DOUBLE MAP SUPPLEMENT: CHINA AND ITS PEOPLES

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INCLUDED with this issue is a wall map that has been 35 years in coming. We have waited that long to be able to produce a new map of China with Chinese cooperation and help. Our last supplement map of China—all of it—appeared in June 1945, between the surrenders of Germany and of Japan. Our first was in 1912.

The 1980 map is of a nation transformed. In 1912 we noted treaty ports for foreign commerce wrung from an enfeebled Manchu empire. In 1945 there were vast areas still occupied by the Japanese, and China was soon to be a battlefield in an enormous civil war. Now life there is reordered, and the countryside is divided into communes.

Americans harbored for many years the illusion of an immutable peasantry plodding through an ancient way of life, somehow immune to the storms of political change. Because China was so long closed to us, we saw only darkly, through the eyes of "China watchers" peering from posts like Hong Kong. Only recently have we realized the full extent of the national trauma caused by the Great Leap Forward, and especially by the later Cultural Revolution that caused such losses in the economic and intellectual life of the People's Republic of China.

China's scholars and scientists are now trying to make up for much lost ground. During preparation of the map, Geographic cartographer Ted Dachtera traveled to China as guest of the Cartographic Publishing House. Working with that institution and the Central Academy for National Minorities, we have been able to produce a rare and, I think, splendid ethnic map of China's many peoples and languages. Without question, this is the most accurate, up-to-date map of its kind ever published, a genuine cartographic contribution.

Those who have been accustomed to older Chinese place-names will find many surprises: Beijing for Peking or Peiping, Tianjin for Tientsin, Guangzhou for Canton. The map's nomenclature follows the Pinyin system, a way of representing the sounds of Chinese characters in romanized spellings. The new system should aid understanding and communication, which can only be helpful in future relations between two large and powerful societies.

Gilbert M. Grosvenor

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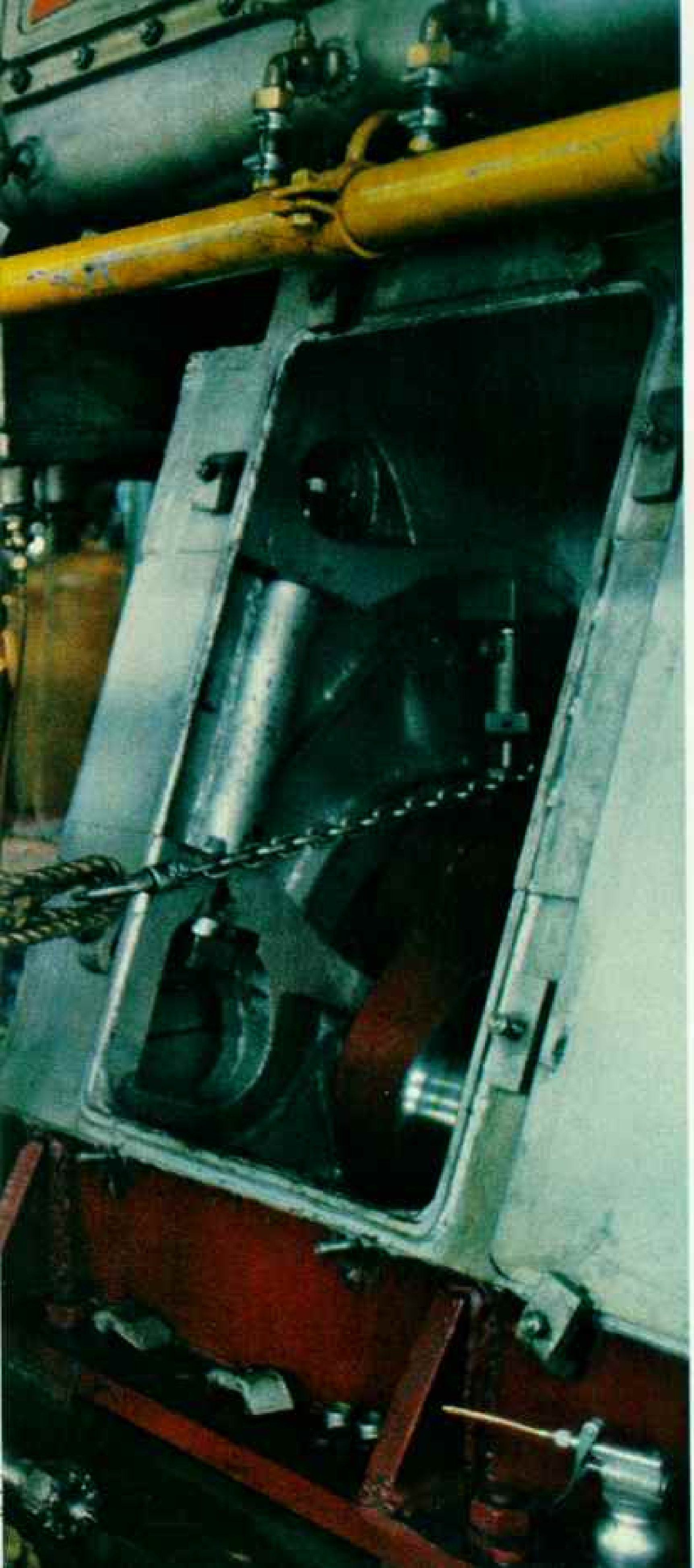
COVER: *An 8-inch-high horse of silver and gold attests the wealth of the Thracians of ancient Bulgaria. Photograph by James L. Stanfield.*

"Muscle and smoke, commerce and crowds"

Its very name still conjures romance and intrigue, the lure of the Orient and faraway ports. But old Shanghai is no more. After thirty years of stern revolutionary discipline, China's largest city stands transformed. What's more, its crowded shopping districts suggest its 11 million people are beginning to enjoy a few fruits of their labor.

A SHANGHAI PORTFOLIO
BY NATIONAL GEOGRAPHIC PHOTOGRAPHER
BRUCE DALE



At the Shanghai Shipyard, workers ease a piston into a 9,000-horsepower engine. Eager for trade, China is expanding its fleet by buying abroad, building at home.

Affairs of the heart find space in city parks, where newly relaxed attitudes toward public affection are evident. Everywhere, in every way, tai ji quan exercises bloom.

Christian comrades, closeted for years by the Cultural

Revolution, now ring the rafters of the Mo-an Church.

Barge trains, cargo ships, and a submarine

crowd the Huangpu River, Shanghai's inland harbor.

Promising more steel for a modern China,

the giant Baoshan Steelworks rises along the Yangtze.


El Clarín
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CHINA'S BORN-AGAIN GIANT

Shanghai

By MIKE EDWARDS
NATIONAL GEOGRAPHIC SENIOR WRITER

Photographs by BRUCE DALE
NATIONAL GEOGRAPHIC PHOTOGRAPHER

Topsy-turvy *as news from China often seems, the people there don't read upside down; this Shanghai man is actually perusing the English section of a combined Spanish-English paper. He may have learned his English before World War II, when foreign gunboats kept Shanghai a stronghold of Western trade concessions wrested from a weak imperial government.*

Those were the days of rampant prostitution and opium addiction—days when local peasants were "shanghaied" for cheap labor abroad, or to crew shorthanded ships.

*Today Shanghai retains a European look along Suzhou Creek (**overleaf**). But it has thrown off its checkered past and taken the lead in China's drive to catch up with the developed world.*

AT NIGHT on a narrow street in the old part of Shanghai, under swaybacked balconies wearing tomorrow's shirts and socks, a crowd surrounds a small woman. She is well along in years, with hair the color of wood smoke. But there is something about the way she moves. . . .

"Sing something for the foreign friend!" someone exclaims when I approach.

"Yes, sing for the 'big nose'!"

"Oh, I need my rest!" Her face vanishes behind a fan.

"Come on, you can do it."

She tries "It's a Long Way to Tipperary," but has forgotten some of the words. Up comes the fan again.

"Sing *Chinese* for the foreigner!"

"I must go to bed!" The fan flutters. But the crowd persists—as she surely wanted it to. This time the words come clear and strong. It is an aria from a Chinese opera, delivered with elaborate gestures—the work, obviously, of someone trained for the stage.

Then she is gone, absorbed by the night. "Wait! The foreigner wants to talk to you!" No reply.

Who is she? No one knows. "She comes often and sings for us," a man says.

In the depths of China's Cultural Revolution, which began in 1966 and the effects of which were felt for a decade, old things were bad and banned. Anyone who sang classical opera did it alone. But today's Chinese are free to contemplate old as well as new, to look backward as well as forward.

In Shanghai, to look backward is to know a certain emptiness. This city is not renowned for the curly-roofed palaces of imperial dynasties. It is muscle and smoke, commerce and crowds. This is the Big Lychee—largest city in China, and one of the largest in the world, with 11 million people. (See the double supplement map, **China and Its Peoples**, included with this issue.)

Shanghai's 8,000 factories range from hole-in-the-wall

shops, where women hand-paste paper bags, to sprawling steel mills. Shanghai makes Spring Thunder radios and Flying Man sewing machines. White Cat detergent and White Rabbit sweets. Golden Elephant buses and White Elephant batteries. The city puts its own name on shoe polish, automobiles, elevators. Last year Shanghai produced 39 billion dollars' worth of goods, one-eighth of the industrial output of the world's most populous nation.

Shanghai means "above the sea" or, some say, "to go to sea." Given time, and political peace, she may again fulfill that second and more magical definition. She claimed it fairly before World War II, when foreign as well as Chinese entrepreneurs processed and shipped the raw products that floated down the Yangtze (a river of various names, both locally and in the hinterlands) and sent back up much that China bought abroad.

Foreign enterprise dated only from the 19th-century Opium Wars that forcibly opened China to outside traders. In their own special areas the foreigners—especially the British, but also many Americans and others—made Shanghai the Paris of Asia. Fine restaurants, a cosmopolitan expatriate

community of 60,000, furs and silks, servants—that was the Shanghai foreigners knew. For the average Chinese it was a good deal less.

Asia's Paris was extraordinarily wicked, festering with opium dens, gambling halls, and alleys with such names as Galaxy of Beauties and Happiness Concentrated.

All that was swept away when the Communists won out over the Nationalists of Generalissimo Chiang Kai-shek in 1949. After "liberation," to use the Communist jargon, the new regime "socialistically transformed" foreign enterprise, "reeducated" the 30,000 prostitutes, and dried up the opium supply of the 200,000 addicts. Shanghai became as innocent as a babe.

Today not quite as innocent as it seems, perhaps. Government officials spoke to me of crime: of a gang mugging pedestrians, of theft and murder. I suspect that Shanghai's crime rate is lower than that of major U. S. cities—justice is severe and includes capital punishment—but the admission that there is *any* crime jolted me. Shanghai people usually are so well behaved in the presence of foreigners that one forgets they are, after all, human. I confess to a thrill at witnessing a fight in a vegetable market: One man mashed into the cauliflower, then rising to deck his adversary.

Shanghai also can be restless. During most of my 38 days in Shanghai last fall, city hall was plastered with complaining posters, and a crowd milled there.

What were the grievances? Through my interpreter, I offered to listen. A hundred or more persons shoved to get close. A thin-faced young man poured out a story of abuse of himself and his family, exiled to a rural town after his father was labeled a "capitalist roader." He had been taunted and beaten. He didn't like his job. His house had been set afire. On and on the story went. Finally a spectator yelled: "Get to the point! What do you want from the government?"

"Revenge," he said.

Most of the protesters, however, were "people waiting for jobs"—the unemployed. No job, no yuan. China has no welfare system for the jobless young. An unemployed person must sponge off relatives. Shanghai strove last year to find work for 400,000 people. Some of the idle thousands went public in hope of receiving attention.

One day the restless crowd was gone, and city hall was scrubbed clean of glue and tape. I later heard that three protesters had been detained and others reeducated.

City hall: technically, the headquarters of

A boulevard of consumers' dreams, *Nanjing Road is ajingle with bicycle bells as a traffic officer controls traffic lights and barks out reprimands. In a city with virtually no privately owned cars, bicycles are treasured possessions.*

SHANGHAI

上海

When Britain claimed *it as a treaty port after defeating China in the Opium War of 1839-42, Shanghai was only a local trade center. Before the Japanese occupation of World War II signaled the end of an era, it had become an international city-state with a multinational army protecting the interests of 60,000 foreigners.*

Now almost the only foreigners are students, tourists, and transient businessmen. Surrounding the city's core, a dozen industrial satellite communities ease congestion. Also within municipal limits, 200 agricultural communes provide the city with most of its food.

the Municipal People's Government. Once this sumptuous building was the Bank of Hongkong and Shanghai, a very British edifice. The street in front was the Bund—good gray granite, Trafalgar Square without Nelson and the pigeons. Opposite, freighters riding the Huangpu River loaded to descend to the Yangtze estuary.

It isn't the Bund anymore; it is Zhongshan Road, memorializing Sun Zhongshan (Dr. Sun Yat-sen), the early 20th-century revolutionary. Now and again a regal old Buick rolls along this wide avenue, and you wonder about its former life.

North, beyond Suzhou Creek, Shanghai is jumble and chaos—mill piled on factory on housing block. The Number One and the Number Five Iron and Steel Mills, rubbled streets, air smelling of coal smoke and hot metal. Where builders have overlooked a plot, cabbages and onions thrive. Shanghai does not waste land.

WIND SWEPT the muddy Huangpu, frothing the surface with browncaps. At the Number Ten Dock area I caught a grimy whiff of North Korea. A freighter was unloading cement from that Chinese ally, and some of the bags had broken.

Number Ten is newly equipped with gantries to handle containerized freight. Shanghai, itching for more trade, has added 17 modern berths and plans fifty others.

As it is, the Huangpu is clotted with freighters, tankers, ferries, barges, occasional submarines, missile-armed gunboats, and shoe-shaped junks. Last year Shanghai handled eighty million tons of cargo, ranking among the world's dozen busiest ports (pages 10-11). But most of it originated in China: petroleum from Lüda (Dairen), for example. In international commerce Shanghai counted only an anemic 16 million tons.

Number Ten was loading tea for Casablanca and textiles for London. A Japanese ship had brought used tires, "raw materials" for a rubber factory. Among stacks of copper pigs, several men stooped and poked. "We are office workers in the Bureau of Metallurgy," one said. "We have a regulation that every Thursday office workers will perform manual labor." This group's task: to glean every tiny scrap of copper knocked from the pigs. "Copper is expensive," the office worker said.

I watched a woman maneuver a crane. Women make up a sizable part of Shanghai's labor force, as crane operators, drivers, welders, and carpenters.

Chou Fengying looked about 18 but was 24. She had gone to a vocational school, then to the docks. I asked if she'd prefer some other kind of work. "It is useless for me to say what I'd rather do," she replied. "The choice is not mine. This is what I was assigned."

***Grist for the mill** of progress, cement from North Korea may provide more foundations for the city's ever enlarging textile industry. Or it may be barged hundreds of miles up the Yangtze River, to the vast Chinese hinterland served by the port of Shanghai.*

My interpreter smiled at this rare candor. Asked the same question, most workers responded with patriotic slogans.

Although Shanghai was China's greatest port long before the Communists came to power, its shipyards built few major vessels. Hence all those in various stages of completion at the Shanghai Shipyard—14,000-ton freighters, 900-horsepower tugs, and four-deck passenger liners—are monuments to recent progress.

I went to the yard by taxi, passing under the Huangpu in a 1,300-meter tunnel. No bridge links the two sides; workers cross by ferry. The taxi turned north through a checkerboard of low whitewashed houses and boxy apartment buildings. Bonneted women ladled water on plots of vegetables.

My shipyard escort, Cheng Tsai-jung, tall and bespectacled, had risen from apprentice to deputy director. We walked alongside ways and through cavernous shops. Workers were assembling a 9,000-horsepower diesel engine, four stories tall. Mr. Cheng pointed to a huge metal-planing machine that the yard had built.

There seemed to be more workers than needed. Many stood about, just chatting. I found this to be typical. Industry serves the state by providing large numbers of jobs, of course. Padded employee rolls may have a further advantage—the training of additional manpower. Shanghai often has lent skills to other parts of China.

"Our output per worker is about $8,000 a year," Mr. Cheng said. "That is high for China, but compared to the United States or Japan it is rather low. Our technology is rather backward—we know that."

At lunchtime workers strolled to three cafeterias, carrying their own bowls and chopsticks. Several women visited the nursery; a mother is allowed a half-hour break twice daily to nurse her infant.

The shipyard's forge was fire, grime, and thunder. Two giant steam hammers worked in earsplitting counterpoint, pounding red-hot steel. A man built like a wrecking ball swung a 12-pound sledge. Four others manhandled a chunk of red steel that one of the hammers flattened, then cored into a hot doughnut. These, the muscle men of the shipyard, *worked*.

Beside them, Liu Fengzhu seemed fragile. Dollfaced, only 23, she drove a small locomotive that seized glowing telephone-pole-size cylinders and shoved them onto the hammer's anvil. When she had a free minute, I tried to talk to her—not easy in the din.

Do you like this work? "It is glorious for me to devote myself to the socialist reconstruction," she said. A crane lowered another fiery cylinder. She climbed into the locomotive cab and went back to glory.

MY SHANGHAI home was the fifty-year-old Jing Jiang Hotel, formerly the Cathay Mansions, built by Sir Victor

Exceeding the tolerance level *of a state that stresses unity above all, protest by poster was banned shortly after this picture was taken outside Shanghai's city hall, and chronic protestors underwent state "reeducation." These posters air personal grievances, largely by the unemployed. Officials say they're striving to provide more jobs.*

Sassoon. Grandson of a Baghdad Jew who reached Shanghai in the 19th century, Sir Victor owned the city's choicest properties. The Jing Jiang still boasts fine wood paneling and a grandfather clock in the foyer.

Sometimes I left before dawn just to walk—alone, without my government interpreter. Even at such an early hour senior citizens contorted in the slow-motion exercise, *tai ji quan*. People hurried along with string bags. Following them, I came to a crowded vegetable market.

Soon after daylight, cyclists began to swarm. Who are all those bikers wearing blue (usually) or green people's jackets? They are everybody. In Shanghai 1.7 million bikes transport factory workers, bureaucrats, even physicians.

Walking north under sycamores, I passed a piston-grinding factory, tucked into what must have once been a garage. Farther along, a three-story building bore a faded legend: "College Ste. Jeanne d'Arc, 1922."

This route took me to Nanjing Road. By comparison the shopping streets of Beijing (Peking) look like country lanes. Bureaucrats visiting from other parts of China would not think of going home without checking Nanjing Road's greater selection—one way in which the old commerce-mindedness of Shanghai still shows.

Six days shalt thou labor in China, but for most people the seventh is shopping day. Nanjing Road becomes so packed that buses barely get through the crowds.

Yet this and other Shanghai thoroughfares are cleaner than the streets in many American cities and are remarkably free of human odors—even though that bike cart rolling along in the morning crush may be hauling night soil destined for some commune's fields. (Ten thousand tons of night soil are collected daily from older houses that have no plumbing. As a consequence, Shanghai is well supplied with vegetables.)

In the Shanghai Opera Sword and Rifle Store, I bought a Colt .45 for three dollars. Not the real thing—just a wooden stage prop used in Cultural Revolution dramas. Politely, the salesman described it not as the

old U. S. Army standby but merely as a weapon of the Nationalists.

I like a policy of the Number One Department Store. (Almost everything big in Shanghai has a number.) If you lose one of a pair of socks, you can buy one replacement. On Sunday 200,000 people may jam Number One's five floors. Last year 140 million dollars was spent there.

This pleased deputy manager Chen Guoliang, whose brushed-back hair is phasing into gray. Sipping tea, he contemplated turning over to the state a year-end profit of ten million. For helping the store exceed its sales goal, a thousand employees would share a bonus of $290,000, increasing their earnings by 60 percent.

A capitalist gimmick? No, Mr. Chen said, bonuses are good socialism. "Those who work hard get more, those who work less get less." The bonus has been widely adopted to boost productivity.

Number One sells goods as diverse as calligraphy brushes and fire hoses. It stocks 16 sizes of vacuum bottles, mainstays for a people short of water taps, and replacement liners for every size. This isn't a throwaway society.

Last year the store sold 14,766 bicycles, 11,424 sewing machines, and 12,509 TV sets. It could have sold more TVs (a nine-inch set retails for $150), but supplies are limited. So is demand. To purchase a small-screen TV, sewing machine, or bike, one must possess a coupon, as well as money. Coupons are issued by factories and communes—sparingly, and often as a reward.

In times past, coupons also were needed for pork, eggs, and dairy products. They are still required for rice, noodles, and cotton goods. But Shanghai doesn't look underfed, and the cut of clothes is snappier than I saw in another port city, Guangzhou (Canton). In any case, China's rice is probably the world's cheapest, and a serviceable cotton jacket costs only $5 in Number One. An average factory worker earning $40 a month can clothe and feed himself. But in housing and consumer gadgetry, China lags.

"We know we have to wait," a student said. "We can't have as much as we want." I met him in a dormitory room at Fudan University in the northern part of the city. The room was crammed with bunks and

***Tuning in** to the consumer revolution, a young worker (**above,** center) consummates years of penny pinching in the TV section of Shanghai's Number One Department Store. With help from many friends, and the necessary ration coupon from his factory, he tests identical models before making a purchase.*

*In a Shanghai court an accused TV thief (**right,** in light jacket) is shown the evidence. The judge issued a moderate sentence, citing the effect on China's youth of the Gang of Four—the now rebuked leaders of the Cultural Revolution who unleashed chaos on the land.*

festooned with laundry. Enamel wash pans were stacked in a corner.

How long are you willing to wait? Easy laughter. "It will be a long struggle."

Another student added seriously: "The most important thing is not whether we all have TVs, but how to realize the Four Modernizations." He ticked off the national goals that everyone seems to have memorized: modernization of agriculture, industry, defense, and science. "If we achieve the Four Modernizations we can have a happy life," he continued. "I believe that."

Founded in 1905, Fudan ("dawn after darkness") is a "key" university. This designation means it can choose students from among the highest scorers on national examinations. Fudan specializes in the sciences and boasts the first Chinese-made nuclear accelerator. The 5,500 students are among the most fortunate of all Chinese. For each one admitted, 25 hoped for a place.

Rock and disco sounds are foreign to Fudan. Students don't date, seldom dance, and the younger ones may not smoke. Questions about beer busts and drugs seem to the Chinese to pertain to some other planet. Students have one purpose: to study (plus a few days of obligatory manual labor each term). "I'm spoiled here," said a German woman, one of about fifty expatriates teaching languages and sciences in Shanghai. "I'll never have such diligent students again."

ONE DAY I descended into an air-raid shelter. It could hold 1,500 people, and there were plans to extend it. The man in charge guided me through pastel-colored tunnels (so painted to soothe nerves) and into a large room where goldfish swam in a tank.

He related that the shelter was dug by his company, the urban bus company through whose garage I had entered. He added that many employees were members of a militia unit that had antiaircraft guns stored in a warehouse nearby. He said they had been trained to use them.

Shanghai has many shelters, I was told. A city official said construction was speeded up after 1969, when several skirmishes occurred on the Soviet border.

I met a woman who prepared in college to teach English but was then recycled into Russian. That was in the 1950s, when the Soviet Union was China's best friend. Now that English is the preferred language, she has been decycled.

No young people in my memory are hungrier for contact with the world than those who frequent Zhongshan and Nanjing Roads in hope of practicing English with foreigners. "Hello, how are you today? . . . Where do you come from? . . . Oh yes, Washington, capital of America. . . ." Riding a bike one night, I was collected, specimenlike, by a man who pedaled alongside for an hour, rolling out textbook phrases.

Chen, who is 30 and a teacher, and Han, a 31-year-old technician, were as curious as the rest. Photographer Bruce Dale and I met them because we wanted to know what a sign said. They translated. Our friendship grew to the point that, a couple of weeks later, Chen and Han invited Bruce and me to dinner at Han's apartment (right).

Han thinks his family is above average in possessions, which include a TV. The apartment's main room also contained a bed, sofa, wardrobe, and dining table. There was a tiny kitchen, a tinier bathroom. Han's mother sleeps on the sofa.

Han's wife, Xiaomei, poised and slender, worked in the kitchen, helped by his mother. Later Xiaomei left to fetch their 22-month-old son from a nursery. He called me *waigong*—grandfather.

We men sat talking. Presently Chen reminded us—carefully—how we had met. "You asked a question about a sign. You were active, we were passive." Then he added: "We don't know what is allowed as far as entertaining foreigners."

Han, however, did not hide us; he invited neighbors in. In any case, there could hardly be secrets here. I well remember the stares two bearded big noses got approaching Han's building.

Now dinner. Cold dishes first: jellyfish, preserved eggs, slices of duck and pork. Then steamed crabs. Chen filled our glasses. He thought he had bought wine, but it was brandy. We drank anyway.

Fried fish, chicken with rice, eggs with mushrooms. Xiaomei and her mother-in-law shuttled to and from the kitchen.

Chen and Han talked about being Red Guards when they were students in the

1960s. "You must understand that when I went to college from a rural province I was full of gratitude," Chen said. "I felt I should do anything the party asked."

He and other Red Guards went to the home of an elderly man. "We demanded to know where he had hidden his riches. We surrounded him so that he was like a dog in water, just trying to stay afloat. He could do nothing." They found a vase filled with jewelry and gave it to the police.

Han burned books. "I helped take old books out of the library." He thinks—and hopes—that the librarian hid some.

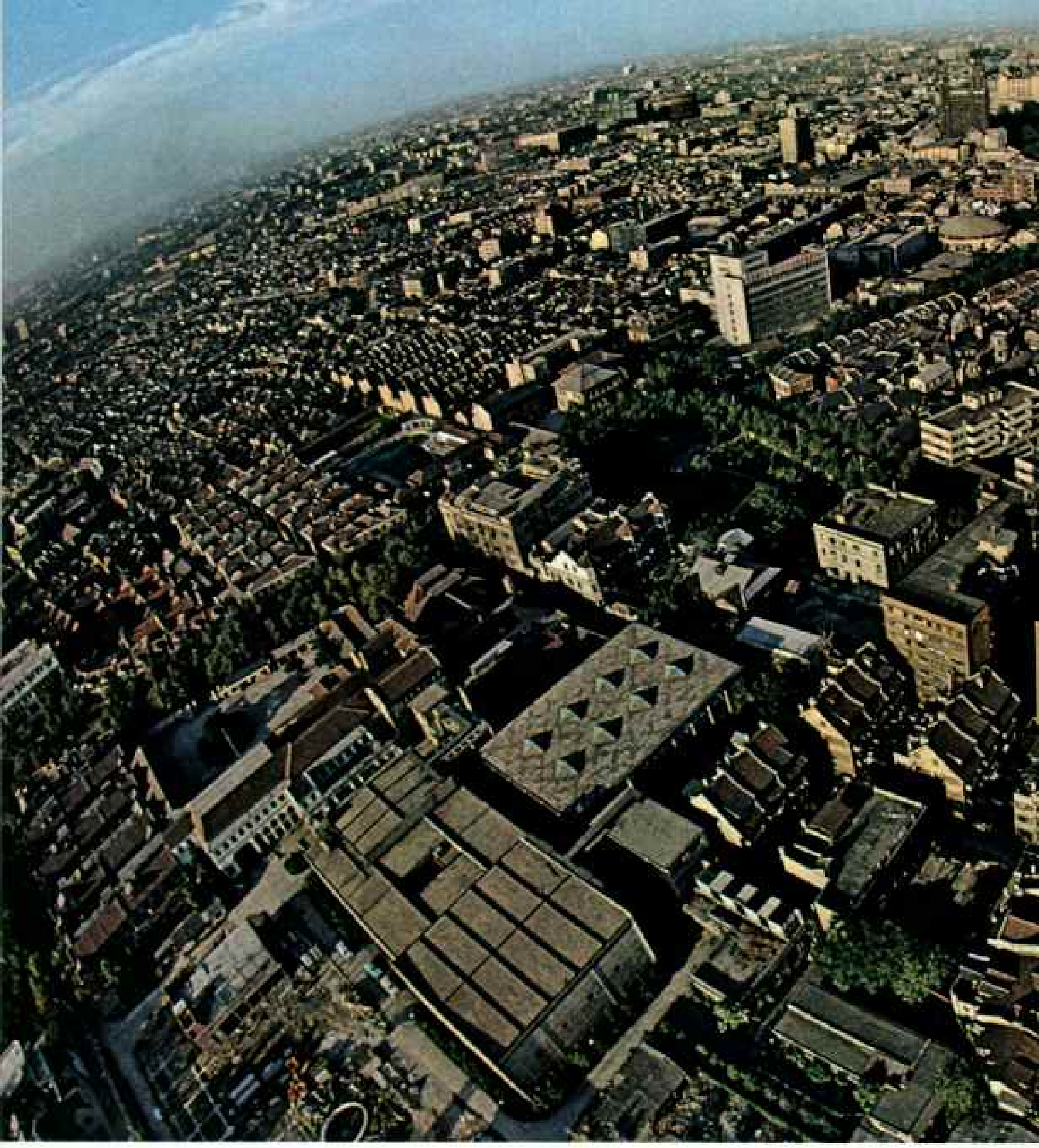
Vegetables with mushrooms and poultry giblets, pork with carrots, bean curd with minced meat, pork in egg batter. How could so much food come from that tiny kitchen? More brandy.

Long isolated from the world, Chinese can hardly be condemned for their ignorance of other nations. Still, I was surprised by the sadly inadequate stories these two had of life in the United States. Example: "Your capitalists pour out milk if it cannot be sold at a high profit."

Omelet, boiled whole duck, rice. Xiaomei joined us and talked about her job in a factory that makes towels—lush, velvety towels, by her description—for export. She had none. "They are too expensive for us."

There is no way I can thank my friends for

Close walls and an expansive mood *greet Westerners in a rare visit to a Shanghai home. Before presenting a lavish Chinese banquet, technician Han Guo-qing* ***(above)*** *serenades the* GEOGRAPHIC *team. The Hans, who have one child, are very proud of this apartment, one room with kitchen and bath.*



this three-hour feast of more than twenty dishes, for the effort, expense, and food coupons expended—except to say, here, that this was the warmest, most candid, most memorable night I spent in Shanghai.

SHANGHAI likes to show off its medical achievements. I was invited to see heart surgery, then a lung operation using acupuncture to block the pain. What I remember best, however, is the broad smile on Kao Tiensue's face as he firmly grasped my hand.

Then he wrote "warm welcome American friends" in bold calligraphy.

