on a farm."

In that sentence, perhaps, lies the future of Costa Rica—the "rich coast" that excited the adventurous Spanish explorers.

Open . . . drop in . . . shoot!

# Kodak brings the Instamatic Camera idea to movies . . . and introduces a new era in movie enjoyment

**Kodak has redesigned the movie camera.** New KODAK INSTAMATIC Movie Cameras load *instantly*. Just slip the KODAPAK Movie Cartridge into the camera and shoot! No threading. No winding. No flipping. Zoom model shown, less than $175. Other KODAK INSTAMATIC Movie Cameras from less than $50.

**Kodak has redesigned the movie film** with 50% more picture area for better, sharper movies. The new KODAPAK Movie Cartridge is factory-loaded with improved KODACHROME II Film in the new Super 8 format —giving you 50 feet of uninterrupted shooting.

**Kodak has redesigned the movie projector.** The KODAK INSTAMATIC M70 Movie Projector lets you show any scene at normal, fast, or slow-motion speeds—forward and reverse. "Still" projection, too. Brilliant illumination, fully automatic threading. Less than $160. Other models are priced from less than $85.

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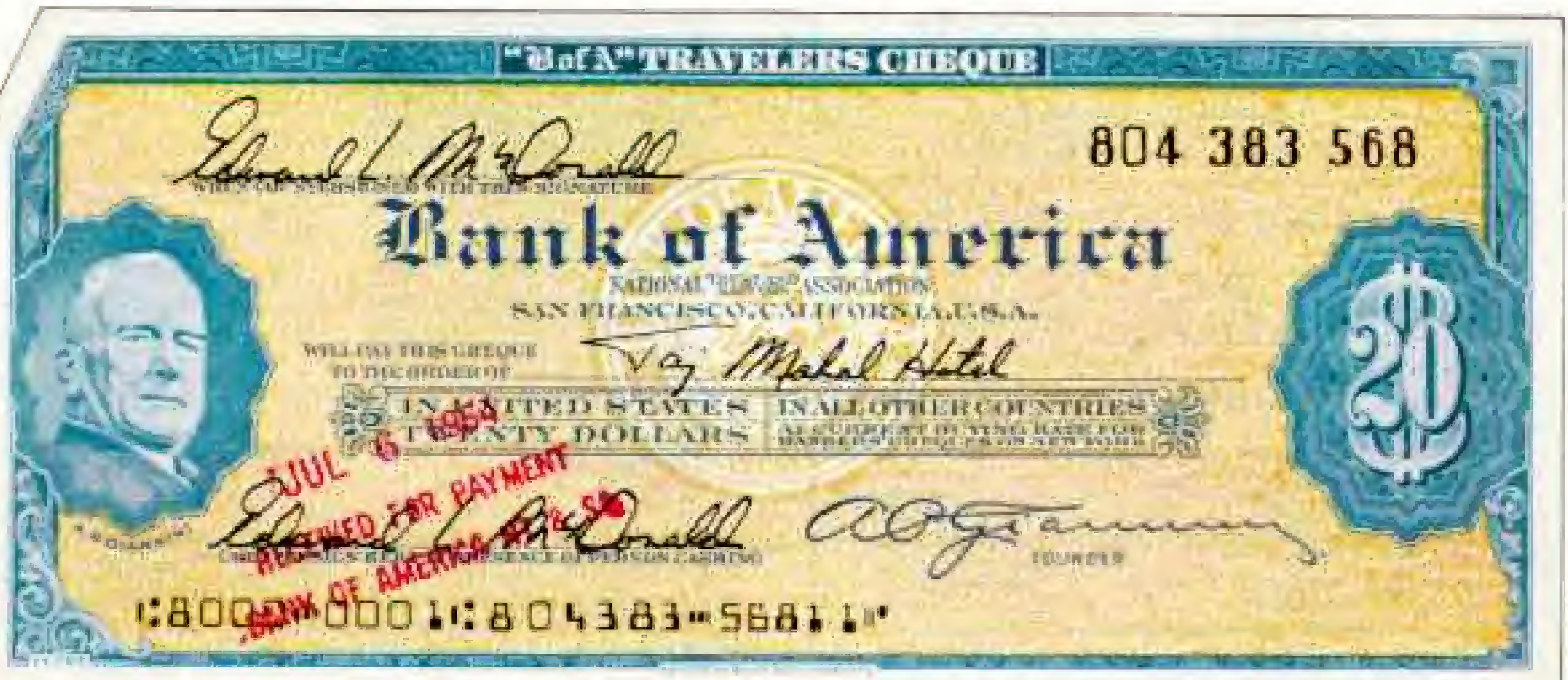