His "hand"—someone has suggested it should be called the "Shanghai hand"—consists of two toes joined to a prosthetic device implanted in his right wrist. It was created by 48-year-old Dr. Yu Chungjia at the

Largest city *in the Communist world spreads eastward in this view from the new, 670-foot television tower—the shadow of which points directly to People's Park, old Shanghai's former racetrack. Little changed since "liberation" in 1949, downtown Shanghai remains essentially a city of low-rise, walk-up apartments.*

Number Six People's Hospital, where surgeons have performed more than 500 operations to reattach severed limbs and digits.

The hospital believes it holds the world's record for elapsed time between accident and reattachment: 36 hours. That, however, was of no help to the 25-year-old Mr. Kao, who had lost both hands when a blasting cap exploded five years ago.

In the first recorded surgery of its kind,

Dr. Yu removed a toe from each of Mr. Kao's feet and attached them to approximate a thumb and forefinger. Small, forked stainless-steel spikes joined toe bones to wrist bones.

With exercise, Mr. Kao had progressed to the point that "I don't need anybody to help—I can take care of my own needs."

Dr. Yu noted that the advantage of a "live" hand over an artificial one is that the patient has feeling.

"Yes, I have the sensation of fingers," Mr. Kao agreed, lighting a cigarette.

"OUR ARSENAL," said script chief Shih Fangyu on the lot of the Shanghai Film Studio. I followed his nod to the parked artillery—U. S. 37-mm antitank guns.

Supplied to the Nationalists, these half-dozen guns find life today in movies about war in China in the 1930s and 1940s.

China's first films were made in Shanghai in the 1920s, and the city has long considered itself the Big Time of the arts. When the Cultural Revolution began in 1966, people suddenly had few films to see.

Jiang Qing, third wife of Chairman Mao, had once acted in Shanghai movies. As one of the Gang of Four who came to power in Mao's dotage, she supervised the direction, and destruction, of the arts. Old movies were withdrawn; for new ones, only eight revolution-related themes were permitted. Worker committees took over the studio. Eighteen actors and administrators were labeled "devils and monsters." Some took a traditional way out: suicide.

As we watched the rushes of a film about a journalist ordered to write lies during the Cultural Revolution, Mr. Shih, a bespectacled man with a high forehead, whispered: "The writer based the script on my own story. It happened in the studio. We changed the locale to a newspaper."

In the film the journalist is dragged handcuffed to prison. Mr. Shih, accused of antisocialist writings, was confined to the studio for two and a half years, then taken to a "cadre school," where writers and artists were reeducated. Mostly they planted rice and picked cotton. Returned to the studio, he refused to script a story dictated by the worker bosses. Away again, to a state farm.

__Time-honored remedies__ from the catalog of Chinese natural medicine, balms made from dried coin snakes (__above__) and sea horses (__left__) are treatment for a number of ills.

In Shanghai's Jiading community, a pharmacist (__below__) boils prescriptions in pans, background, then pours the hot liquid into thermoses for delivery to the patients' homes by bicycle. Chinese and Western medicine were integrated during the Cultural Revolution, one accomplishment, say many, of that bleak period.

He came back in 1977, following the overthrow of the Gang of Four.

The studio has recovered: 14 films last year. None shows explicit sex. "We kiss our lovers behind closed doors," Mr. Shih said. "But we can choose any subject. The only limitation is that we cannot oppose the socialist system."

The three other members of the Gang of Four also sprang from Shanghai, and residents believe no city suffered more than theirs. Factories and schools were in chaos—if they functioned at all. The government, a man said, "just stopped working." Among those executed: a conductor of the Shanghai Symphony. Some officials died in prison. Kangaroo courts of workers sentenced factory managers. In all, the Cultural Revolution's toll in Shanghai is estimated at 10,000 dead.

Almost every educated man I met had been to a cadre school. Dr. Wu Zhaoguang, a surgeon who did his residency in the 1950s in Jersey City, New Jersey, then returned to China because he was committed to his people, was suspected of CIA ties. "I was put in a 'special-study group,'" he said. "Some of your fellow students, so-called, were there to squeeze information out of you."

Then, to cadre school. I asked who the teachers were. "What teachers? This was reeducation through manual labor." He had books to read—Marx, Engels, Mao—but mostly he planted and harvested rice.

Romanticizing *an otherwise bureaucratic procedure, Shanghai newlyweds by the hundreds are having their pictures taken in Western wedding garb. This couple earlier tied the knot officially by signing a government form. Bowing to state pressures aimed at curbing population growth, the two plan to have only one child.*

Dr. Wu cycles daily to Zhongshan Hospital from his three-room apartment ("by local standards it is quite large") and has no complaints about his $200-a-month salary. But I wonder how much of the gray in his hair is attributable to the Gang of Four.

I cannot imagine a less offensive man than Pan Quanfu, deputy director of the Shanghai Puppet Theater. I met him backstage in what had once been a Sassoon-owned nightclub, Ciro's. This gentle, soft man stood amid sets being painted for *Snow White* and talked of his cadre school time, and of the shock. "We were told that what we had done before the Cultural Revolution was completely wrong." His puppets paid the supreme price of being "counterrevolutionary." They were destroyed.

OFF NANJING ROAD is a place where many people weep. The old hymns—"Just as I Am," "Rock of Ages"—bring out the emotions, and the handkerchiefs. Some stand but do not sing, lost, perhaps, in remembrance.

From the balcony of the interdenominational Mo-an ("bathed in grace") Church, I looked down at Christian Chinese. The pews were packed (pages 8-9). Services had begun again only a month previously, after a lapse of 13 years. Two other churches also had been allowed to resume services, and Buddhist shrines were being renovated.

My pewmate was an elderly man who had long been Mo-an's pastor. The Red Guards came in 1966, he told me in English. "These people *smashed* the church! [Italics his. The Reverend Z. S. Zia gives words a pulpit-style quiver.] *All* the windows! They *burned* all the books! They burned the *cross!* They *smashed* our Hammond electric organ! Our pianist used to be our organist. A very faithful woman. . . ."

"You must have been heartbroken," I commiserated.

"I was *not!* Like John Wesley, the best thing with us, God is with us! I had that *feeling!*" He was in jail two years. "That didn't bother me; it was the safest place to be."

The pianist pounded out a lively "Onward Christian Soldiers." The sun streamed through plain windows that once held stained glass. It was a beautiful morning.

AFTER LIBERATION, Shanghai's population spurted upward. Now, enforced (the word is not too strong, I think) family planning has helped slow the growth. China employs all forms of birth control, but surely the most effective is social pressure.

I heard something of this from the chairwoman of the neighborhood committee of Pumpkin Lane, a community of 7,600 near the railroad station. All neighborhoods have a committee; its members are elected by the residents, subject to approval by the next higher body, the street committee. Several street committees form a district committee. Ten district committees report to the Municipal People's Government.

Among the duties of the Pumpkin Lane committee, headed by Wang Lanhua, a large, strong woman of 63 years, are health campaigns, encouraging study of party affairs—and promoting family planning.

"We educate young people to have only one child," she said. When parents realize the benefits (which include a bonus that must be paid back if they have a second child), they usually like the idea, she added. "In some families we do have difficulty. Some couples have a daughter but want a son, so they would like to have another child. In this occasion we persuade them."

Persuasion—bringing the weight of the community to bear—is strong stuff. To be criticized is to be disgraced.

If the neighborhood committee fails to dissuade a family from having a second child, the "units" where husband and wife work may be brought into action. Mrs. Wang's committee has also called on work units to help persuade couples not to divorce. She said the neighborhood has a perfect record of zero divorces.

Pumpkin Lane, consisting of 35 apartment buildings joined by shady sidewalks, is one of Shanghai's best housing areas. Three rooms cost only six dollars a month.

Tucked into a corner of Pumpkin Lane is a reminder of the past—several globe-shaped hovels of thatch and packing-crate wood, of the kind that gave the community its name. When the Japanese attacked Shanghai in 1937, they bombed the railroad yards—and got Pumpkin Lane too. Residents rigged crude shelters over the craters.

The 1930s already were a desperate time in China. Nationalists warred with Communists; the Japanese, who had invaded Manchuria in 1931, gobbled up more and more territory. Victimized by warlords and landlords, peasants by the thousands arrived destitute in Shanghai. Many who dwell in Pumpkin Lane today were child laborers in textile mills. Some ate ground wheat husks because rice was too dear.

Mrs. Wang came in 1935 and married a street cleaner. When the Japanese attacked, she looked south and saw a place of safety, the two foreign enclaves. The International Settlement and the French Concession, totaling 8,000 acres, were not attacked. Japan chose not to confront the foreign power vested there—until 1941.

Thousands of Chinese crowded into the foreign areas in 1937. Mrs. Wang and her husband lived in a storage lot for construction materials near Nanjing Road. They could not erect a shelter. "If anyone put one up, the authorities came and tore it down."

In this lot she sat on a downed utility pole on a cold day and gave birth. The sun overhead prompted her to name her son Rumein—"like brightness." She was afraid the cold would kill him. As for herself, "I did not want to live any more."

Today Mrs. Wang declares: "It was the Communist Party that saved us from misery." This is, in a sense, homage to a local institution; the Chinese Communist Party was covertly founded in Shanghai in 1921.

WE GO for a while to Hong Kong, where today many people still remember Shanghai's foreign enclaves with a fondness Mrs. Wang would not share.

"You could live a wonderful life for practically nothing," said Freddy Elias, who once rode about in a chauffeur-driven Pierce Arrow. "You paid your servants very little. If you earned $100,000, it was all yours—no income taxes."

A Shanghai stockbroker and landlord, Mr. Elias, who is now 83, also owned a stable of racehorses that garnered every important cup at the local track.

"I led such a tough life. Every night was a party, and you took people to clubs. We had the most beautiful nightclubs, and some

A cart and a stick *fill the bill for an impromptu table-tennis match on a Shanghai side street* ***(above)****. Table tennis was endorsed by Mao Zedong in the late 1920s as an ideal sport for his Red Army soldiers. Using little space and cheap equipment, it has become the number one sport in this nation of 970 million.*

At a Shanghai soccer stadium, senior women workers from the capital city of Beijing ***(right)*** *heave mightily in a halftime tug-of-war with their Shanghai counterparts.*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first-class bands that came from the States."

Mr. Elias remained in Shanghai until 1950, a year after the city was occupied by a Communist army. It soon became clear that the life he knew was dead. The new regime took over foreigners' factories or forced them out of business. The regime, consolidating its grip, thereafter began executing Chinese—perhaps thousands.

What was bad for the capitalists of Shanghai has been good for Hong Kong. It received an estimated 200,000 Shanghai Chinese, including many who had been textile-mill executives. The millmen soon made Hong Kong one of the world's great textile centers.

Among the bare handful of foreigners permanently residing in Shanghai today is snowy-haired Talitha Gerlach, who came to the Jing Jiang one night to dine with me. An American, she was sent to China in 1926 by the YWCA and worked with Chinese in such fields as illiteracy. Shortly before the Communist takeover she returned to the United States, anticipating, she said, that she would work a few more years for the Y at home before retiring. But in 1951 she was let go. Fear of Communist infiltration was at its height in America, and she suspects that her views were thought to be too liberal.

China welcomed her back, installing her as an adviser in the China Welfare Institute. She would not tell me her salary, but said it is better than the top pay of bureaucrats, $240 a month. China remembers its friends.

"Things are on a sound basis in China," she said. "Not all the problems are solved, but there is a basis for building a strong socialist society in which all the people have security for food, shelter, clothing, work, and medical care."

ELEVEN YEARS of experience showed in the confident way Wang Meijuan moved under the hood of a 15-ton "Traffic" truck, attaching

wires to generator, lights, horn. Soon the exhaust smoked, and another Traffic rolled off the Heavy Duty Truck Factory assembly line in an outlying industrial district.

You can have any color Traffic you want, so long as it's army green. The factory's administrative chief, slender, wispy-haired Wu Yunfeng, told me, "We may offer light blue, orange, or yellow in the future." Shanghai's streets would be brightened.

Later we talked in a reception room under portraits of China's heroes: Marx, Engels, Lenin, Stalin, Mao, Zhou, and of course the present party chairman, Hua Guofeng. It is not so farfetched to suggest that Chiang Kai-shek's portrait belongs in the factory's pantheon. As Mr. Wu observed with an innocent smile, "Chiang was a very good transportation officer for us."

This factory grew from a shop that overhauled the booty of victory over Chiang's Nationalists. Engineers remember such names as Dodge, Ford, and GMC. The first Traffic, made in 1958, had an engine copied from a three-and-a-half-ton International.

I went farther one day, across flat land studded with beehivelike stacks of harvested cabbage. Waves of bonneted women moved through fields of cotton, reminding me of Georgia when I was growing up.

Twenty-three kilometers to the southwest, I was in Minhang—but still in Shanghai. With 6,200 square kilometers, Shanghai has some of the farthest flung limits of any city in the world.

Minhang counts 60,000 residents. Its factories turn out castings, hydraulic presses, and generators. The planners erred here, a member of the street committee told me. "There is an imbalance between heavy and light industry, so there are more male workers than female. It is rather hard for a male worker to find a girl friend."

Planners have more serious problems than fine-tuning Minhang's romances. One of them cited the need to improve and vary

World brain scan, *now under way throughout academic China, is reflected in the Shanghai Library, where one of 5,000 imported periodicals captures a reader's interest (**left**). Publications in English predominate, followed by Japanese and German. The goal of China's push for high technology: a fully modernized nation by the year 2000.*

*The library is housed in the main building of Shanghai's old racetrack (**above,** seen at an unused entrance), and is used primarily by scientists, engineers, college professors, and university students.*

consumer goods. Table lamps are plentiful, he noted, but floor lamps are scarce. And women want cosmetics. Grand ideas exist for a subway and an expanded sewage system. But Shanghai isn't rich.

At construction sites old China endures—the China that carries earth on shoulder poles. I watched a bucket brigade of men and women unloading bricks, four at a time, and laborers digging a canal with shovels. The most developed city in China still relies heavily on plain sweat.

This slows efforts to overcome the serious housing shortage. Shao Ming, a graying, crew-cut engineer, told me that apartments for 400,000 families had been built since liberation. Construction stopped during the Cultural Revolution; one member of the Gang of Four said adequate housing was not important. "We owe it to the people to speed up now," Mr. Shao said.

Six or seven persons commonly shared a room before liberation. While families are smaller today, there are many more of them. Young people want places of their own—with plumbing, please.

IN THE OLD CITY, the Shanghai that existed before foreigners came, the hot-water depot substitutes for the tea shop. Almost every block has one—a warm place where people can gather.

In one of these, two big drums rumbled and steamed atop a stove fed with wood shavings. People came with vacuum bottles and kettles. A thermosful to go costs a fraction of a cent.

For a penny, a pot of tea will be put on one of the three tables. "Serve the people," the bald proprietor said, borrowing a Maoism as he brought my pot.

The tanks rumbled, kettles and bottles were filled, people smoked and talked. Neighborhood life in the old city.

I walked down twisted lanes. Charcoal fires heated dinner—outside. A woman rinsed dishes in a public sink. I peered through windows at tiny rooms. Sometimes I saw a ladder and a shelf—a sleeping ledge.

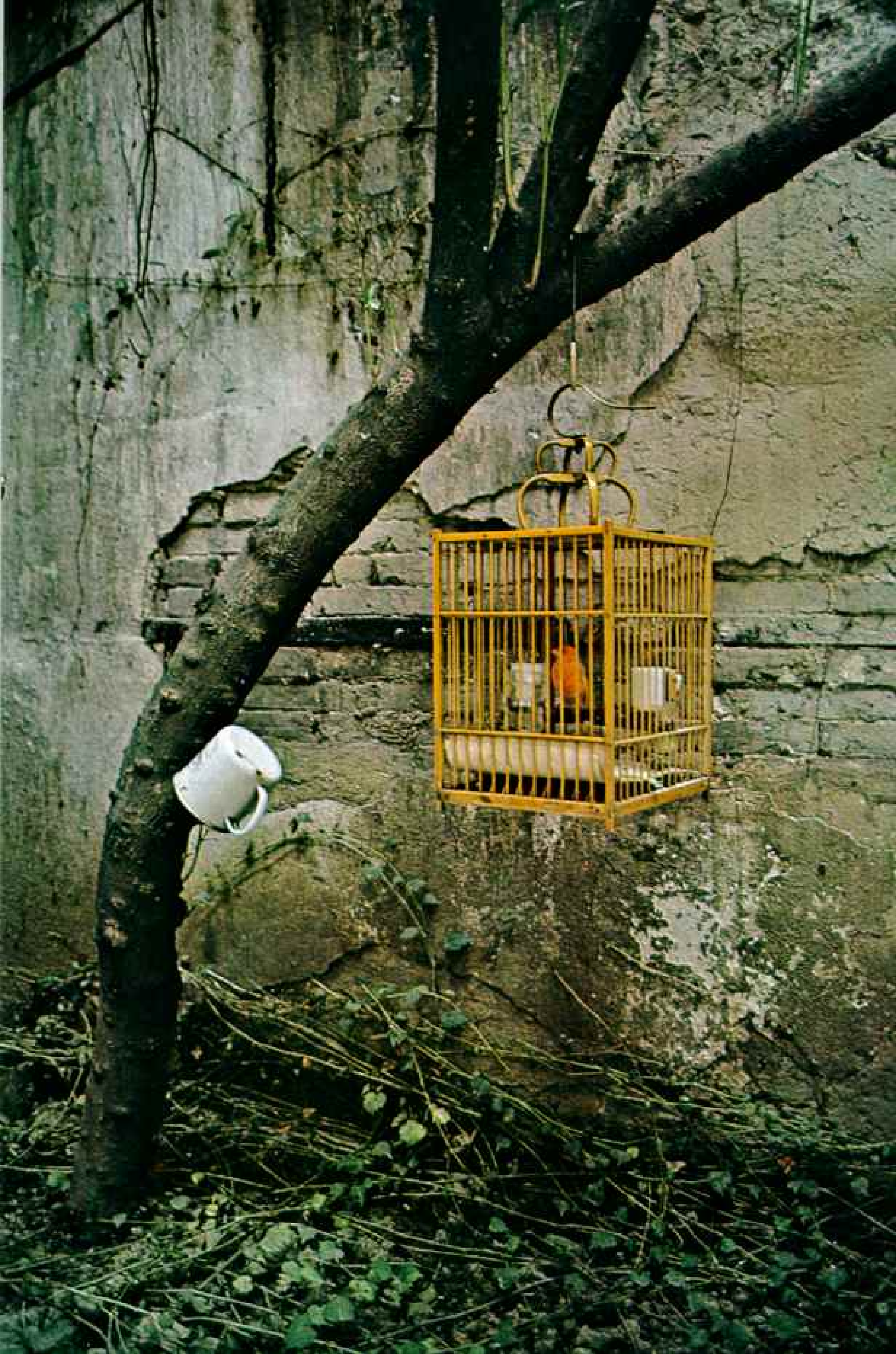
There's plenty of room in the three-story house where Sally Yung Yang (top right) lives with her husband, Ching T. Yang. They have two servants plus a part-time gardener. "I need only a car and driver to

Patriotic, proletarian, *but still wealthy, Sally Yung Yang* ***(top)*** *belongs to a group of former capitalists who opted to stay in China. After liberation the family's holdings were bought by the government; during the 1960s personal property was seized by the Red Guard. Now the government, eager to reassure would-be foreign investors, is making restitution.*

At a Shanghai bank, managers despair of ever locating owners of abandoned valuables ***(facing page)****. In a foreigners-only store an antique gold watch* ***(above)*** *has a price of 12,000 yuan, or $8,000 U. S.*

Flirting with fashion, *women in a Shanghai beauty parlor indulge in permanents on vintage equipment left over from the city's past. Limited stocks of pastel blouses, makeup, and leg-revealing dresses are snatched quickly from department-store shelves.*

Another recent phenomenon—advertising ***(above)****—shows that the government too is borrowing from the West. Some factories are beginning to produce goods according to consumer demand, but they still must meet predetermined quotas and yield profits for the motherland.*



live the life I had before," Mrs. Yang said, mixing Chinese and the English she learned from missionary teachers. She could have a car, but thinks repairs and finding a chauffeur would be too troublesome.

"Former capitalists" is the term officials apply to Mrs. Yang, a pleasant gray-haired woman, and her husband, a 1930 graduate of Massachusetts Institute of Technology.

Former? If the couple's Chinese yuan could be converted into dollars it would amount to six figures.

Mrs. Yang's father and his brother, said to have been China's wealthiest men, owned nine cotton mills and eight flour mills in Shanghai alone. When the Communists took over, most of her father's 16 children fled. "He wanted to stay and make a contribution to the motherland," Mrs. Yang said.

Chinese-style Communism takes strange turns. While expropriating many industrial holdings after 1949, the new regime entered into joint operation with the Yung family, then began to *buy* its properties. I was told that hundreds of former capitalists who were so treated live in comparative splendor today in Shanghai—though they suffered in the Cultural Revolution. In one foreign observer's view, the Communists cultivated liberal-minded capitalists because China needed their managerial and commercial skills. Now, seeking foreign investment, the government hopes to show that investors need not fear Chinese Communism.

"We are not capitalists now," Mrs. Yang said. "We are just two socialist workers."

ALONG A ROAD littered with pipe and construction debris, men walked with bedrolls. They were going to the place I was going, out to Baoshan, where Shanghai meets the Yangtze (which the Chinese here call the Chang Jiang).

Baoshan: "treasure mountain." I saw no mountain—only gray flatland. I wondered if the construction gangs had moved it.

Baoshan means something else now: steel. Eventually, the huge mill being built here will have a capacity of six million tons, more than doubling Shanghai's output.

Steam hammers pounded, power shovels gnawed. No shortage of mechanization here. Japan furnished the necessary machinery to build Baoshan, as well as the necessary credit. But the labor is classic China. When China wants to move, China can assemble staggering numbers.

Among more than 20,000 workers at Baoshan were 6,000 soldiers, detailed to build storage areas for ore and coal. Where a coke oven's skeleton rose, I met men from Sichuan Province in the far west, hard-hatted men whose leathery faces and dangling cigarettes reminded me of confident big-project builders I have met in, say, Montana.

On the concrete slope of a vast pit, site of a rolling mill, a mouthful of slogan blazed. "Launch a Movement to Increase Production and Practice Economy With the Central Task to Raise the Standard of Quality." Exclamation point. I descended into that pit, meeting workers from an interior province, Hubei.

Three women in their early 20s leaned on shovels, waiting for the next delivery of cement. They had been at Baoshan only two months. Do you get homesick? Shy laughter. "Yes," said one.

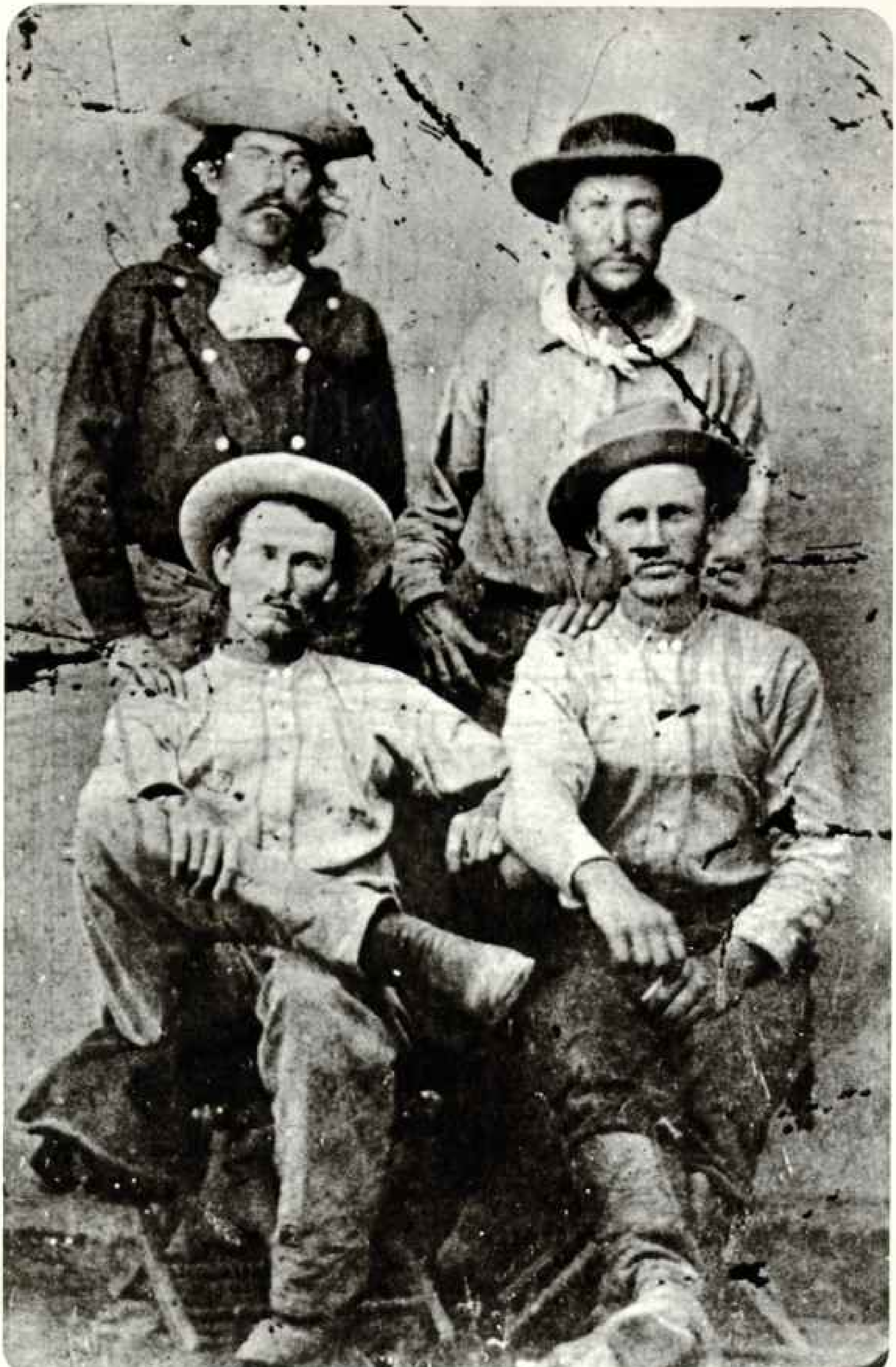
Do you like the work? Giggles. Then, from a freckled face: "I like this job because it is important to make the mill."

In rice fields lapping at the edge of the construction site, women bent with scythes. Flails smacked and shovels tossed grain into the air. A water buffalo plodded against the dropping yellow sun.

China's greatest city has been riding a roller coaster, knowing heights of progress and depths of chaos. The burdens of old ways have been relieved but not lifted. Baoshan's steel will take China one step farther on the long road ahead, a distance of decades. "We are backward," a Baoshan engineer said, "but we won't always be."

So hopes Shanghai. □

Once a symbol of bourgeois corruption, *a birdcage adds color to Happiness Concentrated, onetime alley of brothels and opium dens. From the easy virtue of those times and the puritanical reforms that followed, a hardworking city has emerged—one that can now pause for a few of life's simpler pleasures.*



PONY EXPRESS STABLES MUSEUM, ST. JOSEPH, MISSOURI (BOTH)

A BUCKAROO STEW OF FACT AND LEGEND

The Pony Express

By ROWE FINDLEY
ASSISTANT EDITOR

Photographs by CRAIG AURNESS

"HERE HE COMES! Away across the endless dead level of the prairie a black speck appears against the sky . . . sweeping toward us nearer and nearer . . . a whoop and a hurrah . . . a wave of the rider's hand . . . and man and horse burst past our excited faces, and go winging away like a belated fragment of a storm!"

Thus Mark Twain, from a westbound stage, beheld a Pony Express rider, and thus the rider has galloped into history, hat brim bent by the wind, horizon bound to a staccato of dust-digging hoofbeats.

The Pony Express, like other episodes that have become epic, looms taller than truth, a buckaroo stew of fact and legend. And even the facts have a legendary flavor. Take, for instance, that much quoted ad of March 1860, when the Pony Express company was seeking hired help for its venture:

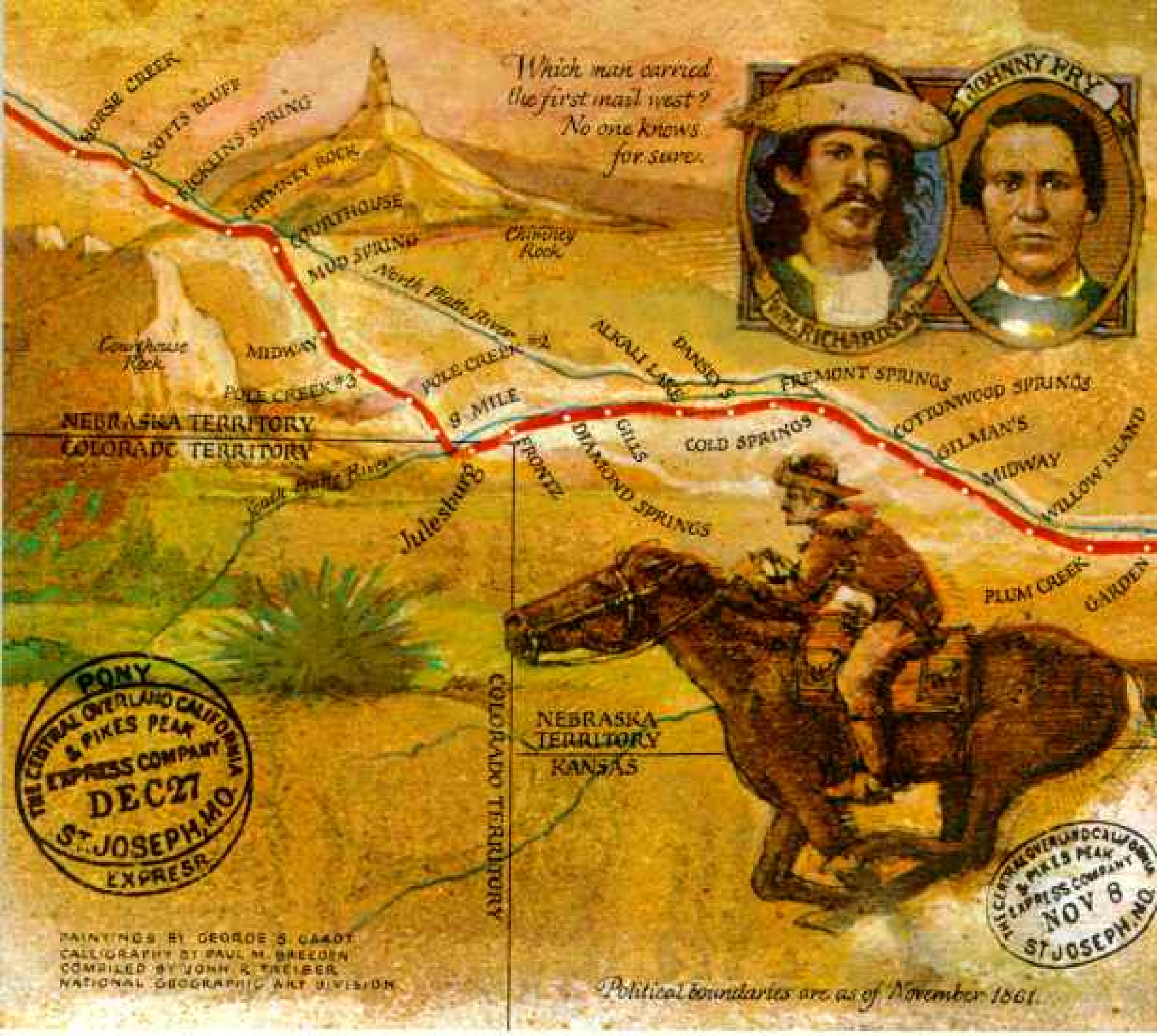
"WANTED—YOUNG, SKINNY, WIRY FELLOWS not over eighteen. Must be expert riders, willing to risk death daily. Orphans preferred."

HISTORY DISPUTES WHETHER BILLY RICHARDSON (TOP LEFT) OR JOHNNY FRY (TOP RIGHT) RODE THE FIRST LEG OF THE PONY EXPRESS WESTWARD. SEATED: BROTHER RIDERS CHARLEY AND GUS CLIFT.

The man who worded that ad had sized up the enterprise as a dangerous business, and he was, in fact, correct. Before it was two months old, an Indian war flamed across hundreds of miles of Utah Territory, destroying relay stations, stock, and 17 lives, including one to three riders, depending on whose facts you accept. The bravest death is credited to an orphan, age 14.

For another instance, one William F. Cody recalled earning his spurs as a pony rider at 15, chapter one in the life story of Buffalo Bill. James Butler Hickok earned the name "Wild Bill" in a controversial shoot-out while in the employ of the Pony Express company; and a spunky lad named Elijah Nicholas "Nick" Wilson survived a barbed arrow in his skull and enough other near-hair-raising adventures to frazzle the inventions of a dime novelist like Ned Buntline.

Other facts rein the pony rider back from his hell-for-leather gallop. There is the fact that he had to average only ten miles an hour to make schedule, that in darkness or uphill



Riding day and night, the couriers spanned the plains and spurred

he slowed for safety or to spare his mount, that he usually arrived on time with mail and scalp intact. But my mind's eye can never accept such horse-sense restraint.

Recently I retraced the trail those lithe young riders rode, from the Pony Express Stables in St. Joseph, Missouri, the western end of the nation's railroads in 1860, to the Sacramento quay where the mail was flung aboard a side-wheeler for San Francisco.

"Most people's jaws drop when they learn the Pony Express lasted only a little over 18 months," began Don Reynolds, who runs the old Pony Express Stables as part of St. Joseph's museum system. "They have the idea it must have gone on for years."

Like many human endeavors, the Pony Express was born out of long-frustrated need. By 1860 almost half a million Americans lived west of the Rocky Mountains, most of them in California and Oregon. Aside from the lures of land and gold, the number one concern was for news from home, those settled states east of the Missouri River. Summoned into this need by a fanfare of circumstances was the freighting firm of Russell, Majors, and Waddell.

That giant of frontier transport was a cherished subject for Louisa Johnston, a frail but flint-willed former schoolteacher. Until her recent death she had mounted battle for 49 years to save a once proud mansion in southwest Kansas City, a battle begun in 1930. When Alexander Majors,

past outriders of the Rockies on the eastern third of the 1,840-mile dash.

her great-grandfather, built it in 1856—nine spacious rooms with hand-hewn oaken beams and horsehair-plaster walls—it stood in rustic grandeur overlooking 55 acres of corralled mules, oxen, and horses, the muscle pool of a freighting empire.

"A clerk of the firm wrote that all the company's wagon trains together would stretch forty miles," Miss Johnston said. "Russell, Majors, and Waddell were freighting to Santa Fe and to all the U. S. Army posts in the West. They ran stage lines to Denver and Salt Lake City. So they were uniquely equipped to start a pony express."

Before the Pony Express, mail to California could take six long weeks by packet from New York via the Panamanian isthmus. The Butterfield Stage averaged three weeks over the so-called Oxbow Route southwestward from St. Louis via El Paso, Lordsburg, and Yuma. As civil war loomed, such isolation favored secessionist hopes of herding the Golden State into the Confederacy.

In January 1860 a pair of visionaries conferred on the communications problem: freight magnate William H. Russell, with ascetic features and a flair for grand schemes, and U. S. Senator William M. Gwin of California, whose resemblance to Andy Jackson was both physical and temperamental. Their vision was for a ten-day service to California by the central route—across what today is Kansas, Nebraska, Wyoming, Utah, and Nevada—through a

PATEE HOUSE MUSEUM, ST. JOSEPH

*FAR EDGE of settled country in 1860, St. Joseph, Missouri, marked the westernmost reach of rail and telegraph. Distant California and Oregon hungered for news from the East, but the mail could take as long as six weeks by packet via Panama, as little as 21 days via the Butterfield Stage from St. Louis. To cut this lag, Russell, Majors, and Waddell, freighters and stage-line operators, began the Pony Express on April 3, 1860. Averaging only ten days from St. Jo to Sacramento, the feat was hailed with superlatives. The wide Missouri (**above**) posed the trail's first barrier, but a ferry eased the rider across. Ahead lay 157 relay stations. One of the few not built by the company, the Hollenberg Ranch station in Kansas (**below**), is still preserved on its original site. Modern St. Jo (**right**) takes pride in its Pony Express role, part of a lusty history begun when Joseph Robidoux founded a fur-trading post there in 1826.*

MESSENGERS of momentous events, the riders brought news of a nation sliding toward civil war. Word of Lincoln's election **(below)** *went to Julesburg, Colorado, where a branch of the Pony Express hastened it to a Denver newspaper. The ponies sped Lincoln's first Inaugural Address to California in seven days and 17 hours, a record remembered as the "lightning express." Vast lonely stretches still mark the trail, as a rider in Nevada* **(above)** *discovers during a 1979 rerun from Julesburg to Sacramento.*

PONY EXPRESS STABLES MUSEUM

system of horsemen riding in relays: the Pony Express. For more than a decade the central route had suffered a bad name from the snowbound Donner party's resort to cannibalism to survive a Sierra winter.

"When Russell outlined the plan to Majors and Waddell, they both objected that such a scheme could never pay expenses," Miss Johnston told me. "But Russell said Senator Gwin could all but guarantee the federal mail contract—and besides, Russell had given his word, and that was that!"

Destiny could hardly have drawn together three partners more diverse. Conservative William B. Waddell held the reins of finance, and ramrod Alexander Majors kept the ox trains and stages rumbling on schedule by brandishing a Bible rather than a six-gun.

"The Bible was his way of meeting the ruffianism so common among the freighters and stage drivers," Louisa Johnston said. Every rider had to swear that "while I am an employee of Russell, Majors, and Waddell, I will, under no circumstances, use profane language; that I will drink no intoxicating liquors; that I will not quarrel or fight with any other employee of the firm. . . . So help me God."

Having sworn and signed, the new hand found himself the owner of a Bible, leather-bound and gold engraved, "Presented by Russell, Majors, & Waddell."

There is dissenting opinion on the efficacy of putting Bibles in the hands of bullwhackers. Adventurer-scholar Sir Richard Burton, stagecoaching west in 1860, noted that "I scarcely ever saw a sober driver. . . ."

But the manning of 1,840 miles of trail in little more than two months was the miraculous feat of sober, hardworking men. On January 29, 1860, the Pony Express was only a dream. On April 3 it was an off-and-running reality with 157 relay stations, placed five to twenty miles apart, with 400 horses, some eighty young riders, plus station keepers, stock tenders, route superintendents, and shuttling supply wagons.

Once a week couriers dashed west and east; later the runs became semiweekly.

To protect the precious mail—at first carried at $5 a half ounce, later as low as $1—the company used a new device called a *mochila*, Spanish for knapsack.

"It was a rectangular leather apron, with cantinas, or pockets, in the four corners, and it was designed to fit over a saddle," Don Reynolds explained, showing me a replica in his St. Jo stables museum. "Only the rider's weight held it on the horse; he could whisk it off in seconds for a change of ponies."

History records that mochila, saddle, and bridle weighed only 13 pounds. Many riders were teenagers who wouldn't tip the scales at 130 pounds. And the horses were animals bred to the frontier—mostly mustangs.

It was a little bay mare, saddled and skittish, that waited in St. Jo 120 years ago to carry that first mochila westward. From the lamplit stable into the April dusk strode a wiry youth in fancy buckskins and boots, and his name was. . . .

"With so much fame riding with that first westbound rider, you'd think there would be no question about who he was," Don Reynolds told me. "But that is not the case. Was it Billy Richardson or Johnny Fry? Accounts disagreed, and the argument was on."

A cannon signaled the steamboat ferry that the pony rider was clattering toward Levee Street and the wharf. Pressure was up and lines were being cast off even as the courier galloped up the gangway. To cheers and a steam-throated whistle, the ferry's wooden-toothed drive wheel dug water toward the Missouri River's Kansas shore.

Too Late to Stay in the Smith Hotel

To follow that 1860 rider galloping into darkness, I crossed the U. S. 36 bridge and drove past little Elwood, Kansas, where he landed, across the Missouri's rich bottomland, through bustling Troy under the valley's west bluffs, up winding timbered valleys to the West's high rolling plains.

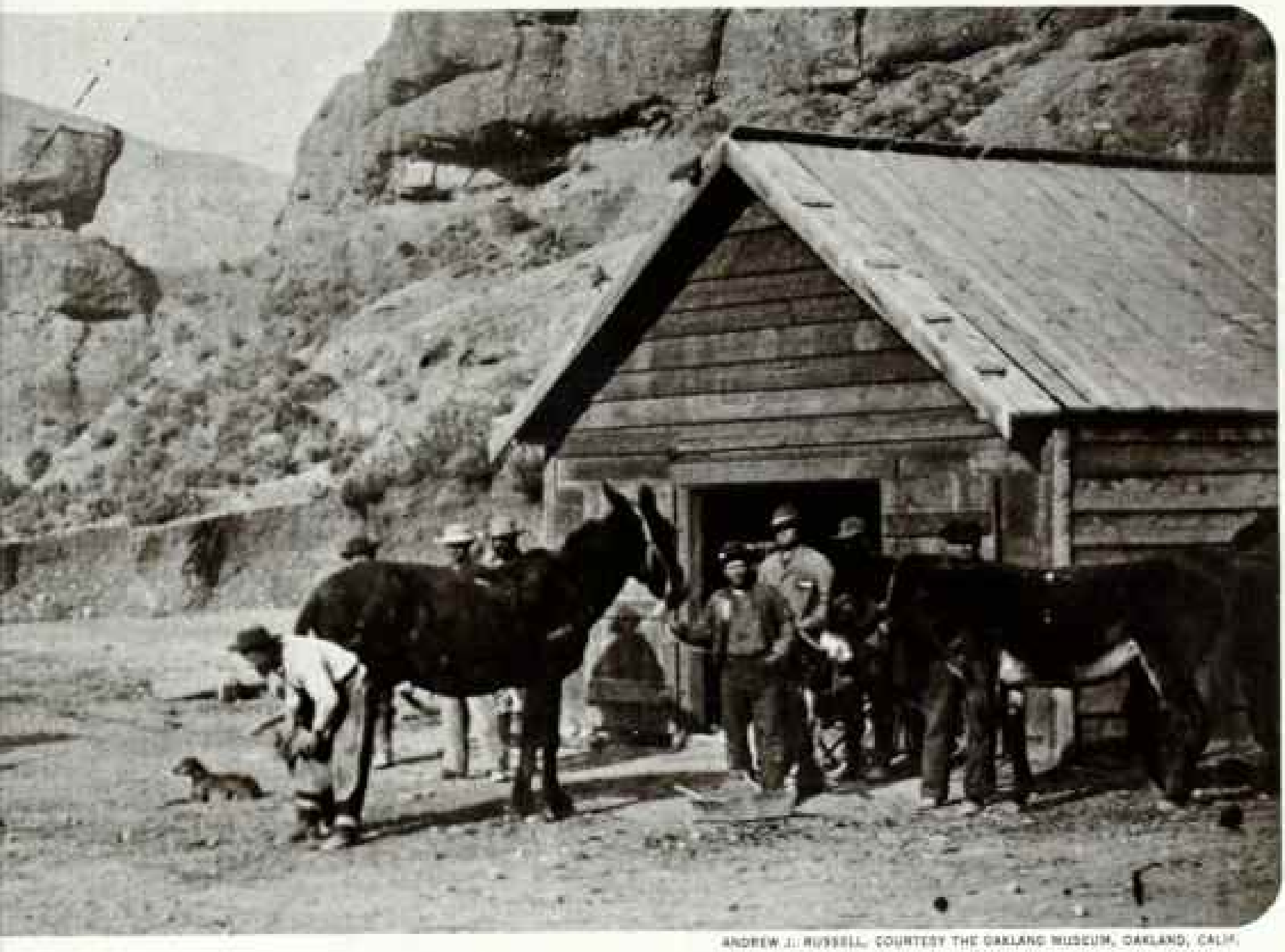
In Seneca, some seventy miles west of St. Jo, that first rider could look forward to a larrupin' good meal and soft bed at the Smith Hotel, the first home station westbound, where another rider waited. I rode into town looking for the Smith Hotel, but found that I was about five years too late.

A ramshackle eyesore it had been declared, and down had come the century-old walls. But hope is not lost for those who prize history. Jim Markley, the stepson of Amos Smith, who is grandson of hotel builder John Smith, told me he had keyed and saved every beam and joist, door and window frame for someday reassembly.

Winter's first snow blurred the trail signs between Beattie and Marysville as I drove west to the old Hollenberg Ranch near Hanover, now a Kansas state historical park.

"This is the only unaltered station still on its original site," Floyd Severin, the caretaker, told me. Gerat Henry Hollenberg, who began life near Hannover, Germany, reached Cottonwood Creek in 1857, at the end of a dream-chasing route via the goldfields of California, Australia, and Peru. From creek-bank groves he hewed walnut trees for a lasting home, and he helped found nearby Hanover. "He was already here when the Pony Express came along," Floyd explained. "So the agents gave him a contract to run a relay station."

The sun beamed warmth, and snowbanks

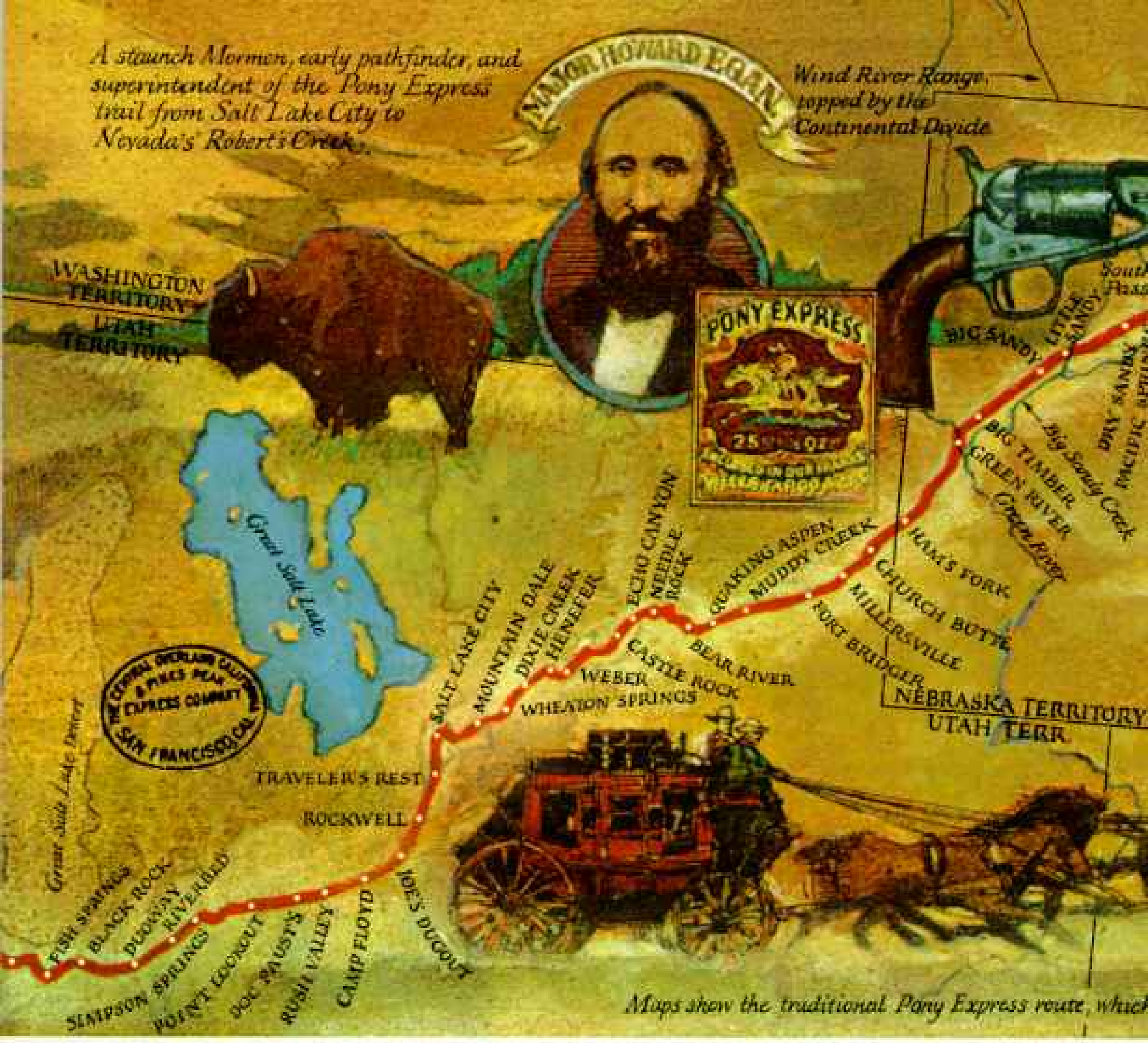


ANDREW J. RUSSELL, COURTESY THE OAKLAND MUSEUM, OAKLAND, CALIF.

*HOOFBEATS of the ponies echoed only in memory when this view of the Weber Station site in Utah's Echo Canyon was photographed in 1868 (**above**). Poles mark the first transcontinental telegraph, which killed the Express in October 1861. Running a ranch astride the pony route, the David Bagleys (**below**) preserve history of Utah's Willow Springs Station.*

A land rejuvenated, fields near Scotts Bluff, Nebraska, were denuded when

the livestock of pioneers moving westward overgrazed the valley of the Platte.



Between Fort Laramie and Great Salt Lake, riders whipped across high

shrank to islands as I steered northwestward into Nebraska's far-sloping hills. Streamside thickets and a broad trench that was once the Oregon Trail mark the site of Rock Creek Station and James Butler Hickok's transfiguration into the deathless Wild Bill.

A modest flair for wildness had already put its brand on him; in fact, the story goes that the company had given him light duty as a stock tender at Rock Creek to favor his recovery from a wild affair in Colorado, a hand-to-hand with a cinnamon bear.

A week after Independence Day, 1861, came his legendary shoot-it-out with the "McCanles gang." By one account Hickok single-handedly felled ten desperadoes; by more believable court records he killed David McCanles and winged two others, who were finished off by Hickok sidekicks.

Passing the lone graves of pioneer father George Winslow and pioneer wife Susan Hail, Oregon Trail casualties, I moseyed up the Little Blue Valley, then veered northerly over broad highlands to intercept the grand valley of the Platte just east of historic Fort Kearny, once a Pony Express station.

Here the several fingers of the Oregon and California Trails—from Westport, Fort Leavenworth, St. Jo, Nebraska City, and Council Bluffs—at last became one, spilling into the Platte Valley, that great palm of the plains that leads ever westward and gently upward some 400 miles, into high, wide Wyoming to the continent's backbone.

plateaus, threaded deep canyons, and braved wind-wracked South Pass.

Platte Valley historian Merrill Mattes notes that more than a third of a million men, women, and children trudged and jolted westward in the mid-19th century. During summer migration months in 1860 and '61, the pony riders threaded their way through an estimated 20,000 "pilgrims," their wagons and herds, plus buffalo and Indians. Along the way thousands died of cholera, smallpox, or other ills, and a few hundred fell to Indian attacks; unmarked graves, conservatively ten to the mile, seed the trail with tragedy.

Solitude seemed Fort Kearny's lot when I arrived early on a bright chill Veterans Day, for not another soul did I see in the partly restored compound, a Nebraska state historic park. But soon I had company, not hunters of history but of deer, for this was the season's opening day. In a busy hour Duane Arp of the state game and parks commission checked in six whitetails.

While Duane tagged, I talked with Assistant Park Superintendent Gene Hunt about how amazed the pony riders would be at the sight of the Platte Valley today—a rich broad ribbon of forest, thicket, and marsh bordered by bountiful grainfields.

"I saw some sandhill cranes this morning," Gene said. "You missed the whooping cranes by two weeks."

Six score years ago even a tree was something to talk about. Spring floods fed by Rocky Mountain snowmelt, late summer

fires, and countless thousands of campfires consumed the scant stands.

Just up the trail a piece, at North Platte, Nebraska, stands the enshrined home of a man whose life was a prime instance of stampeding repute: Buffalo Bill—bison hunter for railroad builders, scout for the Army, Indian fighter, Wild West showman, dime-novel hero, boyhood's eternal king on a white horse.

"And he started as a Pony Express rider," Tom Morrison is fond of saying. Tom directs an able staff that welcomes visitors from all over the world to Scout's Rest Ranch, built in 1886 by Buffalo Bill at the peak of his show-business career. Nebraska preserves it as a historic park. I admired the lofty red barn that stabled Bill's prize mounts, and a display of his Wild West posters—circus art featuring warbonneted braves, swaying stagecoaches, and a buckskinned Bill in full gallop.

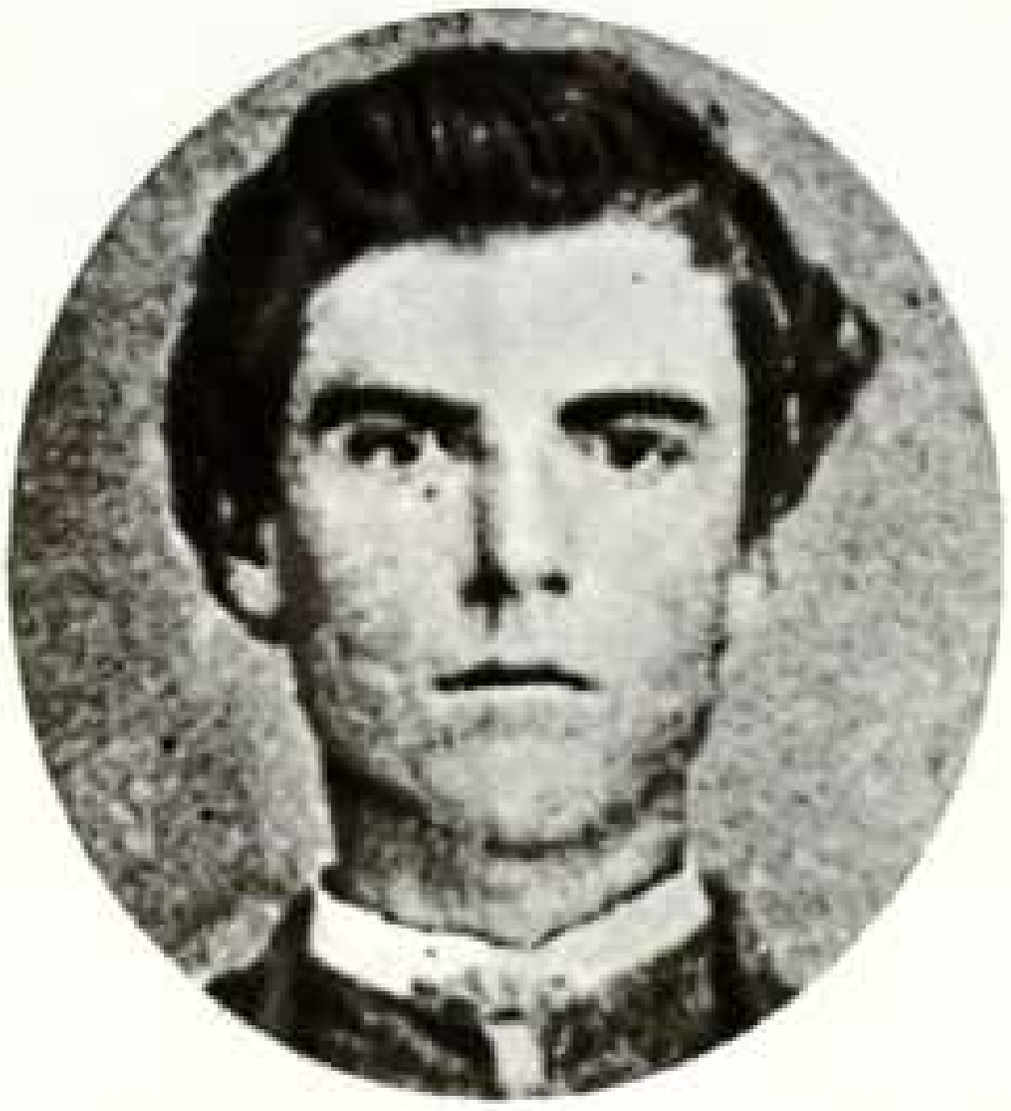
Fatherless with mother and sisters in need, young Billy Cody was hired by the kindly Alexander Majors as a courier for his firm's wagon trains, then, at 15, as a Pony Express rider. Later Cody would write:

"One day when I galloped into Three Crossings, my home station, I found that the rider who was expected to take the trip out . . . had been killed; and that there was no one to fill his place. I did not hesitate for a moment to undertake an extra ride of eighty-five miles to Rocky Ridge, and I arrived . . . on time. I then turned back and rode to Red Buttes, my starting place . . . a distance of 322 miles."

Heroic enough for any lad just turned 15, but Bill's greatest contribution to the Pony Express came years later, in the opinion of biographer Don Russell: "For three decades a representation of the Pony Express was a spectacle at every performance of Buffalo Bill's Wild West. No other act was more consistently on its program. . . ."

And while Buffalo Bill gave it fame, others gave it notoriety. A chief case in point was Bill's boss and Pony Express division chief, Joseph Alfred "Jack" Slade.

To most chroniclers of his deeds, he is simply Slade, the reputed killer of 26 men. Mark Twain accords him several pages of his book



*DOING A MAN'S JOB, the riders, mostly jockey-weight teenagers, proved their grit. William Cody (**above**), later known as Buffalo Bill, recalled that at age 15 he rode 322 miles after a relief rider died. Thomas Owen King (**right**) at 20 lost the trail in stirrup-deep snow, then found it again.*

Roughing It. In due course Mark's stagecoach reached Rocky Ridge Station, and the awed traveler found himself at table with "the actual ogre," but also found him "so friendly and so gentle-spoken that I warmed to him in spite of his awful history. . . . The coffee ran out. At least it was reduced to one tincupful, and Slade was about to take it when he saw that my cup was empty. He politely offered to fill it, but . . . I politely declined. I was afraid he had not killed anybody that morning, and might be needing diversion. . . . But nothing of the kind occurred. We left him with only twenty-six dead people to account for. . . ."

Teaching a Deadly Lesson

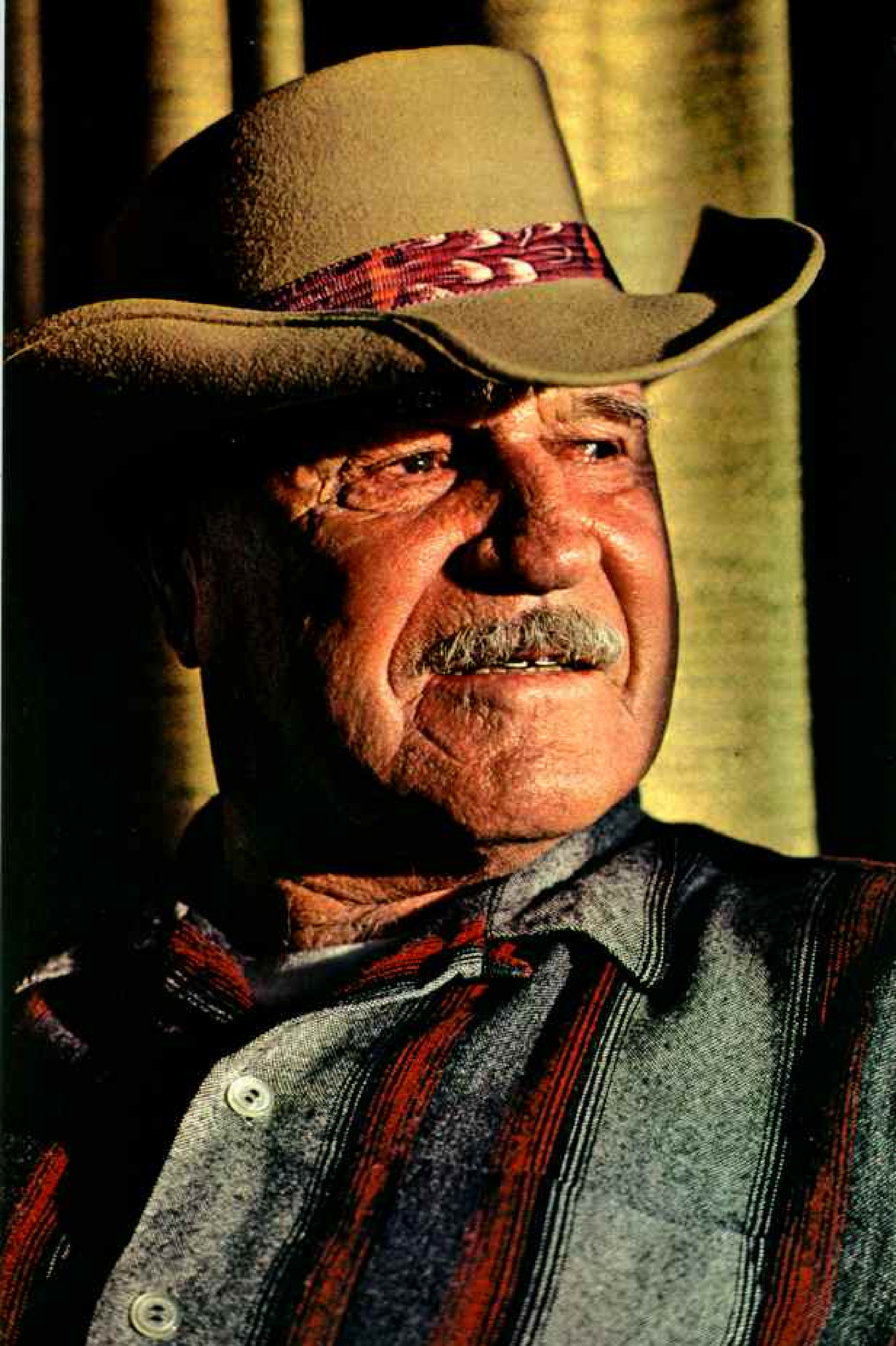
The accounting included one Jules Reni, for whom Julesburg, Colorado, is named. Jules was a station keeper for Russell, Majors, and Waddell. The story goes that he had taken to consorting with renegades who seemed to know just when to hold up a company stagecoach. So the company fired him, but he refused to vacate. Slade was dispatched to "evict" him, Jules got off the first shot from behind a door, and round one ended with Slade intent on convalescence.