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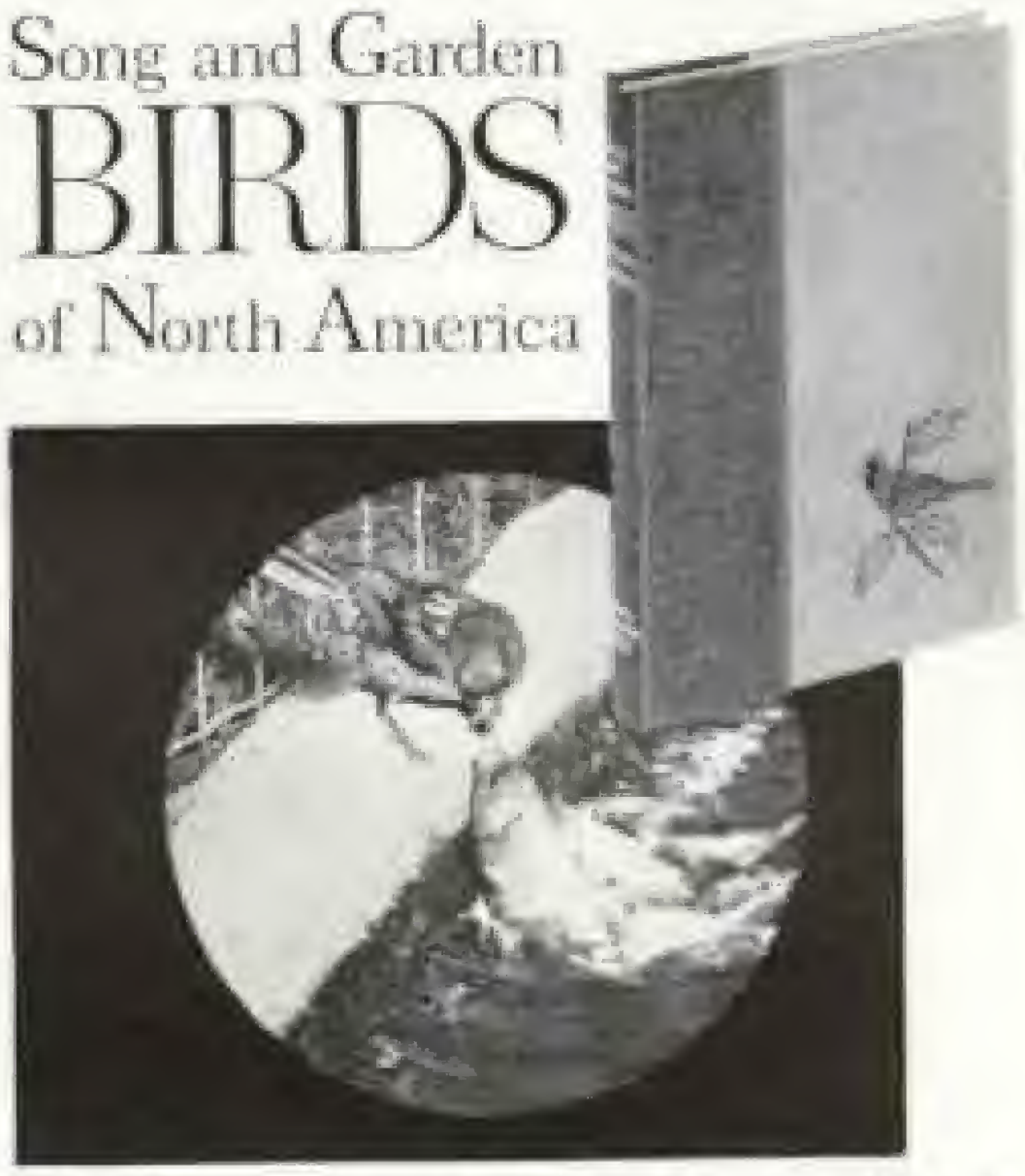
Song and Garden