Finally Slade captured Jules, left him hog-tied to a corral post overnight, then filled him with lead by practiced degrees, starting with the extremities and working toward the vitals. When finally Jules sagged dead, Slade cut off his ears, nailing one to the corral post as a warning and tanning the other for use as a watch fob.

"And maybe the Pony Express would have failed without men like Slade," Paul Henderson speculated when we talked one November day in his library in Bridgeport, Nebraska. From Julesburg, on the South Platte in Colorado, the trail veers back Nebraska way along Lodgepole Creek, then across high windmilled rangeland toward Paul's hometown by the North Platte. Until his recent death at 83, Paul had spent every spare moment filling a basement room with floor-to-ceiling shelves of books, journals, maps, and photographs that document the look and events of the Oregon and the Pony Express Trails, collected during a lifetime of tracing those historic routes.

*Planning to wed, Richard Erastus "Ras" Egan (**right**) at 19 asked for a furlough, and was excused from only one ride. Charley Cliff, 17 (**below** and page 44), found his plains route boring, but years later helped a wagon train fight off Indians.*

BUFFALO BILL HISTORICAL CENTER, CODY, WYO. (FAR LEFT), AND PONY EXPRESS STABLES MUSEUM



I mulled Paul's premise concerning Slade, and a pattern of character found focus in my mind: All chief figures in the Pony Express story—from Majors to Slade to Buffalo Bill—were types undismayed by quick triggers or long odds. In a word, they had grit.

Don't Look for an Early Spring

From Bridgeport west, the Great Plains give way to buttes and spires and mesas and finally to the thrustings of the Rocky Mountains. For the pony rider this geographic graduation was indexed by familiar landmarks: blocky Courthouse Rock, the 325-foot spire of Chimney Rock, table-topped Scotts Bluff, horizon-held Laramie Peak. By the time I reached Fort Laramie, today a national historic site, I had mushed through two snows, and a third was a-brewing. I would defer travel farther west until spring, an option not open to pony riders.

In May I headed for Wyoming's South Pass, where the riders crested the Continental Divide, but was turned back by the season's worst blizzard. I asked a grizzled native when spring could be expected, and his reply was profound: "We only have two seasons here—winter and July."

I didn't wait for July, but wheeled back to South Pass on June 7. I topped the divide in a sleety barrage that was erasing the Wind River peaks from the skyline.

Descending below the fury, I stopped for a breather, not far from where a monument marks "the parting of the ways," with one trail heading for Oregon, the other for California over the route of the pony riders. Nearby I saw a small station wagon and beside it a young couple standing, in earnest embrace. "We're celebrating our survival," the man said, pointing back at the snow-whipped pass. "When the car began to slow down going downhill, even when I gave it the gas, I knew we were in trouble."

South Pass country is still short on roads and people, and so I was delighted to discover an experienced guide in Charley Wilson, son of Pony Express rider Nick Wilson. In younger days Charley had been a professional hunter in the area, and now he guided me along the lonely pony trail. I exulted in the great grassy sweeps of hills, still home to wild horses and thousands of antelope. And we cautiously negotiated half a dozen marshy fords, Charley explaining it was no problem at all to get a car stuck—but sometimes a lengthy problem to get it out. What was the longest you were ever stuck? I asked. Two weeks, he replied.

Our talk drifted to the life and deeds of his father, Elijah Nicholas Wilson. When Nick was a boy in frontier Utah, he ran away and lived for two years with the Shoshone tribe of Washakie, becoming that chief's foster brother. When the Pony Express began, Nick, 18, signed on as a rider. The horses he rode were memorable for their orneriness. Later he wrote: "Generally just as soon as the hostler could lead them in and out of the stable without getting his

PONY EXPRESS STABLES MUSEUM

*LIVING LINK to history, Charley Wilson (**facing page**) shares stories he heard from his father, Nick Wilson (**above**). When the Indian war flared, Pony Express rider Nick, then 18, helped fight off attacks and defend corrals, and almost died when an arrow lodged in his forehead; in later years he usually wore a hat, even indoors, to hide the scar.*

FORT LARAMIE ARCHIVES

*WAY STATION for the trail weary, Fort Laramie (**above**) was a relay point, where a rider changed horses and rode onward. Unlike most Pony Express stations, Laramie offered a feast of tempting diversions: chewing tobacco and smoked oysters, troop reviews and Virginia reels, and an endless stream of pioneers. Though Indian strife flamed elsewhere, these Sioux tribesmen (**left**) came to smoke for peace and negotiate a treaty. Portraying a cavalryman, Ellis Lefevre (**right**) helps re-create the past at Fort Laramie, now a national historic site.*

head kicked off, they were considered broke. . . ."

They were mostly those western mustangs, good for fast getaways from Indians, in 1860 a pony rider's first priority. In May the Paiutes, numbering perhaps 8,000, rose in holy war to chase the white man from what today is most of Nevada and a slice of Utah. War parties attacked ranches, wagon trains, and stragglers. Along 300 miles of trail, about half the Pony Express stations came under attack, several were burned, and some 17 employees were killed.

Nick Wilson knew the peril and the fighting. He helped a station withstand a three-day siege and fought off night forays on station corrals. He was having dinner at Spring Valley Station when Indian raiders tried to drive off the horses. Nick and friends gave chase:

"I was ahead of the other two boys, and as I ran around a large cedar, one of the Indians, who had hidden behind a tree, shot me in the head. . . . The arrow struck . . . about two inches above the left eye. The other two boys. . . . tried to pull the arrow out, but the shaft came away and left the flint spike in my head. Thinking that I would surely die, they rolled me under a tree and started for the next station as fast as they could go. There they got a few men and came back the next morning to bury me. . . ."

They found him still alive. He lay in a coma for 18 days, and was left with recurring severe headaches, an unsightly deep scar, and a habit of hiding it under his hat.

Westward through the country Nick fought in, I wound into Nevada. Beyond an 8,000-foot pass, I crossed the Steptoe Valley and climbed into treacherous Egan Canyon.

The canyon honors Howard Egan, a good Mormon, early pathfinder, and superintendent of the Pony Express trail from Salt Lake City to Robert's Creek in Nevada. Two of his sons, Howard R. and Richard Erastus, carried the pony mail.

Paiute warriors attacked the Egan Canyon Station, and would have slain all defenders but for the bugled charge of a troop of bluecoats. On a knoll above the juniper-grown station site, I lingered in a desert cemetery, where weathered pickets and nameless crosses mark a few lonely graves. Here lie, according to legend, the bluecoats who died in the defense of Egan Station.

Some stories have it that one grave is that of perhaps the bravest pony rider of them all—Billy Tate, an orphan.

Billy, only 14, was carrying the pony mail near Ruby Valley when the Paiute war erupted. A dozen braves rode him down to a desperate stand behind a rock. Friends later found him, pierced by many arrows, seven of his attackers dead before him. Surprisingly, the slain Billy still had his scalp. A witness wrote: "They respected courage. . . . They didn't touch the mochila."

On the Trail of Tragedy

Westward from Egan Station, the route crosses Nevada country almost as empty today as it was during the pony's lonely rides. Evergreened ranges alternate with broad valleys, most of them desert dry but a few, like the Ruby, set with lakes or marshes fed by snowmelt streams. Here the Indian war took its greatest toll.

A rough stone records the tragedy at Dry Creek Station: "John Applegate, Ralph Lozier, killed by Indians, 1860." The slab dates from our own times, erected by the Dameles—father Peter, sons Benny and the late Peter Jason. They own the ranch on which the old station stood, in a turquoise-speckled valley below Eagle Butte.

What made them think they had found the grave of the two station tenders? "We dug into it," Benny said, "and just a foot or so down we found the remains of two bodies, one on top of the other, with a head bone at either end. One skull had a hole in it."

Benny was shouting over a wind strong enough to be leaned into, and I asked if it often blew like that. "It may start one morning," Benny said, "and blow for two months. Then, one morning it stops, and you walk out the door and fall down."

I headed into the wind toward western Nevada and heard history echo and re-echo its Indian-war theme: station burned, the keepers slain or fled, the stock driven off.

It was in that grim context that "Pony Bob" Haslam started his famous ride in May of 1860 from Friday's Station near Lake Tahoe. His eastward gallop was routine as far as Carson City, which he found full of wild rumors but devoid of relief ponies. He pushed on to Buckland's, which was to have

been the end of his 75-mile stint, and discovered a further problem: His relief rider refused to ride. Station keeper W. C. Marley offered Bob a $50 bonus if he would fill in:

"Within ten minutes, when I had adjusted my Spencer rifle, which was a seven-shooter, and my Colt's revolver, with two cylinders ready for use in case of emergency, I started. From the station onward it was a lonely and dangerous ride of 35 miles, without a change, to the Sink of the Carson. I arrived there all right, however, and pushed on to Sand Springs, through an alkali bottom and sand hills, 30 miles farther, without a drop of water all along the route. At Sand Springs I changed horses and continued on to Cold Springs, a distance of 37 miles. Another change and a ride of 30 more miles brought me to Smith Creek. Here I was relieved by J. G. Kelly. I had ridden 190 miles, stopping only to eat and change horses."

In only 18 hours, that made it the fastest run of record. But Bob's work was not yet done. He'd had only a few hours rest when the westbound mail arrived, and he had to climb into the saddle again:

"When I arrived at Cold Springs to my horror I found that the station had been attacked by Indians, the keeper killed, and all the horses taken away. I decided in a moment what course to pursue—I would go on. I watered my horse, having ridden him 30 miles on time, he was pretty tired, and started for Sand Springs, 37 miles away. It was growing dark, and my road lay through heavy sagebrush, high enough in some places to conceal a horse. I kept a bright lookout, and closely watched every motion of my poor pony's ears, which is a signal for danger in Indian country. . . . stillness of the night and the howling of the wolves and coyotes made cold chills run through me at times; but I reached Sand Springs. . . . Before leaving, I advised the station keeper to come with me to the Sink of the Carson. . . . He took my advice, and so probably saved his life, for the following morning [the station] was attacked."

Across the Sink of the Carson and into the dusk Haslam rode on. At Buckland's, Mr. Marley doubled the bonus to $100, and Pony Bob galloped onward to Friday's Station, his starting point: "I had traveled 380 miles within a few hours of schedule time, and

NATURE'S TOTEM, the 325-foot spire of Chimney Rock in Nebraska told pony riders and frontiersmen they had crossed the plains, that mountains lay ahead.

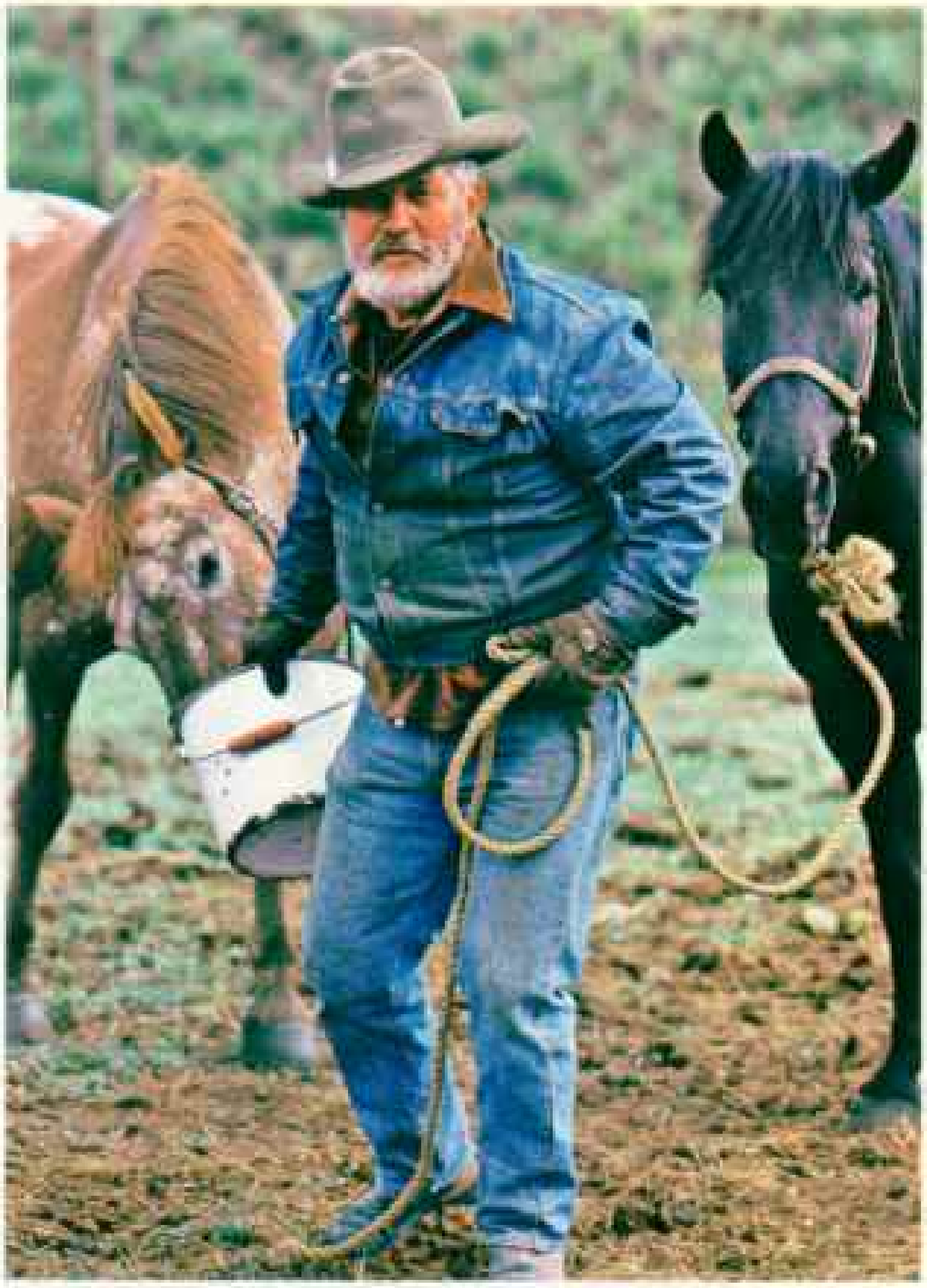
was surrounded by perils on every hand."

Though other riders rode extra relays amid similar perils, Pony Bob's feat ranks at the top for distances and dangers conquered in a brief span of time.

Into a Land of Rugged Splendor

Now glad grandeur met my gaze—cobalt Lake Tahoe mirroring the sky-filling Sierra Nevada. My guide on this final leg into Sacramento, U. S. District Judge Sherrill Halbert, was patient when my sentences trailed off, lost to the arresting splendor of the country he knew so well.

Where I now saw an alpine meadow of



*ON THE TRAIL of the past, Utah rancher Curtis Moore (**above**) went looking for a stagecoach strongbox lost in 1860 but found spools of wire left over from the first transcontinental telegraph. At the Damele ranch in Nevada, where Indians killed two station hands, a barn (**right**) stores gear a pony rider would know.*

buttercups, he enabled me to see it through the snow-dazed eyes of Warren Upson on the blizzardy morning of April 4, 1860.

"Upson was the second rider out of Sacramento on the original eastbound run," Judge Halbert explained. A lifetime of pursuing the Pony Express story had branded the details in his memory. "The start in California coincided with one of the worst storms in history. Sam Hamilton had left Sacramento at 2:45 a.m. in a torrent of rain that turned the roads into quagmires. Five hours and 16 minutes later, he had ridden six ponies a distance of over 60 miles and climbed 4,000 feet into the Sierra foothills to deliver the mochila to Warren Upson at Sportsman's Hall.

"Rain had changed to sleet before Upson took over. Climbing higher, he fought blinding snow and drifts that hid the trail. He finally dismounted and broke trail to get through. Beyond Woodford's Station the snow turned to rain. At Genoa he was provided with a fresh mount to carry the mail on to Carson City, the end of his ride. In a little over 12 hours he had traveled more than a hundred miles, and the first eastbound run had met its sternest test."

Just ten days later, that same Sam Hamilton who had carried the first mail east spurred westward to Sacramento with the first mochila from St. Jo. At Sutter's Fort an escort of mounted citizenry enveloped the foam-flecked pony in a mobile tumult.

"Almost simultaneously," said the

Sacramento Daily Union, "from the church towers and engine houses . . . rang out a merry peal of bells. A cannon . . . sent forth its noisy welcome. . . . Amidst the firing and shouting, and waving of hats and ladies' handkerchiefs, the pony—the veritable pony—was seen coming at a rattling pace down J Street. . . . Such a scene—both for comicality and becoming enthusiasm—our city has never, perhaps, witnessed."

Soon the mail had been sorted and was on its way aboard the Sacramento River steamer *Antelope* to San Francisco. There a token rider and pony landed amid the welcoming uproar of bands, bells, and gunpowder.

And Sacramento and San Francisco had news from the East that was only ten days old. Californians savored a new and reassuring sense of closeness with the nation.

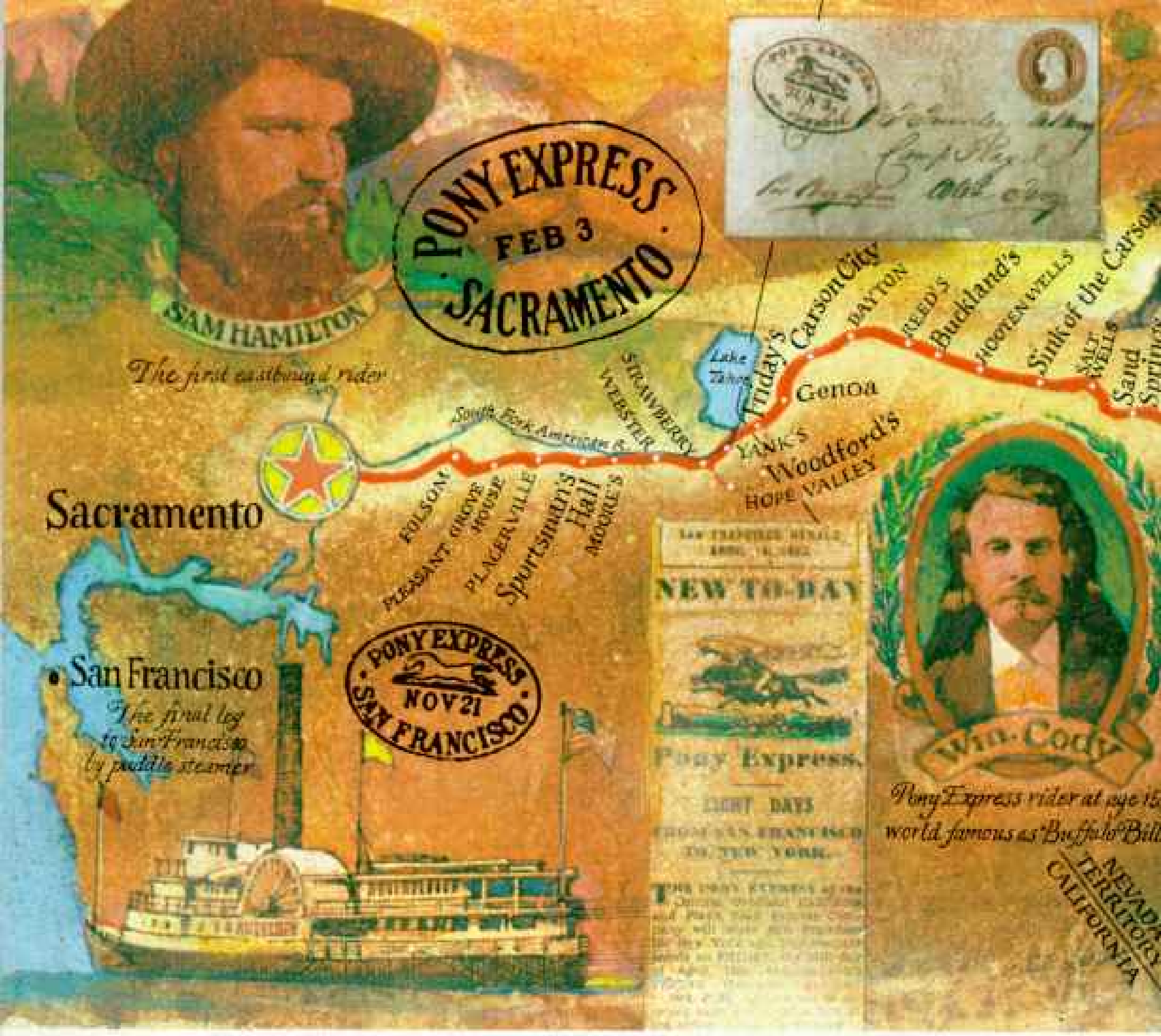
A sense of closeness was soon to come to me, not through letters from home but with a horse. Judge Halbert told me of a four-day Pony Express rerun from Salt Lake City to Sacramento, set for the July 1-4 upcoming. "The schedule matches the speed of the original Pony Express," he said.

So I phoned Malcolm McFarland, a California Highway Patrol officer who devotes off-duty hours to perpetuating the Pony Express story through the National Pony Express Association. I asked to go along. "Why don't *you* be a rider?" he responded.

At 8 a.m. on July 1, Utah Governor Scott Matheson wished well to the first rider, who

Trail's end: In restored Old Sacramento, a bronze rider heads for the

building that held the western headquarters of the Pony Express.



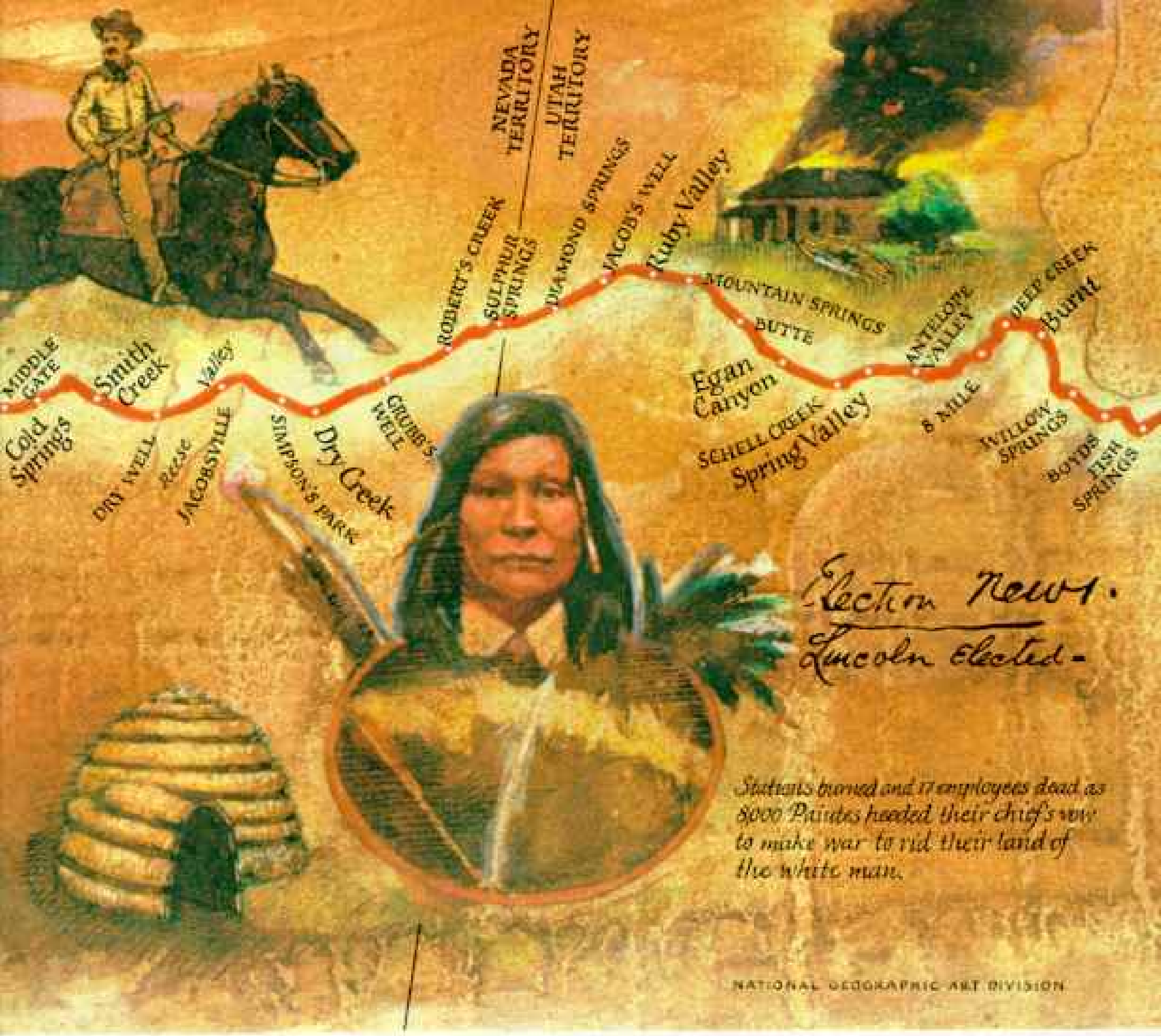
Highest peaks and worst Indian attacks plagued the western third of the trail.

straddled a mochila full of commemorative mail and clattered away from the old Tribune Building near Temple Square. Using truck-drawn horse trailers as mobile relay stations, riders from Utah, Nevada, and California leapfrogged the mail across the desert through light and darkness and galloped into Sacramento four days later, arriving only two minutes behind schedule.

I became a pony rider one midnight in a canyon called Overland in western Utah—the place where attacking Indians had set fire to the relay station so that it was ever after called Burnt Station. Walt Allen volunteered his "easy riding" Wonnie, a quarter horse, for my four uphill miles. Like the transient lights of the horse-trailer convoy strung out behind me, my thoughts flickered between a present concerned with pulsing saddle burns and a past filled with brave boys who could ride a hundred miles and trust their horses to find the way in nights too dark for human eyes. And the same Milky Way they knew raced with me, the same polestar danced over my right shoulder.

One postscript on the rerun: It included a test between the Pony Express and the U. S. Mail, and the pony won by a day.

But the best that man and horse could do in 1861 fell sadly behind the feats of a mechanical rival. From the earliest weeks of the Pony Express, line crews were setting poles for the first transcontinental telegraph. "And with few exceptions, they



The Pony Express dealt its founders financial ruin but lasting fame.

strung the wire along the same route followed by the Pony Express," Keith Mulcahy of Fallon, Nevada, told me.

"The telegraph project was a race by crews building east and west to see who could get to Salt Lake City first," Keith said. The Missouri crew under Edward Creighton got there October 18, 1861, the Californians under James Gamble six days later.

The first message eastward assured President Lincoln of California's loyalty to the Union. In mere minutes it dot-dashed across geography that had taken days to pass under the ponies' striving hooves. Within a week the Pony Express completed its final runs and passed into history, victim of the first feeble voice of the electronic age.

But not before it had served its founders bittersweet portions of fame and misfortune. In 18½ months, by most estimates, the enterprise lost some $200,000.

Despite commercial catastrophe, the venture enjoyed esteem in its day as in our own. Thus when the last mochila was delivered, San Francisco's *Pacific* spoke for many in a sad recessional to the faithful pony:

"You came to us often with tidings that made your feet beautiful on . . . the mountains. . . . We have looked for you as those who wait for the morning, and how seldom did you fail us! When days were months and hours weeks, how you thrilled us out of our pain and suspense, to know the best or know the worst! You have served us well!" □

Return to Uganda

By JERRY and
SARAH KAMBITES
Photographs by
SARAH LEEN

After the fall of Idi Amin in April 1979, a young Ugandan woman returns with her Canadian husband to a homeland on the verge of chaos.

In these pages we present Sarah and Jerry Kambites' story from a double perspective. Jerry chronicles the couple's Uganda odyssey in the text beginning on the next page. Sarah adds her poignant personal comments in the picture captions.

PHOTOGRAPH FROM THE COLLECTION OF SARAH KAMBITES

*HOME AGAIN! I left Uganda to study abroad in 1972, just after Idi Amin seized power, and for seven years agonized from afar as my people suffered under his rule. Last summer I returned—with a Canadian husband and our child. Would my family accept us? Their smiles remove all doubts. Kneeling respectfully, I greet some of my aunts, who will kneel in turn to greet Jerry. That's me at age 10 (**above**) with a great-aunt and my grandmother.*

WE CHASED the setting sun toward Kampala with growing fear that darkness would catch us still out in the countryside, prey to the human wolves called *kondos*—the thieves who come at night.

We had left Nairobi at dawn in this old Land-Rover crammed with gear, food, medicines, and ourselves—my wife, Sarah, our 10-month-old son, John, and myself.

Our destination: home. But it was a home I knew only from the loving descriptions of my Ugandan wife, who for seven years now had lived afar from a homeland brutalized by dictator Idi Amin.

During our three years of marriage in Canada, Sarah had often ignited my imagination with tales of her native Uganda. She told me of the beautiful land of Buganda, home of her own Baganda people—Uganda's most numerous tribe. She conjured images of her mother's home island in Lake Victoria—a fairyland of *miyembe* trees pregnant with drooping mangoes, of coffee caressed by the equatorial sun, of pineapples sweet as fine honey.

"Someday Amin will fall and our exile will be over," she had promised. "Someday you and little John will come home with me and take a clan according to the ancient ways."

Then, last year, the news had come. Amin had been driven from Kampala, Uganda's capital, by an army of troops from neighboring Tanzania and ragtag Ugandan exiles.

This was what we had prayed for since meeting six years before at Holy Cross Greek Orthodox Theological Seminary in Boston. I had been studying theology, and Sarah was working toward a degree in education and Greek. She was tall, proud, very beautiful, and very African. My parents were amazed when I brought home an African girl who could speak fluent Greek.

Sarah and I made three decisions at that time. First, we would get married. Second, I would switch from theology to medicine. And, third—God willing—we would someday establish a medical clinic in Uganda.

Now I had arranged a three-month leave of absence from my final year of medical studies at McMaster University in Hamilton, Ontario. During my stay in Uganda, I would be given credit for working with a surgical unit in a Kampala hospital.

Which explains the huge load of medical supplies jouncing along with us through the green African hills as we bounded over the potholed road toward Kampala. The poor old Rover shuddered as I jammed it through its gears. The overworked transmission filled the cabin with unbearable warmth. Kampala was still hours away. In late afternoon we hit the Ugandan village of Busia on the Kenya-Uganda border, 180 kilometers (110 miles) from Kampala.

Uganda! Sarah sat up straight, staring through the dusty car windows. In the fading light, Tanzanian soldiers stood at sullen guard, cradling submachine guns. Returning exiles and refugees milled about, murmuring over the long delays at the border.

"Nobody's smiling," Sarah said. "It's not like Uganda."

The elation that had swept the country after Amin's fall had by now, just four months later, done a complete turnabout. "It's even worse than under Amin," people told us.

The first post-Amin government, under President Yusufu Lule, had fallen after 68 days in power. Godfrey Binaisa's new government, more to the liking of the occupying Tanzanians, had been installed. But right now, in much of Uganda—at least after dark—anarchy was the real ruler.

Remnants of Amin's army had filtered back into the cities. Jails had been indiscriminately emptied. Many Tanzanian soldiers, paid poorly or not at all, turned marauder at night. Returning Ugandan exiles distrusted those who had stayed behind, and vice versa. Old scores were being settled. Various factions, according to rumor,

were trying to undermine what stability the government had left.

Whatever the case, ten, twenty, thirty people a night were being killed in and around Kampala, many simply dragged from their homes and shot. Such justice had been handed out by Amin's hated secret police, the State Research Bureau. But now the killing was anonymous—somehow even more terrifying. Reports that clergy and doctors were frequent victims did nothing to lessen our anxiety as Sarah, John, and I plunged into this world of chaos.

"Can we make it to Kampala by dark?" I asked a customs officer.

"If you drive fast," he said.

He smiled at John, snuggled in Sarah's arms. The sight of John beaming his little child's smile proved better than any visa, and our papers were quickly stamped.

Ten kilometers later we were stopped by a soldier holding a Kalashnikov AK-47.

"*Habari*," he said, greeting us brusquely in Swahili—language of the Tanzanians.

He placed a restraining hand on the steering wheel. Again he spoke in Swahili.

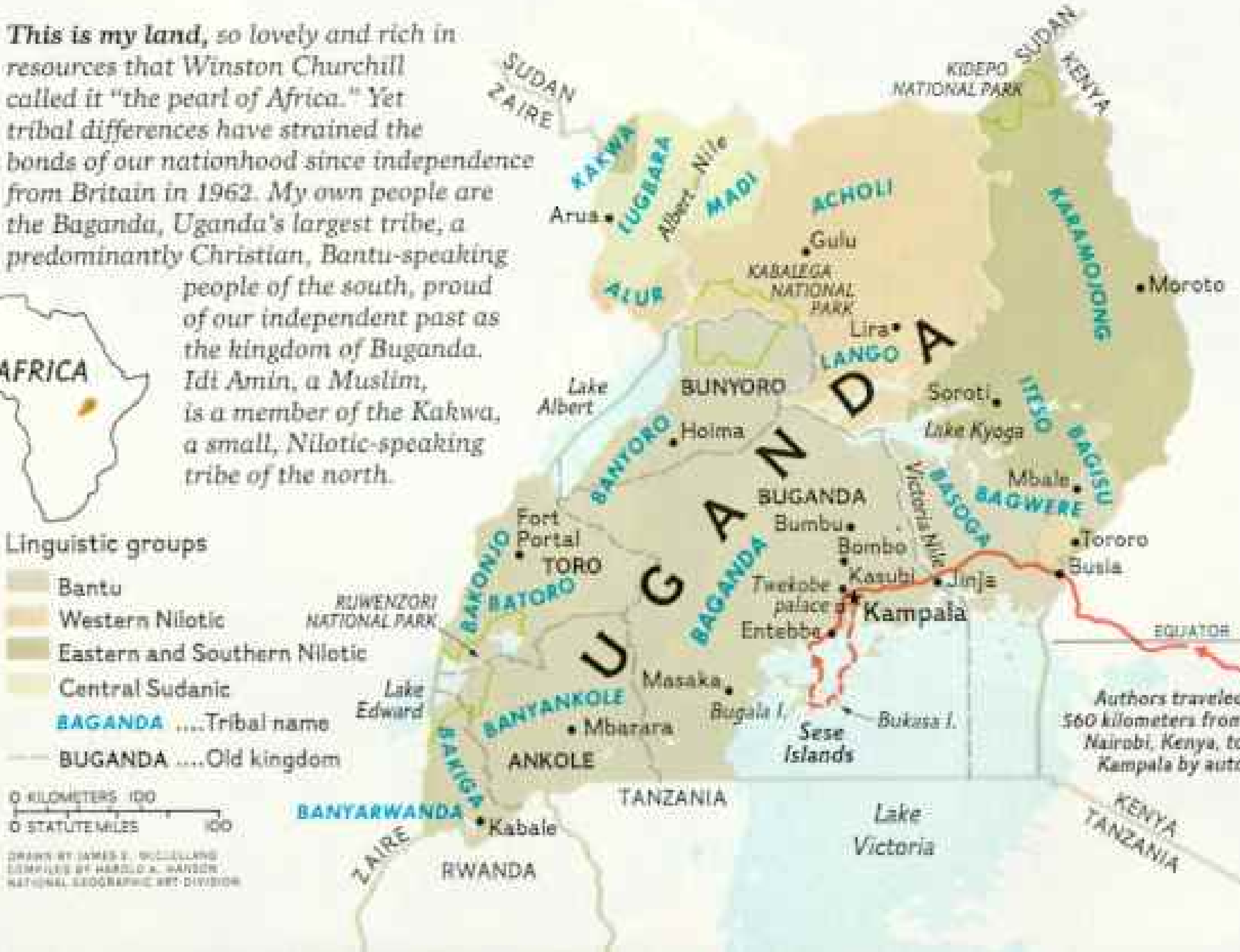
"Cigarettes," Sarah translated. We didn't have any, so I gave him some money. He smiled and let us pass. Good business, I thought angrily. But he had the gun.

Darkness was upon us as we raced the last kilometers toward the haven of St. Nicholas's Greek Orthodox Church in Kasubi, a Kampala suburb. At one point, two shots cracked out only a few yards away. I dropped into second and floored the pedal. Engine backfiring, we swerved wildly around a corner. Now a small car cut ahead of us as a dark van pulled up behind. Men got out of both. Was this a hit? I wasn't about to wait to find out. Careening around the front car, we lurched between piles of rubble left by the terrible days of the *saba-saba*—the Tanzanian artillery barrage.

Finally, we reached Kasubi, Sarah's childhood village. In the courtyard of St. Nicholas's Orthodox Church the engine coughed into silence. For a moment we became aware of an almost mystical quiet pervading the night. Then a crowd burst from the church manse. With thunderous whooping they swarmed around the Land-Rover. Sarah's family! Little John unleashed a high-pitched wail that brought an approving roar of laughter.

Sarah reached through years of longing and greeted her tearful mother, Solome, with a firm hug, then knelt to pay respect to

This is my land, *so lovely and rich in resources that Winston Churchill called it "the pearl of Africa." Yet tribal differences have strained the bonds of our nationhood since independence from Britain in 1962. My own people are the Baganda, Uganda's largest tribe, a predominantly Christian, Bantu-speaking people of the south, proud of our independent past as the kingdom of Buganda. Idi Amin, a Muslim, is a member of the Kakwa, a small, Nilotic-speaking tribe of the north.*



the other elders in the old Baganda way.

Then we were assaulted with questions.

"What happened? You were so late! We thought you might be hurt or that the *bakombozi* [liberators] had stopped you!"

Bishop Theodoros Nankyama, who had made arrangements for us, stepped in.

"Quickly! It's already 8:30. Let's unload and get you to your rooms at the university before the kondos come out."

At last, in our small campus flat at nearby Makerere University, we collapsed into bed. About 3 a.m. strange sounds tore me from heavy sleep—a woman's screams, the gruff shouts of men, machine-gun fire. Finally, silence again. I wondered what I would find at the hospital in the morning.

Horrors in a House of Healing

"Guard your nose," Dr. Adam Kimala cautioned as we inspected the wards of Kampala's Mulago Hospital. Once one of Africa's finest—largely funded by the British as an independence gift in 1962—it had deteriorated appallingly under Amin.

The emergency ward was a disaster: sixty beds, most without mattresses and sheets, for a hundred bloody, dirty patients. One doctor and three nurses were on duty.

Patients were everywhere, lined up for clinics, sleeping on the floor. A putrid smell from the lavatory raked my nostrils.

"We haven't had running water regularly since Amin's middle years," Dr. Kimala explained. "And soap is rarely available."

"No penicillin," a passing nurse sighed.

"And yesterday no blood for surgery," Dr. Kimala added. "Today a little is available. But no tetanus toxoid. My God, we've lost dozens to tetanus alone."

He put his hand on my arm. "Did you hear the shooting last night around three?"

He nodded toward a young girl on one of the beds, a doll clutched in one hand, her arm and chest bandaged, her leg in traction.

"Men in uniform came to her house and killed her mother and brother last night. We've lived with violence a long time. But children? Who can shoot children?"

A nurse came up, her face tired, drawn.

"Doctor—down the hall—that young boy—a cardiac arrest. . . ."

"Resuscitation gear!" Dr. Kimala cried.

We hurried past the boy's mother. "Please, he's my last son," she pleaded.

"Let's not lose him," Dr. Kimala said.

For ten minutes we worked on the boy. Then, just when all hope seemed lost, his young heart leaped into life under my hands.

Later Dr. Kimala said, "It's not just that war is hell, but that the fires of this hell last so long after the guns are silenced."

He looked at me imploringly. "Our government asks the outside world for two billion dollars to help us through this terrible time. But other nations look for some sign of stability here before they are willing to help. Yet how can we have stability without assistance? Must we ask the dying to wait until help arrives?

"Our staff can barely afford to work here. The government salary for doctors is only about 3,000 shillings a month. That's about $400 U. S. But eggs cost nearly ten dollars a dozen. Soap is a dollar a bar. *Magendo*—the black market—is everywhere. Everybody tries to find the money to survive. If a patient wants to go from emergency to X ray, he has

*THIS WAS NOT THE UGANDA I remembered. We didn't see many smiles in the capital, Kampala. Amin was gone, yes, but the Tanzanian bakombozi—liberators—remained (**above**), an army in our midst. With foreign troops in our streets, armed gangs everywhere, bandits terrorizing the night, and frequent government shake-ups, it was hard to tell who was in control, if anyone. People were more worried about simple survival at a time when necessities sold at luxury prices on the flourishing magendo, the black market.*

*Kampala residents (**left**) waited to turn in old money for new—without Amin's picture. But the new currency was hardly more stable than the old.*

*After dusk people stayed behind locked doors with weapons ready in case of attack by the kondos, marauders, who murder and pillage after dark. We hired Tiko (**right**) to guard our apartment door at night. But would a bow and arrow stand up against a submachine gun? Tiko said, if he shot first, it would.*

to pay someone. Aminism is still with us."

"Aminism"—a word coined to describe the systematic exploitation of those without power by those who wield it. Alas for Uganda, Aminism remained behind when the man himself fled.

Smoke Signals Special Occasion

"Clouds," Taata Musa said, "I want to make clouds for my new son-in-law."

We were seated in the mud hut of Sarah's uncle, Taata Musa—Father Moses (below). Among the Baganda, fathers and paternal uncles are called *taata*, mothers and maternal aunts *maama*.

Taata Musa enjoyed speaking English, which he'd learned in the British days. But his English was highly cryptic. Thus, "making clouds" meant to smoke cigarettes.

I handed him a cigarette. Lighting up, he leaned back, smiled, and made clouds.

"He only smokes on the special occasions in his life," Sarah said.

"Taata Musa," I asked, speaking slowly so he would understand my English, "will you join us now for dinner?"

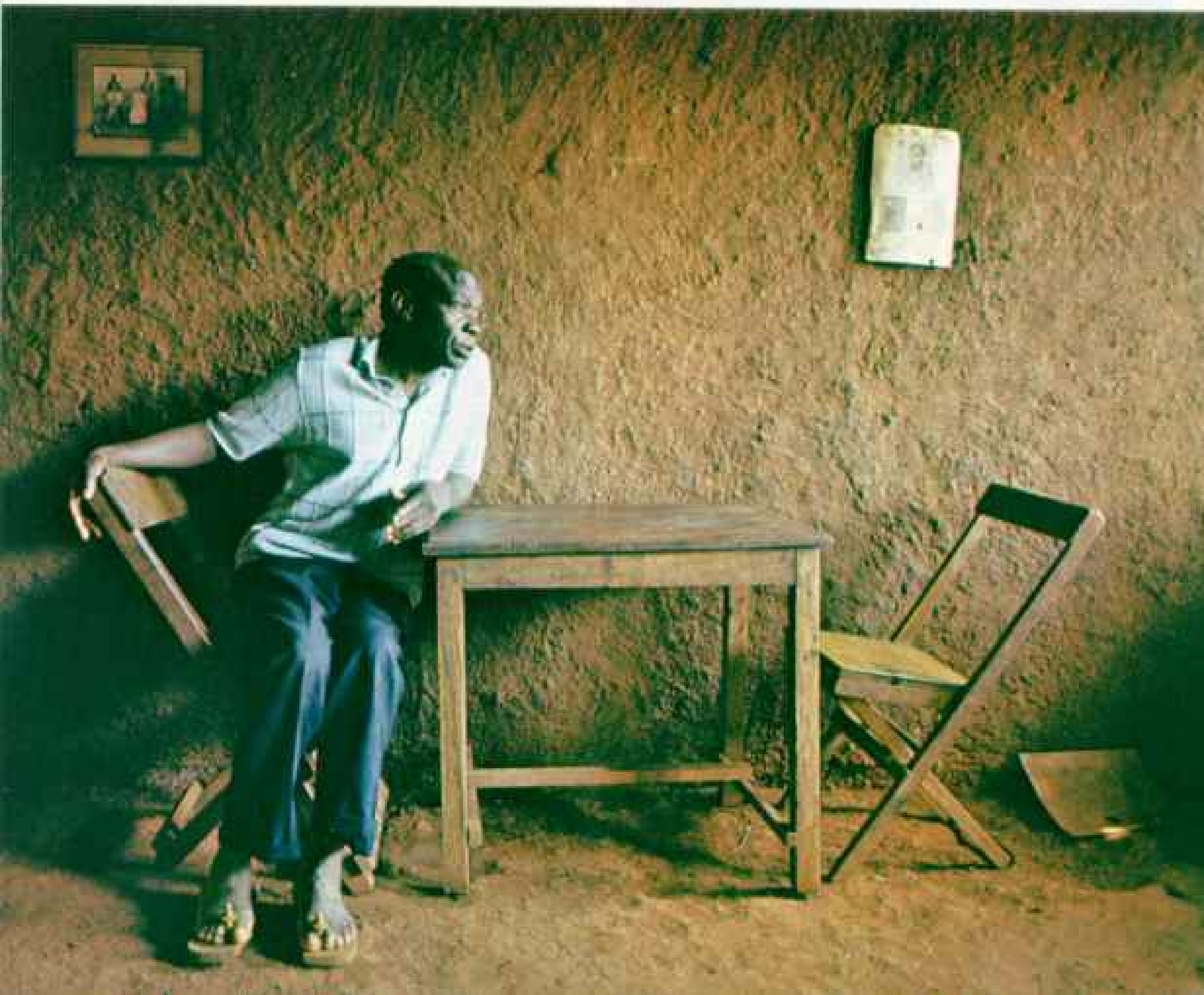
"Of course, sir," he responded with great formality, "dinner at six."

To Taata Musa, remembering the old days under the British, English-speaking people invariably had "dinner at six." Since I spoke English, he assumed I conformed to the same custom. The fact that it was only noon was beside the point. Dinner was properly served at six, and "six" it now was.

He left us for a moment and returned dressed in a crisp new shirt, shiny black shoes, and his best pants. From somewhere in the past he'd found a tie and looked very much the elegant gentleman.

That noon we enjoyed "dinner at six."

Later Sarah got Taata Musa talking. Like many who live alone and watch the world through solitary windows, he knew everyone's business, and there were many stories to tell. We all laughed hilariously.



"Taata Musa," Sarah said, "let's tape a letter to my father-in-law in Canada." When she reached for the recorder, she found that I had had it on during our conversation.

"What do you mean," Taata Musa exclaimed. "Everything I said is on that tape?"

"Everything," Sarah said, smiling.

She replayed part of the conversation.

"All that gossip!" he moaned. "If the people I talked about should hear it!"

He slapped his forehead. "I've just killed myself with my big mouth."

Sarah burst out laughing.

"The tape is our secret," she whispered.

Taata Musa sighed and smiled with relief. He blew a great puff of smoke into the air. Indeed, he had created clouds.

Clanless Author Has to Choose

I took a clan one day, sitting under a tree laden with huge alligator-skinned breadfruit. Among the Baganda there are dozens of clans. Tradition requires a husband to be of a different clan than his wife or mother-in-law. And my son must take my clan.

"What is your clan in America?" one elder asked me. I told him we had none.

"None? But how will your son know whom to marry and whom not to marry?"

John, I learned, may not marry a woman if either she or her mother are of the same clan as either Sarah or I.

"Well, then," the elder asked, "which clan do you prefer?"

Since Sarah's clan, the Fumbe, or Civet, and that of my mother-in-law, the Nkima, or Monkey, were closed to me, I had my choice of any of the others. On a whim I decided on the Leopard clan.

"The Ngo, or Leopard, clan it is," said the elder. "And what of your personal names?"

I recalled the name of a legendary 14th-century Baganda hero named Kintu. It reminded me of Kunta Kinte in Alex Haley's *Roots*. Since I was putting down new roots of my own, it seemed appropriate.

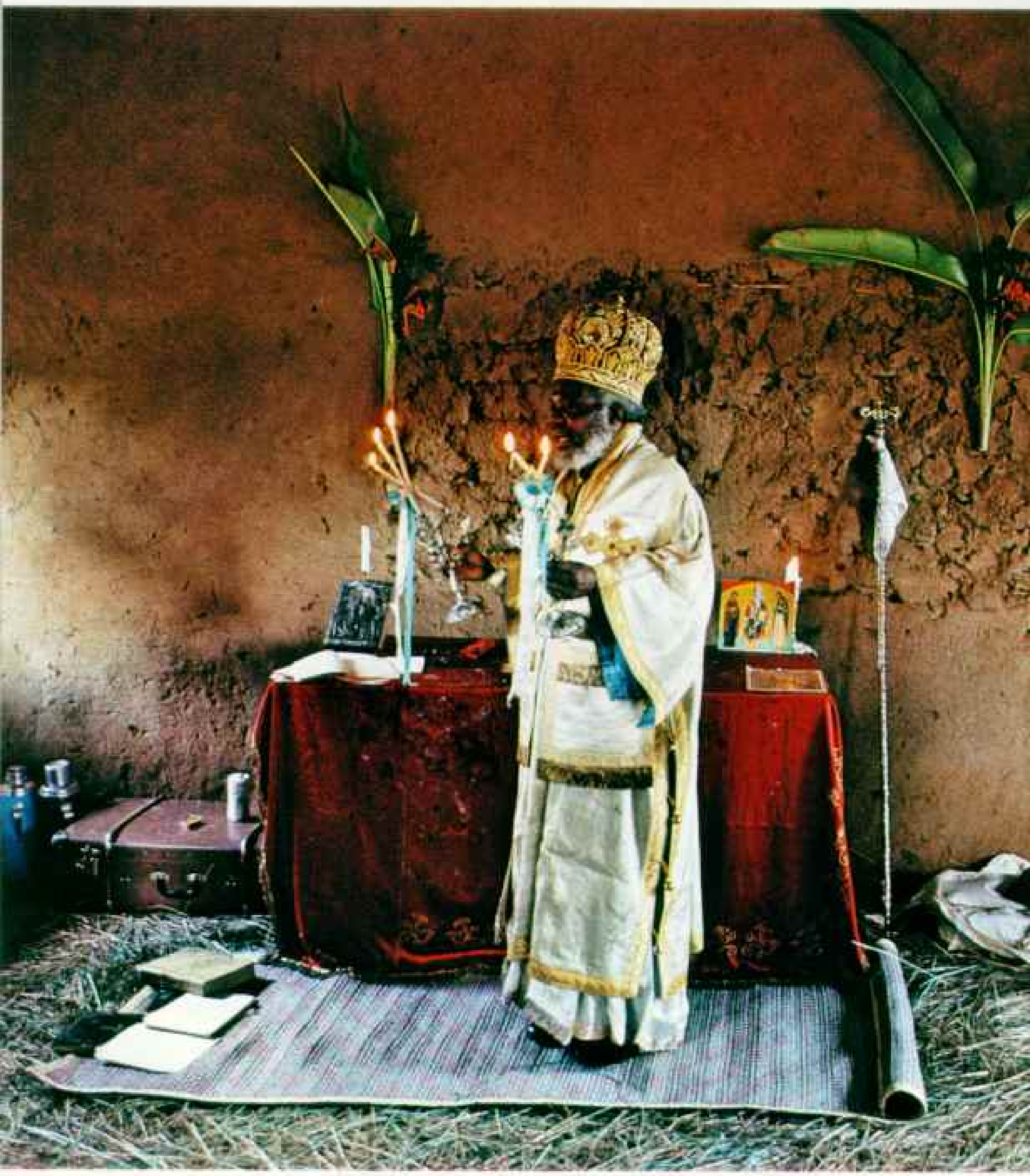
*MY UNCLE, Taata Musa, lives with faded portraits (**left**) of the British family he worked for and of King Freddie, Buganda's last king. The monarchy was abolished in 1966, but never in Taata Musa's heart.*

*At our happy homecoming my mother (**top**) cherishes the printed fabric we've brought her from the United States. And Jerry (**above**) smiles upon receiving two chickens at a ceremony welcoming the new muko, a son-in-law.*

*THANK GOD that where there is suffering there is also compassion. Throughout the recent chaos, miracle workers like Dr. J. C. Gwasaze (**left**) tended the afflicted, even though Kampala's Mulago Hospital—once one of Africa's best—had been looted of ambulances, medicines, linens, even mattresses. Here Dr. Gwasaze performs eye surgery on my mother, Solome.*

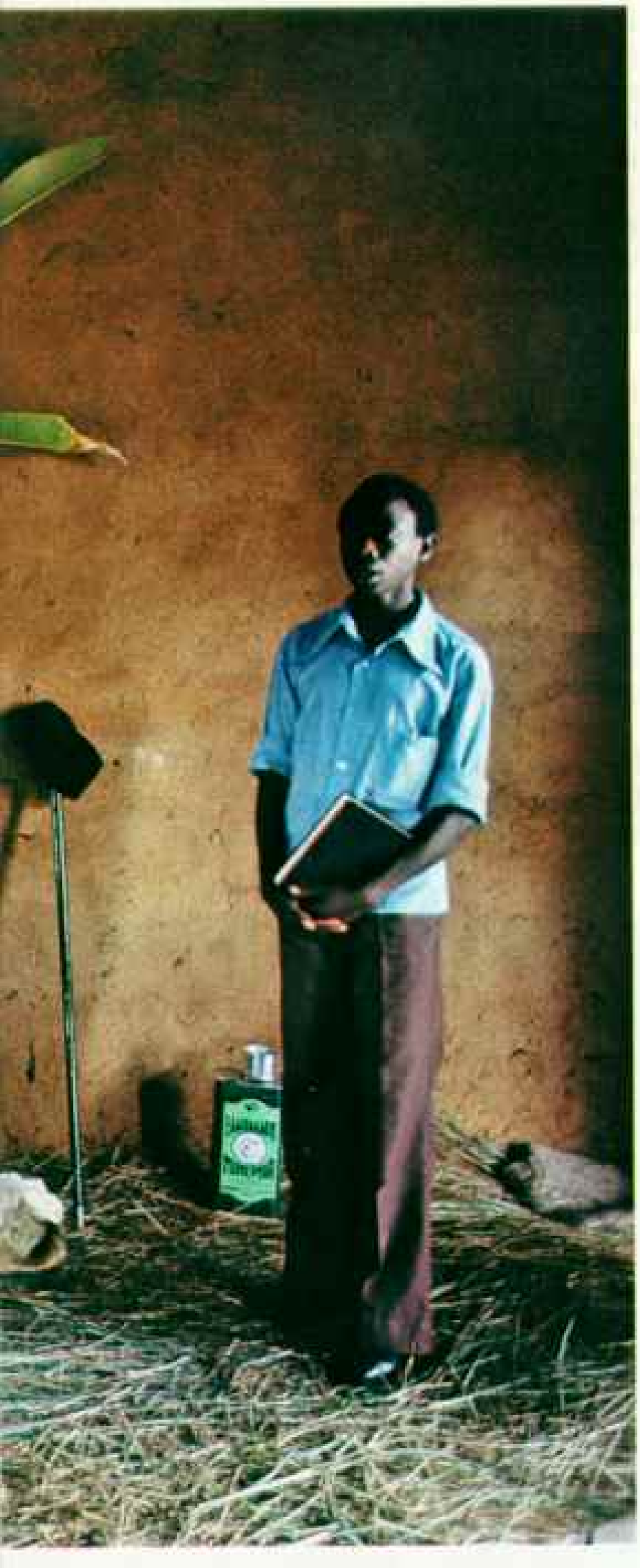
*Jerry, now in his last year of medical studies, examines patients (**below**) in the emergency ward. Though terribly frustrated by the lack of medicine and supplies, he marveled at the skill and dedication of the Ugandan doctors.*

*While violence centers in the cities, poverty and malnutrition are everywhere. On Bukasa Island, knotted rags make a garment for a child (**right**) whose pale hair indicates kwashiorkor, malnutrition from lack of protein.*



MY SPIRITUAL FATHER, Bishop Theodoros Nankyama, has been a shining light to thousands of Ugandans. It was through his unceasing efforts and his faith in me that I came to the United States on a church scholarship provided by the Greek Orthodox diocese of North and South America.

As a young girl in the church choir, I often accompanied Bishop Theodoros on his rounds to celebrate the Divine Liturgy in remote villages. His presence gives a special glow to this mud church



in the tiny village of Bumbu, about fifty kilometers from the main cathedral in my home village of Kasubi.

Among Uganda's 11 million people, about 60 percent are Christians, some 30,000 of whom belong to the Greek Orthodox faith.

"Kintu you are," proclaimed the elder. "Now, what of your son?"

"Why not Kavuma?" asked another elder. "It is an old Ngo name."

And so it was. Jerry and John we had been; Kintu and Kavuma we now were.

A gourd of frothing warm banana beer made it official.

"It's done!" the first elder said.

We were proper Baganda now.

Mothers-in-law by the Handful

Another ceremony was the rite of introduction to Sarah's maamas—her mother and maternal aunts, considered hardly less close than natural mothers. In effect, Sarah had five mothers, and I therefore had as many mothers-in-law. Each had to be won over by me, the new *muko*—son-in-law.

This introduction was no empty formality. If Sarah and I were to be accepted, strong bonds had to be cemented with her family. Otherwise, we'd never realize our dream of merging our future with theirs.

And so I was formally introduced to the family matriarchs, all of them dressed in their best and brightest *busuti*, traditional dresses. I was offered the only chair, while the maamas sat in a wide circle on woven mats. Each was separately introduced—Maamas Agatha, Esther, Alice, Penina, and Sarah's natural mother, Solome.

Sarah warned me that a muko must not touch his mothers-in-law. Nor could we live in the same house. Strange, perhaps, but at least I need never worry that our five maamas would decide to move in with us.

Afterward Sarah took me to the family burial ground. She caressed a stone tomb.

"This is my Maama Kezia, who died ten years ago. She was a very political lady. She used to take me to the rallies of the Kabaka Yekka—the King Only—party. My, how she loved King Freddie!"

The kings of Buganda no longer hold court in Twekobe, the royal palace at Mengo hill. The King Freddie of whom Sarah spoke was the last King of Buganda to hold political power—King Edward Frederick Mutesa II. His faded portrait still hangs in many a poor Baganda hut.

When the British arrived in the 1860s, four Bantu kingdoms controlled the region around northern Lake Victoria. The most

powerful was Buganda, which traced its history back to the 1300s, when it is said a great king named Kintu—whose name I adopted—forged a federation of clans.

In 1894 Britain declared Buganda a protectorate and began incorporating other regions into the land now called Uganda. Many tribes thus thrown together under one administration were age-old enemies. The Bantu tribes of the south differed in custom, language, and religion from the Nilotic peoples of the north. Political allegiance fractured along tribal lines.

How to weave this grab bag of cultures into a single nation?

At independence in 1962 the British solution was to make Buganda and three other kingdoms constitutional monarchies within a federal republic of Uganda. A northerner, Milton Obote of the Lango tribe, became prime minister. A year later the king of Buganda, King Freddie, was named president.

In 1966 Obote accused King Freddie of trying to overthrow the central government. Federal troops under a young colonel named Idi Amin stormed the royal Baganda palace, forcing King Freddie into exile. A new constitution was adopted that abolished all the traditional monarchies and gave wide powers to the new president, Milton Obote.

In 1971 Obote was ousted by Amin—beginning Uganda's darkest years. Little love was lost between the largely Christian Baganda and Amin, a Muslim of the small northern tribe of Kakwa.