# BIRDS

of North America



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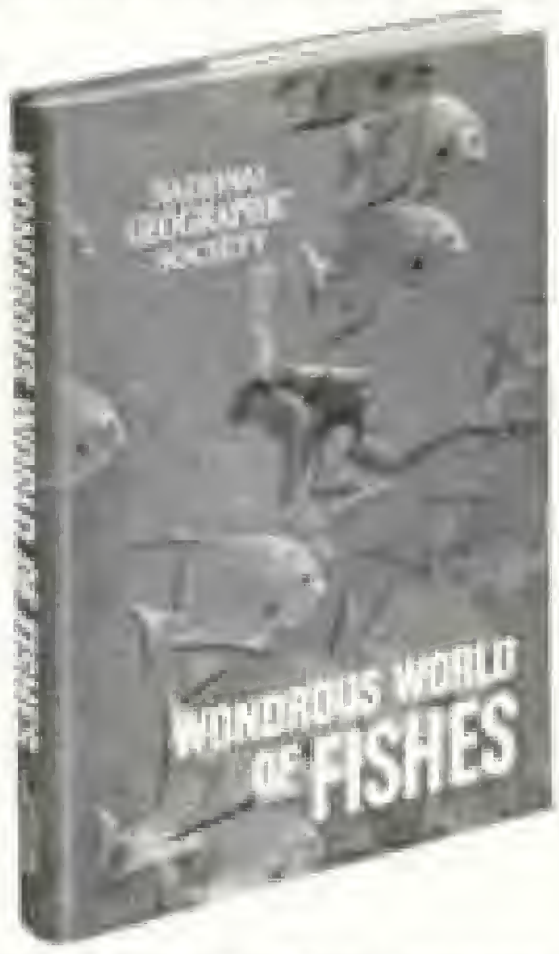


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**Wouldn't you really rather have a Buick?**

Buick Motor Division

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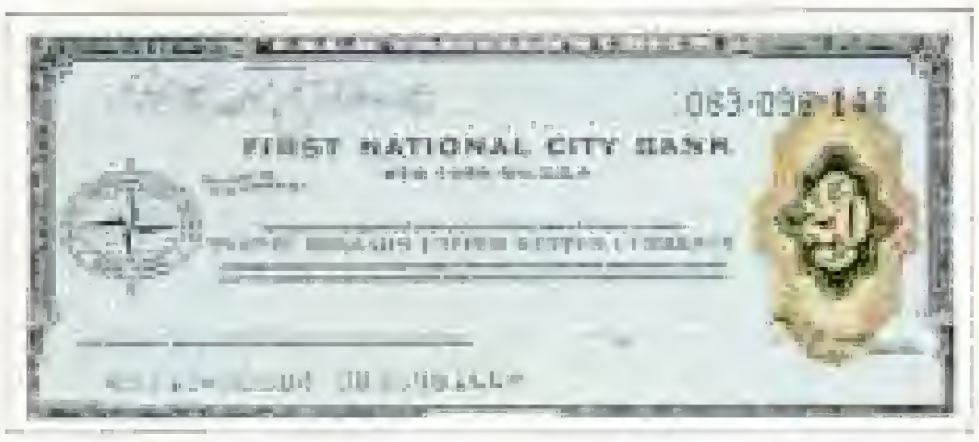


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