With Amin's ouster in April 1979, Yusufu Lule of the Baganda became head of government. This raised Baganda hopes that they would now participate fully in running the country. But tension between Lule and the Tanzanians resulted in his removal. A compromise candidate, Godfrey Binaisa, was installed as president. Though Binaisa, too, belongs to the Baganda, he is associated with former President Obote, who abolished Buganda's kingship in 1966.

Sarah's uncle, Taata Magimbi, expressed Baganda discontent: "We don't say that Uganda should not be one country. But must we Baganda erase our identity and

JERRY AND I join hands (**above**) *at the spot on Bukasa Island where we hope to build our future home and a medical clinic. The view looks out on lovely Lake Victoria. Hippos still tear fishermen's nets on the lake, but their numbers are fast declining because of poaching by roving bands of armed soldiers during the recent disorders. A surviving herd of the dwindling species* (**below**) *finds refuge in Ruwenzori National Park.*

give up our traditions in order for the federal government to rule? How will Uganda benefit from the destruction of Buganda?"

He pointed to time-stained photographs of King Freddie and other old kings.

"If they are not our future," he intoned, "at least they are our past. And, I ask you, without greatness in our past, how can there be greatness in our future?"

Thus, at the palace of Twekobe, the royal drum called *timba*—python—remains silent. But the kings of old are not forgotten.

We spent our last days in Uganda on the island of Bukasa, home of Sarah's mother, in Lake Victoria's idyllic Sese Islands.

Arriving by boat after a stormy voyage across the lake, we were greeted by excited children at the dock. I conjured up the image of Sarah, barefoot and 5 years old, running down the slopes of Bukasa's hills, waving, like these children, to incoming boats.

Now Solome, who had returned to Bukasa with us, hurried to examine her house. She returned distraught. While she was away, a thief had stolen her pots and pans.

Escorted to a lakeside lodge, we fell asleep

"HOW COULD YOU do this to your Maama Solome! Didn't I feed you a hundred times and take care of you like a son?"

In her mud-walled house on Bukasa Island, my distraught mother pleads for information about her stolen pots and pans from a local man accused of taking them while she was away. Officials wanted to send him to a prison farm, but Maama Solome intervened, putting Christian charity into action.

In return for a confession and expression of repentance, the young man was sentenced to work in Maama's garden for two months—but never on Sundays.

"Sundays are for church and rest," Maama says.

to the sound of a rising wind and raindrops on the roof. Awake early, I walked out to the shore. The spirit of the lake, so angry yesterday, was peaceful now. A flock of white birds ambled slowly over the pewter gray water, losing themselves in the union of the rising sun and its sister reflection.

After breakfast, we walked out to the forest edge, where Solome was hoeing her garden. Three newly turned rows of rich brown earth already lay ready for planting. In the tall trees, hung with great vines, monkeys chattered merrily. Hornbills beat the air with great black-and-white wings.

Solome greeted us, smiling. We could feel the peace of that place as tangibly as you feel the wind or the rain.

While Sarah and her sister Florence prepared a lunch of bananas and pineapples, I picked coffee. Solome continued her vigorous hoeing. Not a bad place to spend one's life, I thought.

Noon came and with it young Patrick Bulagulwa, the acting district chief.

"We have caught your thief," he announced, pointing to an abject-looking

young man trailing behind. "And he will go to the prison farm on Bugala Island."

"No, no, you can't send him there," Solome said. "It's too harsh a punishment."

After much haggling, a deal was struck.

"Then it's decided," Maama Solome said. "No prison. He will work for me without pay for two months. But not on Sundays. Sundays are for church and rest."

Another problem arose. A rogue hippopotamus had been tearing fishermen's nets. Normally the island chief would lead an expedition to drive the hippo away, but today he was ill. Christopher, Sarah's brother, asked if I would hunt the hippo.

I was no hunter, but the challenge intrigued me. Why not? To tell the truth, my blood was up for an adventure.

Patrick procured the venerable chief's ancient rifle—the only one available—and he, Christopher, and I set out in a small boat, searching the tall lake grass.

"There he is!" Patrick shouted.

A hippo's head surfaced 200 meters away. Patrick killed the engine, but the hippo sensed danger and submerged. I was dropped off by the shore, and the boat roared off to make it seem we had gone.

Motionless, I stood in waist-deep water. Stinging red ants dropped onto my back from trees above. Then the hippo surfaced ninety meters out, and I forgot the pain.

As I took aim, a conflict of emotions swirled inside me. I knew that hippos are fast declining; hundreds had been killed in recent months by uniformed poachers in Uganda's unguarded game reserves. But I knew also that these fishermen had to earn a living, and that this hippo was making that difficult for them.

But was there also something else? I had to admit it to myself. Yes, I *wanted* to kill that hippo. Some old atavistic urge was rising within me. I fired. The antique rifle's kick knocked me backward into the water.

The hippo went down. At the sound of the gun Patrick and Christopher returned with the boat. Half an hour passed. No hippo.

Christopher slapped me on the back.

"Looks like you've done it!"

I felt a mixture of pride and remorse.

Then Christopher moaned. "Look!"

About 150 meters away, the hippo had reemerged and was heading into a stand of tall grass, seemingly none the worse for his encounter with this shaky-fingered hunter.

"Oh, well," Patrick muttered "maybe he's learned his lesson and won't come back."

The Kintu within me was distressed, but Jerry the doctor felt a wave of relief.

I would stick to doctoring from now on.

A Sign From the Heavens

Our last night on the island we built a great bonfire and roasted a goat that Solome had bought for us. But we ate without enthusiasm, not knowing how long it would be until we sat together as a family again.

Solome picked at her food. There was a great sadness in her eyes.

"Maama," Sarah said at last, "we have good news. Jerry and I have decided to return to Bukasa Island after he finishes school. We'll build our clinic. Perhaps a school as well. This will be our home."

Maama's eyes lit up. With the dignity befitting her age, she said simply, "We will pray for your safe return."

Next morning, in the predawn darkness, we loaded the canoe that would take us back to the mainland. Solome bid us each a warm and gentle farewell.

"I'll be waiting for you," she said.

A sliver of moon hung low in the sky. From the forest came the song of an early morning bird. Sarah pointed at the sky.

"Kibonoomu!" she exclaimed. "Shooting star! A good sign!"

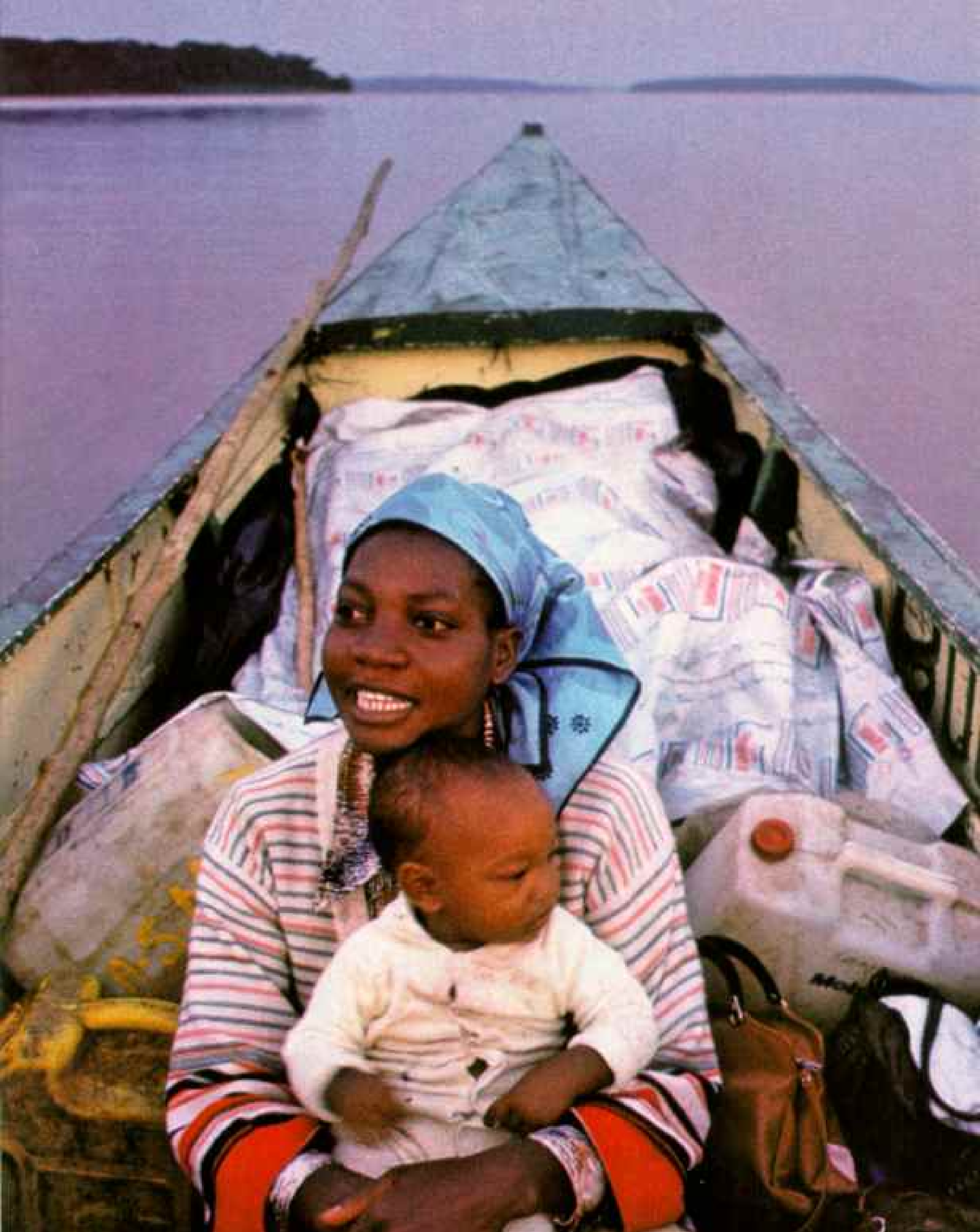
Apparently the lake spirit was pleased.

I kicked off, and the canoe slid into the darkness. To the east, dawn broke and haloed the receding shape of Bukasa Island.

"Look, *mukwano*—my love," Sarah said. "See where the sun has led us."

It was a perfect ending for our return to Uganda—and a perfect beginning as well.

IF HOME IS WHERE THE HEART IS, then my heart remains in Uganda—land of my past and future. As we leave Bukasa Island for the long trip back to Canada, I cradle our young son, John, a child of two cultures. When I look into his eyes, I see Uganda's future—and our own. □



The Bulgarians

By BOYD GIBBONS

Photographs by JAMES L. STANFIELD

BOTH NATIONAL GEOGRAPHIC STAFF

ON A COLD AFTERNOON Nikola Tunov squatted in the dust of the square of Gorna Sushitsa and with a stick stirred a pot of hot tar and pine oil. He was surrounded by a group of young men, mostly his relatives (a corncob thrown in this village will likely hit a Tunov). They passed around a jug of red wine. From time to time Nikola would intercept the jug and throw back his head of black hair. His hands were large, and cracked and raw.

Throughout the winter (this was November), Nikola and his work brigade climb the steep slopes of the Pirin mountains to cut oak for their stoves and fence posts for the big agro-industrial complex of which this village is a part. The men wear no gloves. Nikola uses the tar solution to treat cuts on his sheep, but it has not escaped his attention that it also repairs his sore hands.

A truck rattled into the square—a two-and-a-half-ton Soviet GAZ 51. Stoyan Lavurov jumped down from the cab. The GAZ made one more gasp. It appeared to have been driven mostly down dry riverbeds. Stoyan is the truck jockey for the village, hauling wood to the sawmill in the valley. Bulgarians seem reserved, but Stoyan had the sort of wild abandon that pressed the GAZ to achieve flight.

Nikola referred to the condition of his hands. "So why don't you cover them?" asked Stoyan.

"With what?"

"They call them gloves."

Nikola rubbed some tar into his palms and spat in the dirt. He and Stoyan laughed.

Most towns in Bulgaria have a square around which stand the municipal building, a hotel, a restaurant, and a statue commemorating either the Russian liberators or the local partisans who fought the pro-German government during World War II. Gorna Sushitsa has only the square, and a mayor with the only telephone. It rarely rings, the national government having chosen not to include Gorna Sushitsa in its plans for present or future development. Thirty years ago there were 900 people living in the village. Today, in this relic of old Bulgaria, there are maybe 180, largely lonely grandparents. Most of the children, as happens over much of this rapidly industrializing

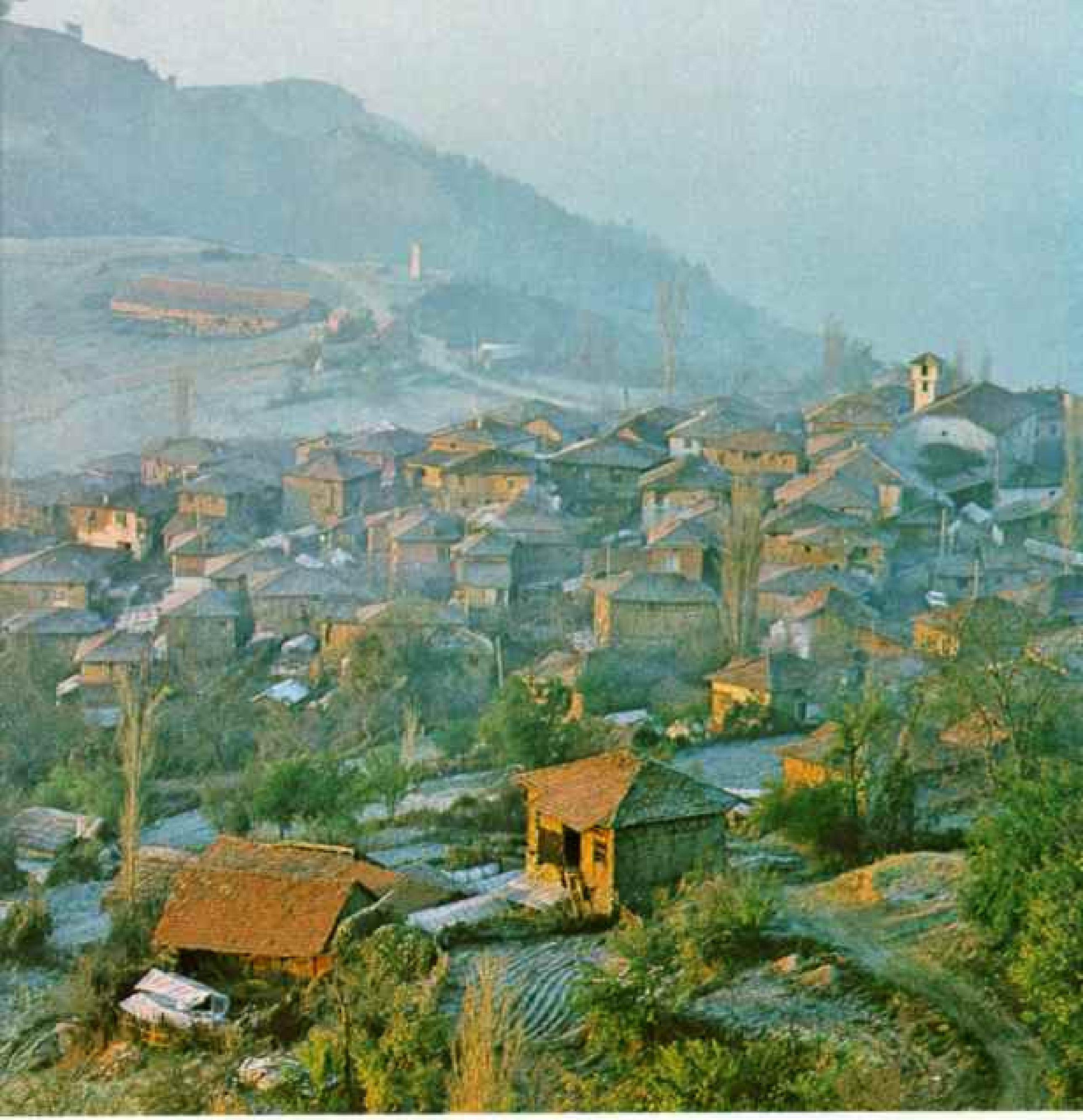
She wears her years with vigor *and her self-made ceremonial dress with pride. Vangalia Tunov "never sits down," the villagers of Gorna Sushitsa like to say. With similar grit, Bulgaria has weathered turbulent centuries athwart the strategic Balkan Peninsula. With an eye toward its roots—glimpsed through recent archaeological finds (page 112)—the socialist nation plows from an agrarian past into an industrial future.*

Old Bulgaria seems rock-ribbed *in the Pirin mountains, where a grandmother* ***(below)*** *gathers wood for her stove in Gorna Sushitsa* ***(right)****. Yet even here swirl eddies of change. The young stream to cities for factory jobs, leaving an aged though nearly self-sufficient population of about 180, who earn most of their cash from tobacco fields.*

country, have left for jobs in the cities.

Behind Nikola was a little whitewashed church. (The Bulgarian Orthodox Church is a branch of Eastern Orthodoxy, its independence circumscribed by the state, its attendance hesitant.) The houses were of stone, timbers, and whitewashed bricks of mud and straw—solid homes, roofed in red tile, separated by dirt paths. Nothing in Bulgaria—even in spare Gorna Sushitsa—suggests a slum. The apartment complexes would win no design awards, but the homes are neat, well built, and often artistically painted, and, when they can afford to, Bulgarians add on.

In the windows hung strings of red peppers, and beside the houses tobacco leaves dried under tents of plastic. At night each family pens its stock in mangers abutting the houses. In the morning a shepherd (the job rotates) moves sheep and goats to the grass, their bells clonging. The music recalled for me a day when I was invited by a shepherd with a small mustache and the endurance of an ox to go with him up into the Rhodopes to his cabin. He was a gentle, wiry man who



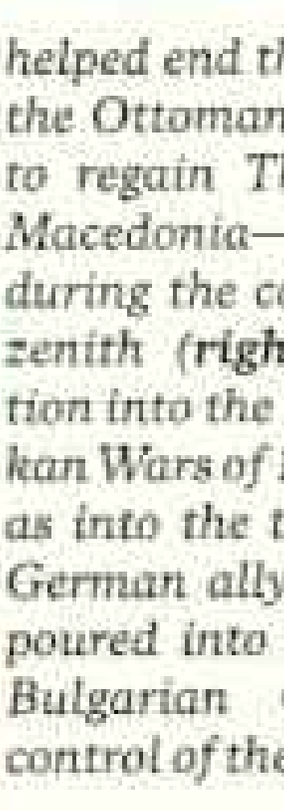
would lean on his staff, going "shh, shh, shh," as he softly lobbed snowballs to keep the sheep on the move. He handed me a tin of cold yogurt that melted in my mouth like fine ice cream. That night I slept in a room full of sweet wool under what seemed like fifty pounds of Rhodope blankets, waking to the aroma of steaming chicken, shipka-berry tea, and the scent of pines in snow.

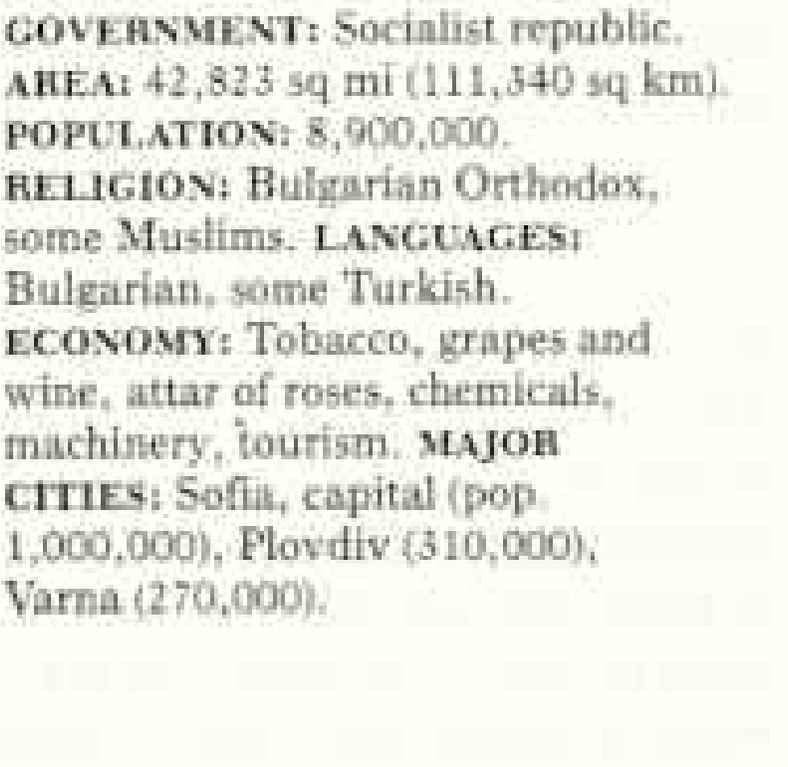
THE VILLAGE of Gorna Sushitsa perches on an open slope facing out over tobacco fields. Below is the hazy Struma Valley, and beyond, Greece and Yugoslavia. Behind the village the Pirin rise above trees in shadow into rugged peaks. About a third of Bulgaria is mountainous—the Pirin, Rila, Rhodopes, and Balkans. Mountains have a special meaning to Bulgarians, whose novelists and poets romanticized the exploits of the *haiduks*, or Bulgarian outlaws, harassing the Turks in the mountain passes. The Ottoman Empire administered Bulgaria for five centuries, conscripting boys into the Janissaries—the sultan's elite troops—and women into the


ПРОЛЕТАРИИ ОТ ВСИЧКИ
ДИМИТРОВСКИ РАЙОН

Bulgaria

*SLAVIC PRIDE fills Sofia as the capital city honors Cyril and Methodius, ninth-century pioneers of the Cyrillic alphabet—a bond between Bulgarians and Russians. Portrait at left vaunts Georgi Dimitrov, best-known Bulgarian Communist. Bulgaria has a tradition of gratitude to Russian liberators, who in 1878 helped end the five-century rule of the Ottoman Turks. An obsession to regain Thrace and especially Macedonia—Bulgarian territory during the country's 13th-century zenith (**right**)—plunged the nation into the First and Second Balkan Wars of 1912 and 1913, as well as into the two World Wars as a German ally. After Soviet troops poured into the country in 1944, Bulgarian Communists gained control of the government.*





GOVERNMENT: Socialist republic. **AREA:** 42,823 sq mi (111,340 sq km). **POPULATION:** 8,900,000. **RELIGION:** Bulgarian Orthodox, some Muslims. **LANGUAGES:** Bulgarian, some Turkish. **ECONOMY:** Tobacco, grapes and wine, attar of roses, chemicals, machinery, tourism. **MAJOR CITIES:** Sofia, capital (pop. 1,000,000), Plovdiv (310,000), Varna (270,000).

harem. Toward the end of Ottoman rule, the empire had become inefficient and corrupt, encouraging a Bulgarian identity and the will to assert it. When the uprising finally ignited in 1876, the Ottoman irregulars—*bashi-bazouks*—quickly crushed the peasants and their few cannon of hollowed cherry logs. The massacre began.

J. A. MacGahan, an Ohio journalist, rode into Bulgaria on a horse. In one village he found mounds of decomposing bodies, most of them women, children, and old men. He was told of babies spitted on bayonets, of women repeatedly raped in front of their children, and of children raped as well. Survivors told of being forced to carry around the severed heads of their brothers and sisters.

MacGahan's lurid accounts shocked the West, helping give Russia the pretext it sought to march against the Turks. Bulgaria was liberated in 1878, but thousands of Russian soldiers lay dead in the fields, a debt the Bulgarians have not forgotten—and for which they are still paying.

AFTER 36 YEARS under Communism, Bulgaria has accomplished much it is proud of: a growing economy, miles of paved roads that before the war were just donkey trails, and a broadened system of schooling (though heavy on the sort of indoctrination that asserts that the U. S. Supreme Court has "always acted in support of the rich").

But when Bulgarians turn on the radio or television, they learn first of the latest Soviet, not Bulgarian, accomplishment. The November 7th parade in Sofia, celebrating the Russian Revolution, consists of thousands of people carrying carnations, accompanied by orange Balkancar forklifts bearing huge photographs of Brezhnev, Lenin, Marx, and Chairman Todor Zhivkov, the nation's leader and First Secretary of the Bulgarian Communist Party for 26 years. All march past the tomb of Georgi Dimitrov, Bulgaria's lionized Communist leader, who lies embalmed like Lenin. Zhivkov and other high officials stand in dark woolen overcoats on top of the tomb, giving little waves, while a cheerleader with a megaphone reminds the paraders what they are to shout up to the tomb: "Long live friendship between Bulgaria and the Soviet Union!"

How well this official affection goes down with Bulgarians is difficult to measure. Of all Eastern European countries, Bulgaria is clearly the most loyal toward the Soviet Union. They share similar languages and the same alphabet—and Bulgarians remember who freed them from the Turks. But I found little enthusiasm for Zhivkov's statement that Bulgaria and the Soviet Union are but a single body, breathing with the same lungs.

BY 10 A.M. the winter sun had reached the rocky hillside where Nikola and his brigade were chopping down the oaks—six men in the black wool trousers and rubber slippers you see throughout the villages of Bulgaria. Nikola stripped off his sweater and picked up his *bradva*, an ax with a short handle of beech. "Move to the left," he said to the others, "you're chopping too close to each other."

From time to time on the upstroke Nikola would spit on his thumb as it passed, but the swing, smooth and powerful, was without interruption. Judging from the amount of grape brandy Nikola had tossed down the night before, I half-expected to find him supine under a tree, holding his head. But there he was on the side of the mountain, with a swing like Willie Mays. He was all business as he worked; conversation soon flickered out.

The oaks dropped quickly, for they were small and spindly. There are nice pines in the Rhodopes and Rila, but despite extensive replanting many of the forests of Bulgaria, particularly in the Balkans, are stunted. Big oaks in the Rhodopes were felled for supports in the mines. Shepherds burned out forests for sheep meadows, which eroded in the rains. Timber is so scarce that much of it is imported from the Soviet Union. In Siberia more than 10,000 Bulgarians, some from Gorna Sushitsa, are cutting down the trees.

Toward late afternoon Nikola and the brigade filed out of the mountains, leading their donkeys heaped high with cut oak. They stacked it by the road for the GAZ, which emerged from the village, lurching its way up the ridge.

I got the impression that there are more

trucks than cars in Bulgaria. The highways are adequate, and surprisingly free of collisions considering that Bulgarians delight in passing on corners and hills. I drove around in a Soviet Lada, which appeared to be a Fiat put together in dim light.

Despite the assembling of Czech and Soviet cars at plants in Plovdiv, most Bulgarians still can't afford one; Gorna Sushitsa has only the GAZ. The cities, however, are well served by trolleys, and there is bus service everywhere. In the villages you still see Bulgarians riding in rubber-tired carts pulled by donkeys—hauling firewood in winter, in summer heading for the fields. And everywhere in the country—it is practically a national pastime—Bulgarians walk.

A fog had drifted up from the Struma Valley to engage the village poplars. Atanas, Nikola Tunov's brother, was in the cellar replenishing a flask of brandy. Vangalia, his wife, was splitting firewood in the yard. The pungent cellar was strung with ears of corn and piled with beets, pumpkins, and potatoes. From a churn Atanas broke off a brick of white sheep's cheese and from an oak cask drew a pitcher of red wine.

These villagers derive their income mainly from tobacco raised on lands of the complex, but each family is allowed to grow and harvest its own grapes and sell its wine. Last year Atanas and Vangalia made almost a thousand leva (roughly equivalent to $1,000) selling wine to a German television crew, who, in a nice twist on Hollywood's habit of passing off the hills of Santa Monica as Spain, were using Gorna Sushitsa for a film about Mexico. Bulgaria is a large exporter of wine, much of it produced on the big complexes. Few homes, however, are without an arbor and a cask.

THE NIGHT WAS COLD, but the Tunovs' little kitchen was tight, and the wood stove puffed it with heat. The rugs were covered with a sheet of clear plastic. Nothing is paved within about five kilometers of Gorna Sushitsa, and the chickens run free, so shoes come off at the stoop. The walls were white and bare, except for a nail behind my head where Atanas hung his watch. There was a low cupboard in the corner, a small table, a few chairs, the stove.

The sheep's cheese was good with the grapes, big sweet golden ones that popped between my teeth. The grape brandy wasn't bad either, less incendiary than *slivova*, the plum brandy Bulgarian officials press upon visitors. After weeks of limp meals of pork and veal and lukewarm soups in gloomy restaurants, I was grateful for Vangalia's lamb stew, swimming with rice, onions, and tomatoes.

Atanas and Vangalia were in their fifties. His bad health had slowed him down, but she was inexhaustible and in constant motion.

The wine in the pitcher began to recede. I filled my glass and offered some to Atanas. He shook his head sideways and said "*Da.*" I had set the pitcher down before remembering that in Bulgarian a nod means "No" and a headshake means "Yes."

Later Vangalia poured us mugs of forest tea into which she ladled four heaping tablespoons of sugar. Bulgarians are on such a sugar jag that they pour strawberry syrup and lemon pop into glasses of wine.

Bulgarians are frugal, and those in the mountain villages quite self-sufficient. From the wool off their sheep and goats they weave blankets and rugs, knit socks, and make heavy trousers and skirts. They grow and raise most of their food, canning for the winter, buying only some rice, salt, sunflower oil, sugar, and maybe bread. Bulgarian bread, a bit flat to my taste, is heavy and resilient. In the Rhodopes I saw a stale loaf chucked out the window of a speeding car. It hit a guardrail, bounced high in the air, then cartwheeled down the highway, quite intact, removing, I suspect, chunks of macadam as it whanged along.

The mountains are covered with sheep, but lamb is almost never found in the markets or in restaurants. It is exported to the Italians and Arabs. About the only meat Bulgarians can buy is pork and veal, and they watch the markets carefully. Weeks often elapse without any meat deliveries other than *lukanka*, a favorite sausage of Bulgarians, but at $5.50 a pound strictly a delicacy.

For all the abundance of fruit and vegetables in the fields and hothouses, I saw little evidence of them in the markets aside from canned goods and cabbages the size of medicine balls. The best Bulgarian foods are

exported to the Soviet Union, Eastern Europe, West Germany, and Scandinavia to help cut Bulgaria's deep trade debts and to get hard currency.

It would appear that foreign-exchange markets are aware that Bulgarian toilet paper is considerably tougher than the lev. Bulgaria covets hard currency. Not only must she pay pounds sterling for the English engines that power the forklift trucks built by Balkancar, she is also increasingly pressed by the Soviet Union, from whom she imports most of her raw materials—including almost all of her crude oil—to pay up in hard currency, not leva.

The economy, like everything else in Bulgaria, is run by the government; wages and prices are mandated, jobs defined and controlled. The average Bulgarian earns the equivalent of about $1,800 a year and pays relatively high consumer prices—$350 for a small refrigerator, $500 for a color television set. To conserve diminishing imports of Soviet oil, the Bulgarian Government last year doubled the price of gasoline to four dollars a gallon. The government doesn't raise prices; it "adjusts" them.

Windshield wipers are locked in the trunk to avoid being stolen. Parts of all kinds are either unavailable or in short supply. Bulgarians have to stand in long lines for products often not worth the wait. "The shoes break your feet before the leather breaks in."

Savings earn only one percent interest, and taxes take a big bite. In the past two years, while productivity went up 6 percent, wages increased just 3 percent. Pay and promotion often depend less on effort than on political obedience. "We pretend we're working," goes the saying. "They pretend they're paying us."

I was often reminded of Bulgaria's high proportion of working women by the predawn growl of water trucks outside my hotel, as husky women in blue coats snaked out high-pressure hoses to wash off the streets—and, incidentally, blast any cars parked there. In the face of a low birthrate and labor shortage, government planners exhort Bulgarians to marry and have children. In case the message is missed, single people under 30 must pay an extra 5 percent income tax—10 percent if still unmarried after reaching

Sofia hustles to work *on Dondukov Street* ***(above)****, the city's shopping magnet, under a web of streetcar lines—part of an efficient, inexpensive transit system. Before World War II about 80 percent of the population lived in the countryside. Today two-thirds live in towns and cities.*

"Miles Davis is the object of my life," declares jazz trumpeter Raicho Ivanov ***(right)****, a teacher at the Sofia Music Conservatory. One popular band combines Bulgarian folk music with jazz. Officials tolerate some Western influence but frown when musicians ape "decadent" rock stars.*

30. Mothers earn a premium of five dollars a month for their first baby, twenty dollars for the second, and fifty dollars for the third, and their pensions begin earlier.

After dinner Vangalia dialed the radio until she found some folk music broadcast from Skopje, the capital of the Macedonian republic in Yugoslavia. Because of their Macedonian heritage, Bulgarians in the Pirin listen regularly to Macedonian folk music from Yugoslavia.

What is often referred to on the Balkan Peninsula as the "Macedonian question" is not a question at all. It is a century of failures by Bulgaria—in the Balkan Wars, and again in both World Wars allied with Germany—to regain all of Macedonia and territories south to the Aegean, where Bulgarian shepherds once wintered their flocks.

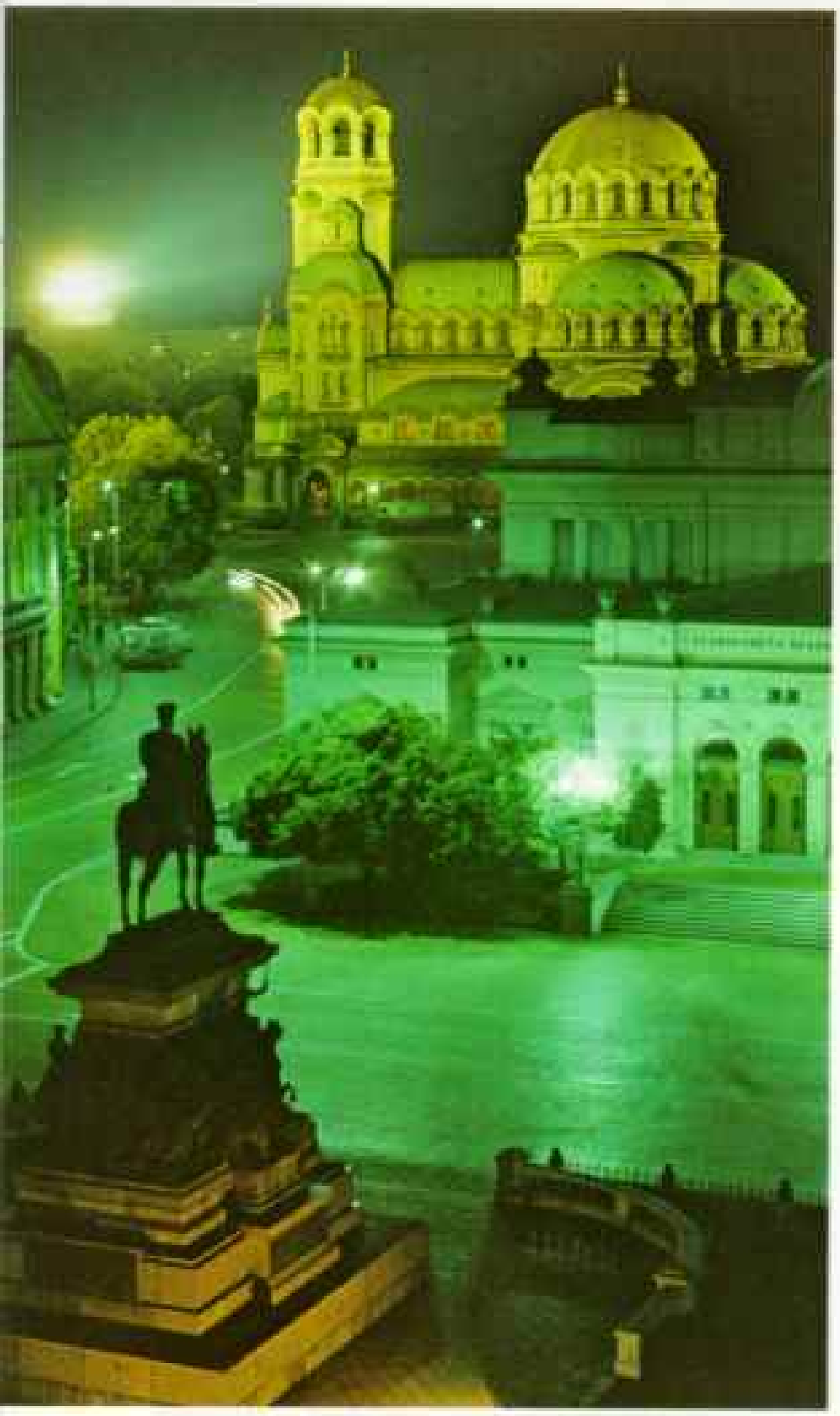
Bulgarians say that the people in Macedonia are Bulgarian. That sends the Yugoslavs into near apoplexy. The Yugoslavs assert that Macedonians are Macedonians, and that Georgi Dimitrov as much as said so. In recent years the Bulgarian census suddenly showed few Bulgarians in the Pirin being counted as Macedonians. It might help explain the Kalashnikov submachine guns bristling on their tense frontier to recall that the Yugoslavs didn't call this simply a case of census manipulation—they branded it "statistical genocide."

In any event the whole business is sufficiently woolly and confusing that Todor Zhivkov still has trouble convincing the Yugoslavs that Bulgaria no longer has territorial ambitions.

At 2 a.m. I was awakened by the crowing of the Tunovs' rooster. The full moon had ruined his sleep, so he had decided to share his misery with the rest of the village. Soon every rooster in town was shouting about the moon. I went outside. Mist had seeped into every ravine of the Pirin, giving, in the moonlight, the appearance of a coastal range indented by the sea, and drawing the Yugoslav frontier uncomfortably near.

Earlier I had asked Atanas whether he considered himself Macedonian or Bulgarian. "I am Bulgarian."

I went back to bed and dreamed of fried rooster.



In homage to the liberators *Sofia built Alexander Nevski Cathedral* ***(facing page)****, where tourists predominate at services. Prince Alexander was the patron saint of the Russian Tsar Alexander II, whose statue faces the church* ***(above)****.*

A TRAVELER tends to carry his first impressions like crystal on a tray before him, just inviting the outstretched foot. In winter the cities had seemed only grim and forbidding, places of drab concrete crumbling at the edges, of dimly lit buildings and heavy drapes, of colorless rooms hung with a portrait of Lenin or Zhivkov. Something funereal had hung over the men and women huddled quietly in restaurants choked with cigarette smoke, chasing brandy with Coke. I had assumed that they were mourning the waiters,

who, being state employees like the store clerks, tend to regard customers as an inconvenience to be dealt with by inattention bordering on a terminal coma. Shops would close on a whim. Nothing seemed to work.

So with some misgivings I returned in May to Sofia, but the city had lost the oppressive solemnity of winter. The smog had lifted, revealing Vitosha's slopes rising verdant right out of the suburbs. I crossed Ninth of September Square, which was rimmed with bright pansies, its yellow Viennese bricks shimmering in the sunlight. A breeze was up, and the streets and parks were jammed with young couples and families strolling, old pensioners hopping through calisthenics—a city on its feet.

Sofia is a big city, but socially a small town, the gossip, as everywhere in Bulgaria, getting amply recharged during the strolls. That evening a friend suggested that we stroll through Liberty Park to the restaurant at the Pliska Hotel. The park was lovely, full of chestnuts and high poplars, ending in a handsome forest. It was also immense. The Pliska was two miles away.

The next morning I wandered into Sofia's massive Alexander Nevski Cathedral, climbed a marble staircase, and pulled up a chair beside the balustrade in the choir loft, surrounded by garish frescoes—artistic visions of heaven and hell. I could barely see

the deacon far below at the altar, but I had no trouble hearing his strong baritone. Out of Bulgaria have come some world-class opera singers (Boris Christoff once sang in this choir). There was no organ, no piano, only a tuning fork, which the director tapped from time to time and held to his ear. The choir blended as one lush voice, swelling over the worshipers and milling tourists below—a music beautiful, powerful, and consumingly Slavic.

When Todor Zhivkov laments that too many of Bulgaria's youth are "under the influence of decadent bourgeois fashion in music," I suspect that he has in mind not just the discotheques, but also the Bulgarian rock groups who attempt to imitate the twang of rock singers from Los Angeles, whose country accent is nearly as bogus. Because of Mr. Zhivkov's views on decadence—and the weight his views carry in Bulgaria—I was pleasantly surprised when, over Radio Sofia, I heard Ella Fitzgerald swinging "In a Mellow Tone." This eventually led me by a circuitous route to a rehearsal studio in Plovdiv's Trade Union Hall, where I found Veselin Nikolov, an intense musician whose face glistened with perspiration from blowing a soprano sax. His quintet, the White, Green, and Reds (the colors of the Bulgarian flag), fuses jazz with Bulgarian folk music. The drummer began pinging his cymbal with complicated Rhodope rhythms, then the group—two fine guitars, a dazzling pianist, and Veselin—flew off on "Doves," a composition of Veselin's they would play later that summer at the Newport Jazz Festival in New York.

In spring all Bulgaria is deliciously green, the meadows flecked with red poppies and yellow wild flowers. Across the northeastern plains, huge fields of wheat and barley stretch beyond the horizon. I headed south into the Pirin toward Gorna Sushitsa, past storks in the meadows. Crows flapped around in the sky in gray vests.

Two billion fragrant bushes *grow in the Valley of Roses, where pickers like Kosta Kostov (**left**) begin bagging the blossoms (**above**) at the crack of dawn, before the sun evaporates their oil. Bulgaria produces 40 percent of the world's rose attar, used to enhance the bouquet of perfumes. To fill seasonal labor shortages, schoolchildren gather 80 percent of the harvest.*

AT DAWN while Atanas and I sleep, Vangalia is up and gone from the house. She rides the GAZ to Laskarevo, loads her wicker baskets with tobacco plants, and returns to Gorna Sushitsa. After eating some scrambled eggs, she fastens a field apron around her skirt and pulls on a pair of rubber boots. Atanas is outside cinching up two *motikas* to the packsaddles. The motika is a heavy hoe, the summer counterpart to the bradva, and in the plum orchards, the vineyards, the fields of tomatoes, no Bulgarian is without one.

We head out of the village toward the fields, leading a horse and donkey. At a hayfield Atanas walks to a water pipe and with his motika gouges a ditch to a culvert under the road. Water soon reaches their tobacco patch. The shallow ditch will, in time, divide the field, eventually consume it. Much of the Pirin has been eroded in this way, and from overgrazing, leaving abandoned green toupees on high sandy pinnacles.

Vangalia coils her braids on top of her head and wraps them with a white *kurpa*. We bend at the waist, a pile of plants in one hand, and with our thumbs stuff them in the mud a few inches apart. The mud is grainy, camouflaging sharp rocks, and my thumb is soon without cuticle, without feeling. Most of the villagers are out here on the hillsides punching in tobacco or hoeing, their conversation occasionally punctuated by the kibitzing of nightjars. An Italian mower is cutting the hay, but most of the fields are too steep for anything but a motika and muscle. We plant all day, the sun hot on our backs.

Walking home that evening, Vangalia smiles and says, "City girls are like eggs—they spoil in the sun. They have learned a lot, but they cannot endure this." Casually I touch my tender back, distinctly feeling the cracking of eggshell.

The leaves will be picked in the fall, dried on poles, then baled in burlap. Bulgaria is the world's leading exporter of cigarettes, principally to the Soviet Union—the one product Bulgarians grow and export that is not in short supply in their stores. They smoke so many Shipkas, Stewardesses, and BTs that young men carry lighters on lanyards from their necks.

LIKE ALL FARMERS here, the Tunovs grow tobacco on land they formerly owned, but which has since been absorbed into this region's agro-industrial complex of roughly 60,000 acres. Unlike most complex workers, who earn a flat wage and a possible bonus if the quota is exceeded, each family of Gorna Sushitsa earns 58 percent of the tobacco revenue from the specific parcel it is assigned.

"We do better," Atanas says, "because we don't spend money buying food and things we produce ourselves." He remembers experiencing food shortages before the war and how "Bulgarian fascists" stopped them from slipping into Yugoslavia for grain. "No one is poor now if he chooses to work." Atanas says, "There is much work."

Bulgaria is intensively farmed. In the valleys of the Maritsa and Struma, across the plains, you see tractors and clouds of dust—and thousands of thunking motikas. The complexes may have overcome inefficiencies of the small private acreages prevailing before the Communist takeover, but the top-heavy bureaucracy has its own inefficiencies which, coupled with harsh winters, a shortage of labor, and the diversion of investment to industry, have crippled production for years. Bulgarians, however, are inexhaustible gardeners; they harvest a disproportionate share of the country's produce from the small private plots each family is permitted to work.

The shortage of labor is particularly acute during harvest. Along the southern wall of the Balkans, in the Valley of Roses, the Kazanluk rose is grown for the Paris perfumeries. Schoolchildren do much of the picking—all delighted to be free of school for a few days, even though it means being out in the fields at 5:30 a.m., when the roses first open and before the sun evaporates the oil.

Because the high school closed in the late 1950s, Tsvetanka, Atanas and Vangalia's 11-year-old daughter, attends school in the valley, where she boards with an aunt.

She is home today, for this is the holiday honoring Cyril and Methodius, the two monks who developed the Cyrillic alphabet used by Bulgarians and many other Slavs. While Tsvetanka shows Vangalia her report card, Atanas turns and says quietly, "I've asked her teachers to grade her strictly. If her grades are too high, she may stop studying." Vangalia tells her to prepare now for the fields. She fusses, wants to visit friends, wants, she adds, new shoes in the style she sees in the valley. It does not seem that Gorna Sushitsa will hold Tsvetanka.

The village could not hold Ilia Tunov. Five years in the army hadn't erased his memories of looking over a plow at the rear of an ox. Ilia had little trouble concluding that life on the Pirin slopes had lost its attraction for him.

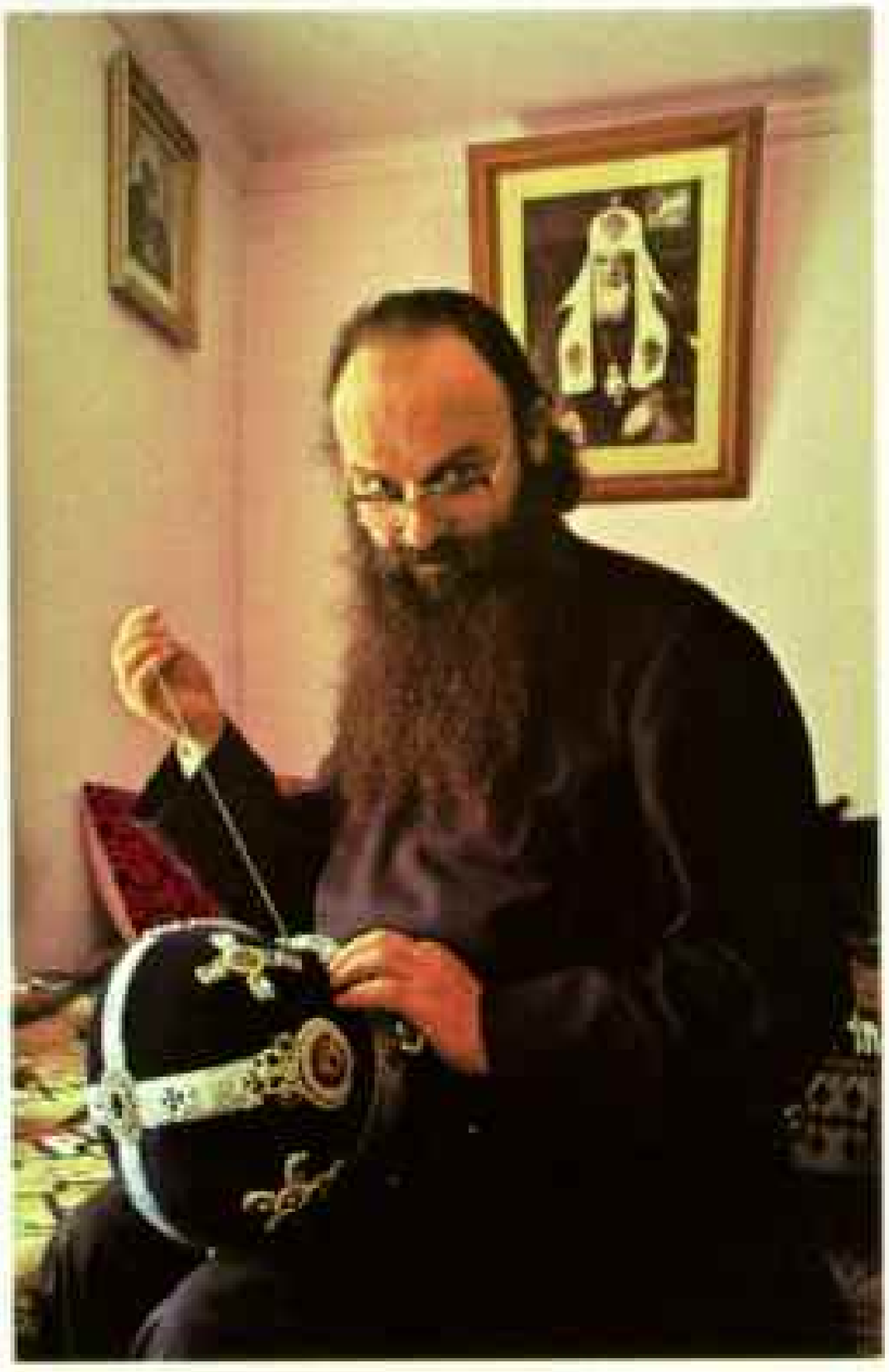
Ilia is a mechanic at the Kremikovtsi steel plant outside Sofia. He and his wife, Ginka, are fortunate to have a flat in one of the Kremikovtsi apartment buildings near the airport. Housing, particularly in the cities, is in short supply. Until recently Bulgarians could finance and build their own homes, but now they must go through the state construction agencies, which add as much as 100 percent to the cost in surcharges.

Mechanics are so desperately needed that Ilia makes *(Continued on page 109)*

Architecture triumphs *over the ashes of conquest in Plovdiv, one of the oldest Balkan cities. Known as Philippopolis after Philip II of Macedon subdued its Thracians in 341 B.C., the city was renamed Trimontium under Roman rule. Ravaged by Huns, Byzantines, crusaders, and Turks, Plovdiv caught the spark of the 18th- and 19th-century Bulgarian revival period. As craftsmen's guilds arose, dozens of ornate homes began to appear. Today about 160 have been restored and preserved in Old Plovdiv. The decorated facade of a house converted to a restaurant flanks the cobblestones of Cyril Nectariev Street (**right**).*

*Hunger for Western literature drives a Plovdiv crowd to a bookstore (**below**) for 200 copies of a recent translation of Charlotte Brontë's* Jane Eyre.

Gilded domes *of Shipka Memorial Church* ***(above)****, rising over the Valley of Roses, pay honor to Russian troops who in 1877 blocked Turkish reinforcements attempting to cross the Balkan Mountains. Bishop Gelassi of Rila Monastery* ***(above right)*** *stitches a ceremonial crown for officials of the Bulgarian*



*Church, an independent branch of Eastern Orthodoxy. The monastery, a tenth-century spiritual center destroyed and rebuilt many times, kept aglow the embers of Bulgarian culture. Here Brother Raphael carved 1,500 tiny figures in a small cross (**top**), a 12-year act of faith that cost him his sight.*

about $3,000 a year, two-thirds more than the average Bulgarian. An outgoing man with thick wrists, his waist suggests an enjoyment of Ginka's cooking.

They still visit Gorna Sushitsa (Atanas and Nikola are Ilia's cousins), where they load their car with fresh vegetables and homemade slivova. He is content with Sofia, but says, "The landscape of Gorna Sushitsa is something I am missing."

Last summer Ilia and Ginka vacationed at the Black Sea, not in one of the many resort hotels run by Balkantourist, but in a "rest station" that Kremikovtsi's trade union—like other unions—maintains for its workers. Although the waiting lists can be long, the stations cost the equivalent of only about two dollars a night; a single room in the Swedish-built Hotel Varna at Druzhba resort runs $45 a night, well beyond the reach of all but the party elite. Other Bulgarians often told me of being refused a room at, say, Zlatni Pyasutsi (Golden Sands), or, having secured one, being dispossessed when a bus full of Germans and their deutsche marks arrived.

NOT ALL BULGARIANS struggle to make ends meet. In this "classless" society high officials of the Communist Party nest in a very privileged niche. For them the most prestigious and highest paying jobs are available, often a new automobile, a villa in the mountains, no restrictions on where they must live in Bulgaria, and, most important, a passport and the freedom to travel abroad. Fighters Against Fascism, the early Communists, are entitled to special housing and an additional $300 a month. Their children and grandchildren—in a country where a university education is cherished and entrance examinations are stiff—are admitted without examination.

Bulgarians cope with their circumscribed life by moonlighting, by a brisk black market ("I'll give you eighty leva for your Levi's"), and by *vruski*—connections. The clerk in the market (your neighbor) pulls some veal aside for you; your cousin with the railroad sees to it that some of those tomatoes destined for Austria end up in your flat.

Bulgaria is far more open than it was during the purges following the Communist takeover, but police, the People's Militia, still have exceptional authority. At a trial in Sofia's Hall of Justice some teenagers charged with drug offenses stood before the judge for hours while their parents sat on benches twisting their hands, as lost and frightened as parents are in courtrooms everywhere. The judge directed the nervous parents to the front row. The militiaman, slouching there, waved them back to their seats. During the recess, I asked the judge whether it was common to be overruled by a

Regiments of sun seekers *deploy along columns of umbrellas on the Black Sea's Slunchev Bryag, or Sunny Beach (**facing page**). Farther north, futuristic castles on Albena's sands (**above**) beckon foreigners. Many Bulgarians complain of exclusion from government hotels built to attract German marks or English pounds.*

policeman. "That's the way it is here."

Although many books and authors are banned because of political "deviation," Bulgarians listen to shortwave radios, and their appetite is voracious for anything from the West. The most demonstrative Bulgarians I saw were those shoving and hipping into a bookstore in Plovdiv to buy a newly arrived translation of *Jane Eyre* (page 105).

Bulgarians who crowd around the United States Embassy, fascinated with the photographs in the display windows of Oscar Peterson at the piano or a Kansas farmer on his tractor, are intimidated and made to move on by the police. Bulgarians who go inside for an American magazine run the risk of being followed and stripped of it.

Outward political dissent is as rare as it is dangerous in Bulgaria. "Oh, we can gripe about food shortages, bad service, and shoddy goods," I was told many times, "but we don't dare say anything against the regime."

One who did was the popular Bulgarian writer and defector Georgi Markov, who died in London in 1978 after being struck in the thigh with a poisoned pellet. Markov's bizarre murder was widely reported in the Western press, but ignored in Bulgarian newspapers. A similar attempt in Paris on Vladimir Kostov, another defector, failed. Both men had been broadcasting programs critical of the Zhivkov regime over Radio Free Europe. A few months before Markov was killed, an investigation revealed, he had

been warned by a Bulgarian official that he would be poisoned if his broadcasts continued. His assassin has not yet been arrested.

For years Bulgaria sealed itself off from the West. Recently, for reasons of its own, it has begun to allow Western writers in.

What is Bulgaria? I ask myself. At times I think that as Bulgarians celebrate the 1,300th anniversary of the first Bulgarian kingdom, they too must wonder.

"It's not natural for Bulgarians to be servile. We are informal and open."

"It's difficult for us to open up. We have historically been a brooding people."

"We are a pragmatic people."

"Obedient? How I *hate* that word! We are *not* obedient. We are patient." □

Sea of glass *warms tomatoes, cucumbers, green peppers, roses, and carnations in greenhouses at Pazardzhik* ***(above left)****. Huge, luscious strawberries* ***(above)****, like most of the nation's produce, are probably destined for tables in other European countries to help ease Bulgaria's trade debts. The strawberry cooperative covers but a fraction of the Stara Zagora Agro-Industrial Complex, one of about 180 that coalesced more than a million tiny parcels of privately owned land. Most families still have garden plots, however—and depend on them.*

Ancient Bulgaria's

By COLIN RENFREW

Paintings by JEAN-LEON HUENS

THE WORLD'S oldest treasure of gold, unearthed as recently as 1972, was not discovered in Sumer or Egypt, homes of the earliest known civilizations, the obvious places to expect such a momentous discovery. Nor did it come from pre-Columbian America, famous for the rich gold finds in Peru and Colombia. It was uncovered, much to everyone's astonishment, in northeastern Bulgaria, near the attractive modern city of Varna, and it may well be more than 6,000 years old.

The discovery of this oldest gold hoard seemed to confirm my own theory that the prehistoric Bulgarians had invented metallurgy independent of earlier metalworkers of the Near East. It also suggested that the Bulgarians of 4000 B.C. had passed their goldworking skills to the superb goldsmiths of the Thracians, inhabitants of Bulgaria in the first millennium B.C.

A city of ancient origins, Varna lies on the Black Sea coast, with miles of sandy beaches and dozens of modern hotels.

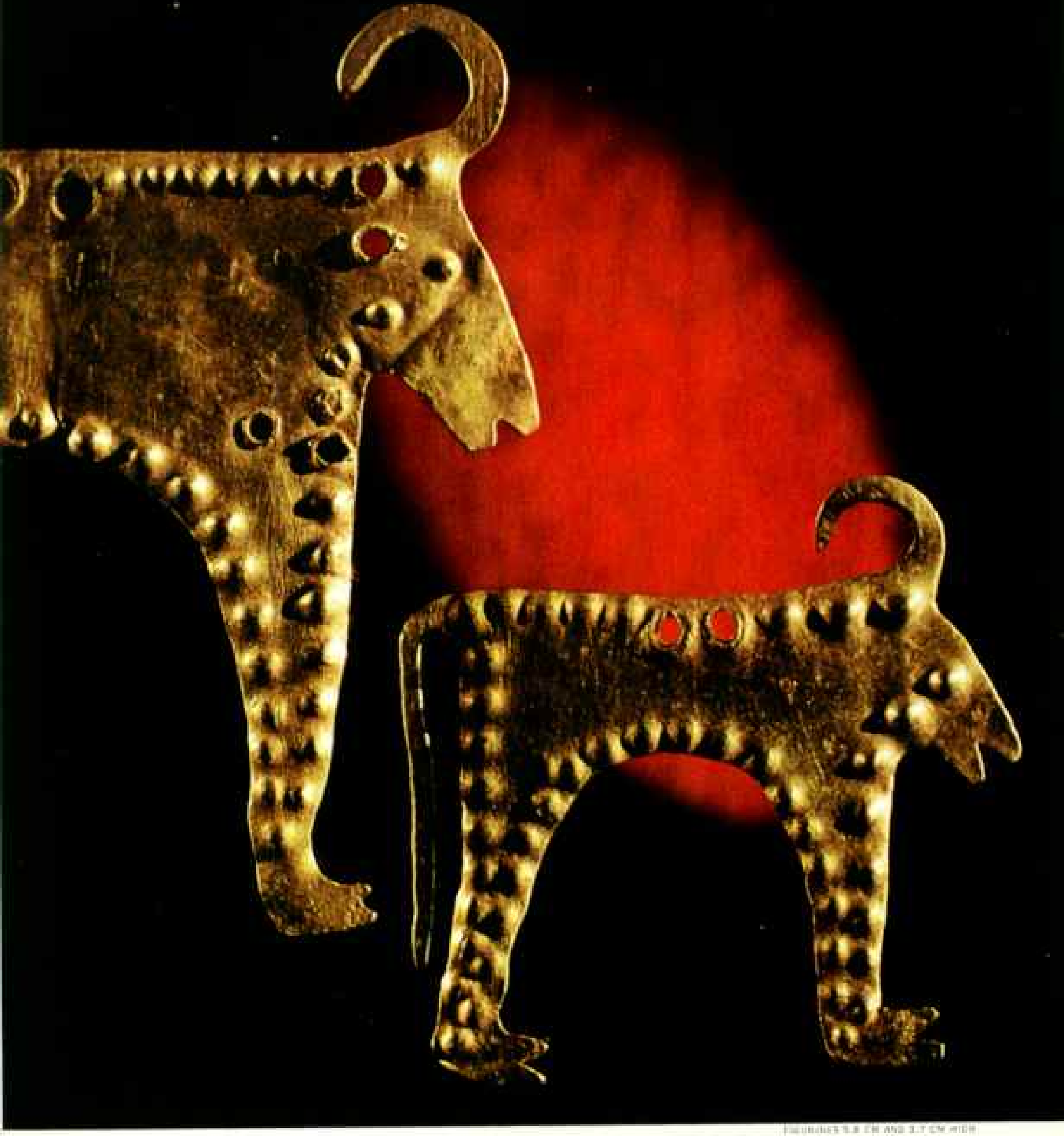
In the autumn of 1972 a tractor operator named Raicho Marinov was excavating a five-foot trench for an electric cable to a nearby factory. Suddenly he noticed pieces of shiny yellow sheet metal more than four inches square, and what looked like bracelets of the same material. There were also some green tools, the color of corroded copper, and flakes of flint. These finds were taken to the National Museum of Varna, where they caused a flurry of activity.

The flint tools were prehistoric. The green axes were copper—in shape like finds of the

***Golden kine**—part of the most ancient gold treasure yet found—were buried in a cemetery near Varna, Bulgaria, probably before 4000 B.C. This trove, along with other finds, supports the author's belief that metallurgy developed independently in southeastern Europe.*

Golden Treasures

Photographs by JAMES L. STANFIELD NATIONAL GEOGRAPHIC PHOTOGRAPHER



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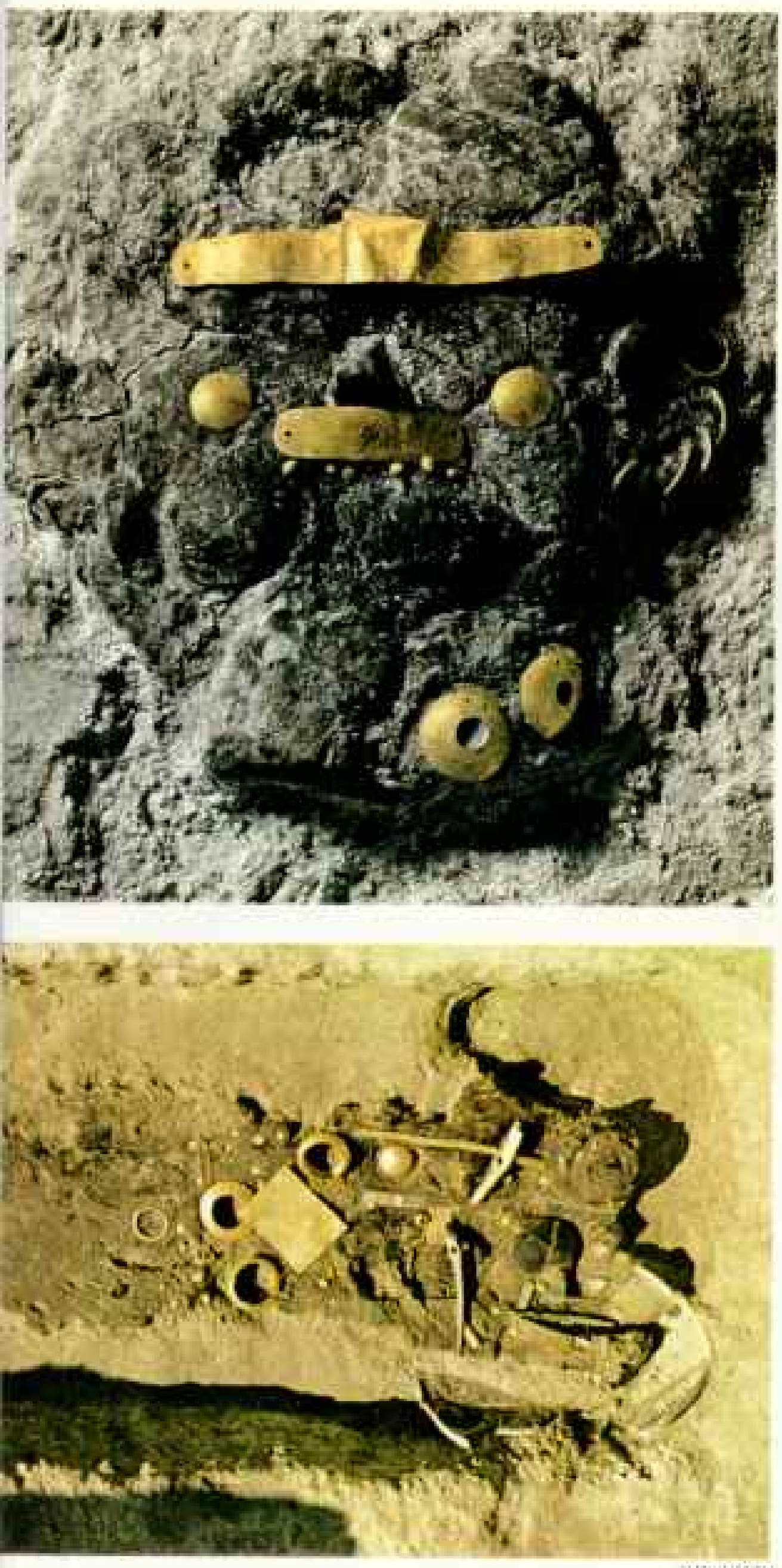


IVAN IVANOV

Glittering array *from the graveyard at Varna* ***(facing page)*** *bespeaks the riches buried with leaders of the settlement. Of some 2,000 gold pieces found so far, most came from four of the more than 150 excavated graves. Nearly a third of the graves are symbolic burials of unknown significance that hold only pottery and metal arranged as if a body were present* ***(above)****. Some graves held life-size clay masks with gold features* ***(top)****, which may have represented a goddess of life and death, perhaps buried to assure rebirth.*

Copper Age in Bulgarian prehistory (about 5000 to 3000 B.C.). But the yellow objects were gold, and such discoveries were unknown from so early a period. Dr. Michail Lazarov of the museum and Professor Georgi I. Georgiev of the University of Sofia organized a rescue excavation.

The actual dig was directed by the museum's young archaeologist, Ivan S. Ivanov, who soon established that the items were rich grave goods from a prehistoric cemetery. The find was as important in its way as the discovery by Heinrich Schliemann a hundred years ago of the "great treasure" at ancient Troy. For while the golden discoveries at Varna are not so elaborate as those at Troy, they are at least 1,500 years older, and can surely be dated before 3500 B.C. Calibrated radiocarbon dating may well place them between 4600 and 4200 B.C.

Was Smelting Self-taught?

In 1978 I flew from England—where I am a professor of archaeology at the University of Southampton—to see the Varna trove and to test the theory I had developed on my first visit to Bulgaria, in 1962. I suspected then that the ancient Bulgarians must have discovered for themselves the technique of melting and casting copper and smelting it from its ores. Since the evidence for that argument lies mainly in southern Bulgaria, in the Maritsa River's Valley of Roses, I will begin the story there, 8,000 years ago, before turning to the gold of Varna.

The Maritsa Valley is dotted with tumuli —burial mounds—nearly 3,000 years old, heaped over the remains of warriors. Larger and older than these, though, are the settlement mounds. The first settlers on this site built their village on the level plain about 6000 B.C. Their houses were made of plastered mud applied to a framework of wood. At least once a generation a house would need renewing, so it would be demolished and its successor built on the same spot, with each demolition resulting in about six inches of mud debris. After several thousand years some mounds, each containing many reconstructed houses, rose fifty feet.

The site of Karanovo, 110 miles southwest of Varna, is the best known of these settlement mounds. When I visited it in 1962, I was staggered by its size, and also by the

excavations of Professor Georgiev, who had removed a large area of the mound, rather like taking a slice from a huge layer cake.

On my latest visit to the site I stood at the foot of the cliff where the slice had been removed and looked up at a vertical face forty feet high (next page). I could see the periods of occupation as horizontal layers. Excavation has unearthed much of the original village plan, as well as broken pottery, bone tools, flint blades, and other rubbish.

But I saw absolutely no metal in the lower levels. These were Stone Age people. Higher up the cliff face I made out levels of debris belonging to the Bulgarian Copper Age culture. They contain copper pins and copper beads and sometimes crucible fragments with traces of melted copper—perhaps the first examples of metallurgy in Bulgaria. From Copper Age levels in nearby mounds came copper axes of elaborate design.

A Jolt to Archaeologists' Concepts

Such finds of copper artifacts also occur in the early Bronze Age of Greece, and indeed at Troy itself, and they can be dated in the Aegean to 2700-2500 B.C. It was assumed that the basic metallurgical skills came first to the Aegean from the Near East, and that the Copper Age levels at Bulgarian sites dated from a later time. But Professor Georgiev established the sequence of cultures at Karanovo, and some feet above the Copper Age levels he found evidence for the early Bronze Age of Bulgaria, which he thought was contemporary with early Troy.

This suggested to me that the Copper Age of Bulgaria had to be much earlier than the Aegean sites. Indeed, if copper working was practiced some 15 centuries earlier in Bulgaria, it might well have an *independent* origin—a suggestion now confirmed by tree-ring and radiocarbon dating.*

Certainly copper was smelted and cast in the Near East at an even earlier date. But there is now no reason to assume a connection between the two areas. By 6000 B.C. the early farmers of Bulgaria had a stable, settled way of life. They had ovens to bake bread—perhaps the origin of pyrotechnology—and to fire pottery. The graphite-decorated black pottery that their successors used had to be fired in a reducing atmosphere—one with little oxygen—implying careful control and considerable skill.

In these circumstances it is easy to see how native copper, which occurred in a pure state in Bulgaria, might first be used to make beads. Later the prehistoric Bulgarians would discover that copper could be worked better after heating—the annealing process—and that, on further heating, it became molten. From there it was a small but crucial step to casting and smelting.

My suggestion that copper metallurgy was invented *(Continued on page 122)*

Blessings of fertility *may have been sought from a pottery female idol about 4000 B.C.* ***(facing page)****. Careful excavation and chance finds have only begun to uncover Bulgaria's prehistoric relics and those of the later Thracians, a people first mentioned in accounts of the Trojan War.*

*See Dr. Renfrew's "Ancient Europe Is Older Than We Thought," in the November 1977 GEOGRAPHIC.

Slice of culture 3,000 years thick

WHO WERE THE PEOPLE who first settled the land of present-day Bulgaria? They are known only by their works. Many scholars believe they migrated from nearby Greece and Asia Minor; by 6000 B.C. they were scattered in small settlements across the Balkan region.

They arrived as Stone Age farmers, but before their culture changed again after 3000 B.C., their accomplishments had carried southeastern Europe into the age of metal. Perhaps as early as 5000 B.C. they began to develop the skill of smelting and casting copper; uninfluenced, the author believes, by earlier metalworking technology in the Near East.

Their culture is documented in the forty-foot settlement mound at Karanovo (**below**), *where excavation by Bulgarian archaeologist Georgi I. Georgiev has revealed artifacts* (**right**) *and house plans of three millennia. Flat-topped settlement mounds were formed in layers over the centuries as wattle-and-mud houses were leveled and rebuilt about once each generation.*

Scholars debate the significance of a 5,500-year-old clay plaque uncovered at Karanovo (**above**). *Only one other such find, though of different design, has been found in Bulgaria. Some experts cite evidence of attempts at writing; others insist that without more examples the markings can only be considered symbols, possibly used in religious ceremonies.*

3000 B.C.

The top layers of the Karanovo mound, from the Bronze Age, reveal a culture in transition. Pottery is utilitarian, without decoration. Few items of bronze or copper are present.

5000 B.C.

Artifacts of a prosperous, stable society fill the Copper Age layers. Necklaces of saltwater shells indicate trading, and the quality of the relics suggests craft specialization. Pottery was enhanced with silvery graphite and red and yellow ocher, an iron ore pigment. Early copper items, such as earrings of idols and figurines, were made by hammering copper nuggets. As control of fire advanced, copper was smelted and cast into tools and weapons.

5400 B.C.

Clay vessels fitted with open handles and clay dishes supported by legs characterize these late Stone Age layers. Most pottery was decorated with incised or relief markings rather than with pigment. Clay statues may have been created as idols or merely as figurines.

6000 B.C.

Graceful pottery, often decorated with white pigment, and female figurines with exaggerated buttocks appear in the lowest levels of the mound. Bone spoons show careful craftsmanship; flint embedded in the natural curve of a deer antler made a sickle.

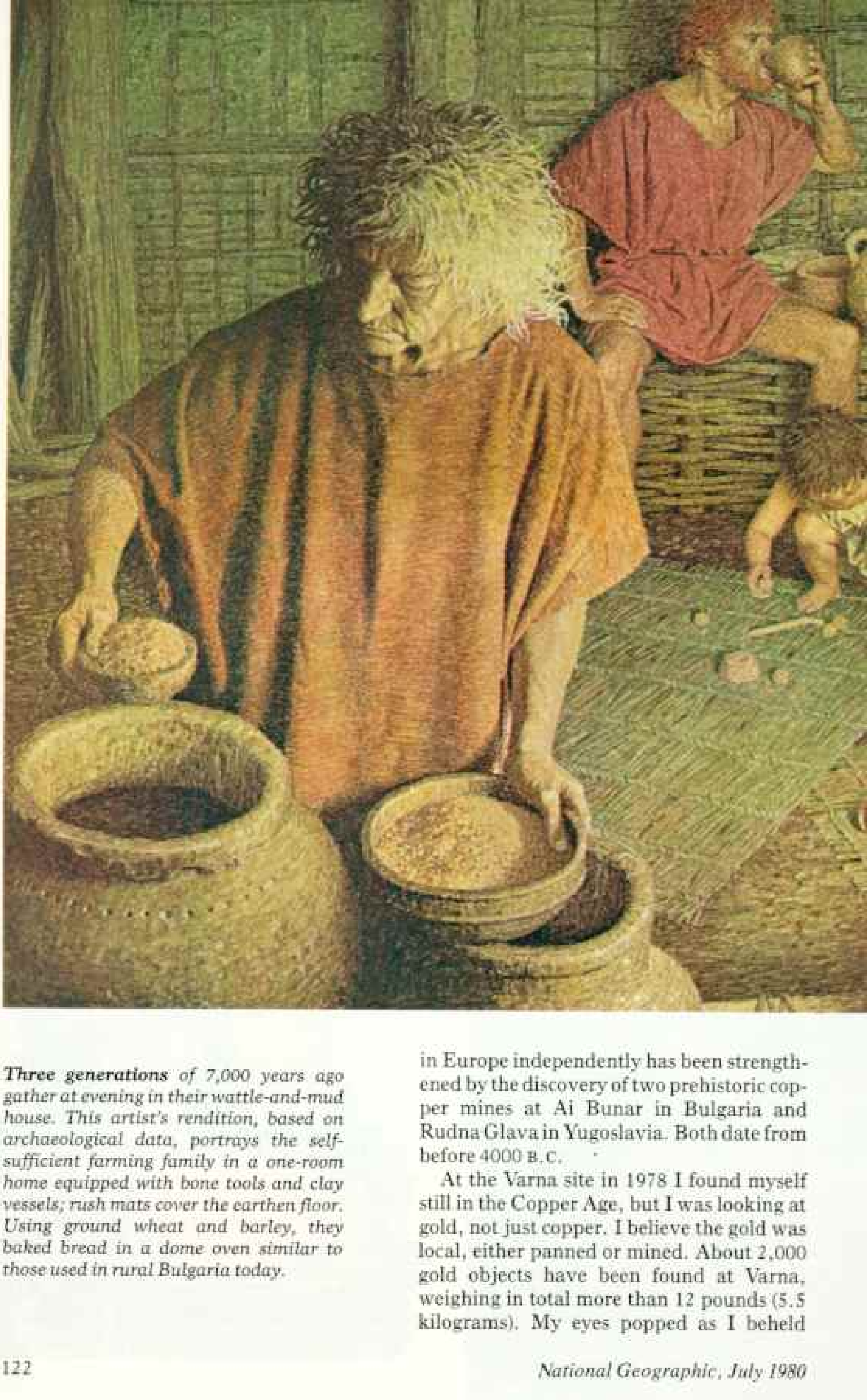
PAINTING BY CHRISTOPHER ALEIN, NATIONAL GEOGRAPHIC ART DIVISION

Homes were quickly abandoned *about 5500 B.C. when fire swept a Stone Age settlement. Its ruins* ***(below)*** *were discovered in the city of Stara Zagora.*

A clay vessel and necklace of imported shells ***(far left)*** *escaped destruction, but most pottery was broken into shards. Depressions in the floor were fire rings used to dry foods such as wheat and acorns* ***(left)****, found in bowls at the site. Beyond a dome oven* ***(below,*** *center background) the remains of another house are illuminated. These two homes shared a wall, unlike separated dwellings nearby and at neighboring Karanovo.*

Five miles away, and nearly a thousand years later, a copper mine at Ai Bunar began to supply a growing metal industry. Many early metalsmiths may have been potters who had learned to control fire, producing temperatures high enough to separate copper from its ores. A smith then remelted the extracted copper in a crucible ***(below)****, pumping a goatskin bellows to heat the fire. Molten copper, poured into stone molds, contracted as it cooled and was easily removed. Rough edges were polished with stone.*

But copper, a soft metal, never entirely replaced stone as a material for tools and weapons. Metal was presumably more prestigious than utilitarian in Europe until the third millennium B.C., when copper was combined with tin to create bronze.



Three generations *of 7,000 years ago gather at evening in their wattle-and-mud house. This artist's rendition, based on archaeological data, portrays the self-sufficient farming family in a one-room home equipped with bone tools and clay vessels; rush mats cover the earthen floor. Using ground wheat and barley, they baked bread in a dome oven similar to those used in rural Bulgaria today.*

in Europe independently has been strengthened by the discovery of two prehistoric copper mines at Ai Bunar in Bulgaria and Rudna Glava in Yugoslavia. Both date from before 4000 B.C.

At the Varna site in 1978 I found myself still in the Copper Age, but I was looking at gold, not just copper. I believe the gold was local, either panned or mined. About 2,000 gold objects have been found at Varna, weighing in total more than 12 pounds (5.5 kilograms). My eyes popped as I beheld

golden necklaces, bracelets, breastplates, a polished stone shaft-hole ax with gold-encased wooden handle, and a large black bowl painted in gold.

When archaeologist Ivan Ivanov handed me a necklace of gold beads, I was piercingly aware that I held in my hands an object from the world's earliest golden treasure trove.

Some of the Varna graves held no bodies —they were cenotaphs. In some of the empty graves a life-size clay face had been modeled and decorated with golden jewelry: earrings and a diadem. These clay faces, though they are misshapen now by the pressure of the soil, stared blindly out at us across the centuries (page 114).

Copper finds from the end of Bulgaria's Copper Age are less rich, but one of the largest gold finds of continental Europe's Bronze Age again comes from Bulgaria, from the site of Vulchitrun, eighty miles northwest of Karanovo. Golden vessels and a curious triple "spoon" were found together as a hoard. Some scholars think the meander

decorations on the vessel lids resemble the art of Mycenae and so would put the treasure around 1500 B.C. Others date it to Greek civilization of around 700 B.C. Probably it should be set around 1100 B.C.

In the centuries after 1000 B.C. Bulgaria was the home of the Thracians, great goldsmiths. I believe they were probably the descendants of the Copper Age mound makers of 3,000 years earlier. The Greek historian and geographer Herodotus sized them up shrewdly:

"The Thracians are the most numerous nation in the world after the Indians, and if they were ruled by one man, or if they could agree among themselves, they would be invincible and by far the most powerful of all peoples. . . . But they are unable to unite and it is impossible that they ever could, and for that reason they are weak."

The Thracians lived a heroic, barbarian life, and derived much pleasure from the wearing of gold.

Death Was Rarely Solo

A grave mound at Vratsa, in northwest Bulgaria, unearthed by archaeologists Bogdan Nikolov and I. Venedikov, illustrates the barbaric magnificence of the Thracian chiefs. The mound contained three burials, the most important a tomb consisting of two rooms. Near the entrance to the antechamber were the remains of a four-wheeled chariot, with the collapsed skeletons of two horses yoked to it, still in position after their ritual slaughter. Nearby was the skeleton of a third horse, a riding horse, with a silver bit and a harness with more than 200 silver decorations in lively Thracian style. Beside this horse lay the contorted skeleton of a young woman, an iron spear between her ribs. This may well be a case of human sacrifice.

The main chamber held the remains of a man about 30 and a woman about 18. The man was buried with an iron sword, daggers, a quiver of seventy bronze arrows, and armor, which included a helmet and a single richly decorated silver greave with golden inlay (page 128). The woman had a beautiful laurel wreath of gold around her head and wore elegant golden earrings. She was no doubt the wife of the Thracian chief, and she too had met a sudden death, a knife blade in her chest. Herodotus's account of the Thracians provides the clue:

"Among the Thracians . . . it is the custom for a man to have many wives; and when one of them dies, there is great rivalry between his wives, vehemently supported by their friends, as to which was best beloved by the husband. She who is found worthiest of this honour is much praised . . . and then killed over her husband's tomb by her next of kin and buried with him. The other wives grieve for their misfortune. . . ."

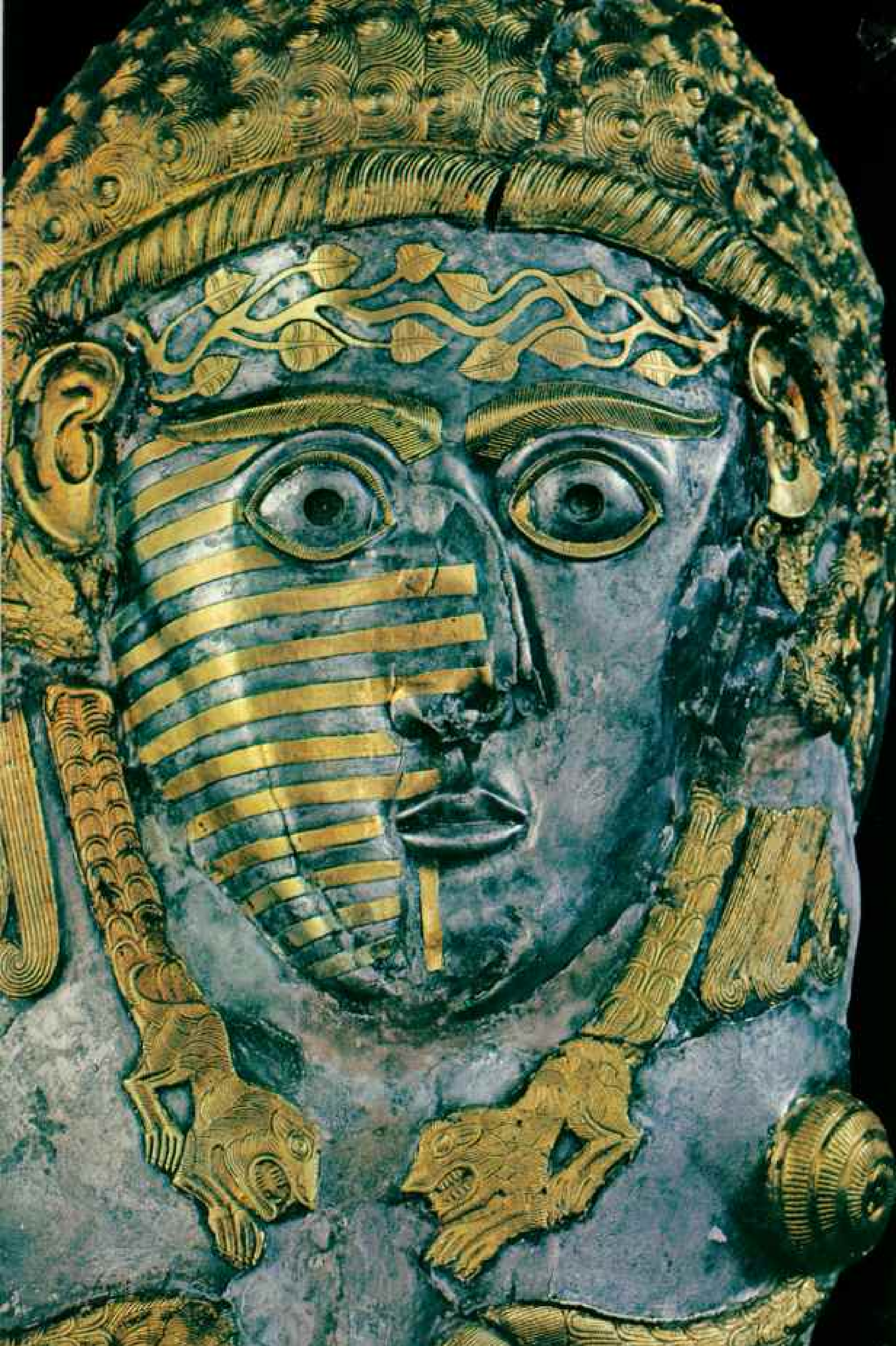
Another vivid picture of Thracian life and death comes from a remarkable painted tomb at Kazanluk, near Karanovo. In a solemn banqueting scene in the circular brick burial chamber, a man holds a cup in his

BOTH BY JAMES L. STANFIELD AND OTIS IMBODEN

Works of war and whimsy *crafted in bronze: A Greek-style helmet shielded a late sixth-century B.C. Thracian warrior. Antler points resembling birds' heads top a stag* ***(above)*** *created by a Thracian artisan in Sevlievo between the tenth and seventh centuries B.C.*

Riderless chariot *parades in a tomb mural* ***(left)*** *painted for Thracian nobility about 300 B.C., perhaps by a Greek artist. In the entire scene on the dome* ***(above)*** *musicians and attendants flank the seated couple. Racing chariots, common at Thracian funerals, dash by. This rare example of Greek-style painting was discovered at Kazanluk in 1944.*

A mound of dirt and rubble near Plovdiv covers a Thracian tomb ***(below)****, one of some 15,000 in Bulgaria. Once easy targets for looters, burial mounds today are protected by law. Many await excavation.*



right hand; with his left he holds the arm of a woman on an ornate throne. She looks down sadly, and the whole atmosphere is sorrowful. To see these faces today is to feel the melancholy of death across the years.

Philip II Captured Gold Mines

The Thracian tombs are a major source for our knowledge of the metalwork of the classical world. An area of great prosperity, Thrace must have derived part of its wealth from its metal deposits, still in use more than 3,000 years after the first goldworking at Varna. When the Macedonian King Philip II,* father of Alexander the Great, conquered much of Thrace in the fourth century B.C., one major source of Macedonian wealth was the gold mines of Mount Pangaion, close to the southern extremity of the Thracian region near the Aegean.

Gold from those mines reached Bulgaria as perhaps the richest of all the Thracian treasures, one of the greatest gold hoards ever discovered. Found in 1949 near Panagyurishte, 90 miles west of Karanovo, it includes eight drinking vessels of astonishing workmanship, weighing together more than 13 pounds (six kilograms), and splendidly embellished with human and animal figures. In addition to these vessels was a bowl, ten inches in diameter, decorated with 72 Negro heads in relief.

Bulgarian archaeologist Venedikov believes that this treasure was made in the eastern part of the Greek world sometime around 300 B.C., and not in Thrace. From the artistic point of view, I prefer some of the less elaborate gold-and-silverwork of the Thracians themselves.

Thracian goldwork, I have come to believe, is the culmination of a tradition reaching back to the Copper Age of Bulgaria, to Varna. For me the Varna discoveries are the most exciting. They take us back 6,000 years before our own time. We find ourselves in that age when the early copper workers, practicing their newly won craft, discovered for perhaps the first time in human history the attractive properties—the dazzle, the freedom from corruption, the allure—of that noblest of metals: gold. □

*Dr. Manolis Andronicos described what may be Philip's burial place in "Regal Treasures From a Macedonian Tomb," in the July 1978 GEOGRAPHIC.

***Fearsome visage** decorates a leg guard of gold and silver, entombed with a warrior in Vratsa about 375 B.C. Inlaid stripes re-create tattooing, marks of Thracian rank. A gold laurel-leaf garland (**below**) crowned the remains of a woman beside him. After a warrior died, his wives vied to be chosen most favored; the winner was ritually slain.*

*Two could drink from twin spouts below the centaur handles of an embossed gold amphora (**bottom**). Probably Greek, it was found with eight other pieces at Panagyurishte.*

JAMES L. STANFIELD AND OTIS IMBODEN

Up periscopes! Giant otters peer warily from a Suriname creek. These likable

Giant Otters: "Big

By NICOLE DUPLAIX Photographs by the author

RIPPLES undulate the lily pads of the creek. Two heads pop up above the cola-colored water. Animals and humans stare at each other, equally surprised and curious. The animals puzzle over this large rubber boat and its occupants; it does not resemble the dugout canoes that they know.

For my part, I can make out dark fur, round eyes, small ears, and tufts of whiskers as the heads bob up and down. One of the animals cranes its neck and opens its mouth, revealing the pink interior. Its companion makes a singsong humming sound, quite loud and persistent. Our boat drifts too close to them, and suddenly, with snorts and splashes, the otters are gone, leaving rings of spreading wavelets.

I have just met the Hummers (as I later called them), a pair of giant otters. As the months passed, I came to regard these animals as friends. More important, for the purpose of my mission to the dense jungles of Suriname in northern South America, the

BATES LITTLEHALES

creatures are vanishing from even their more secluded jungle habitats.

Water Dogs" in Peril

and BATES LITTLEHALES NATIONAL GEOGRAPHIC PHOTOGRAPHER

Hummers taught me much about their kind.

On its sixty-pound body and five- to six-foot frame, *Pteronura brasiliensis*, the giant Brazilian otter, carries a pelt so luxuriant and fashion prized that the animal has largely disappeared from much of its natural range—and today appears on the worldwide list of the 23 most endangered mammals.

Seventeenth-century explorers of the Amazon reported a huge black otter in those inland waters. Biologists thought it might be the Pacific sea otter. Only in 1777 were the world's two largest otters differentiated. The sea otter, also coveted nearly to obliteration for its soft, rich fur, gained protection under the Fur Seal Treaty of 1911 and now, after a strong comeback, can be considered virtually safe from extinction.

A far less promising prospect faces the giant Brazilian otter. By 1969 it was nearly wiped out in Peru. Conservationists postulated that it would disappear throughout its range within the next twenty years. Hardly surprising, since every man with a gun,

from Colombia to Argentina and Brazil to Peru, is still on the lookout for this conspicuous beast that brings the equivalent of three months' wages with one lucky shot.

Lack of knowledge has hampered effective action to save the giant otter. After 300 years the animal's habits remained as much a mystery as ever. To change this, I sought a place where giant otters still survive in good numbers. I would try to record every aspect of their behavior in the wild.

Suriname, where giant otters have been protected since 1954, is probably the only place left where they are still a common sight. Most of Suriname's 402,000 people live along the coast, leaving the inland rain forests virtually uninhabited. The Forestry Department's help in organizing the upriver expeditions was vital to my success.*

Suriname is a melting pot of African and Asian peoples. Most interesting and endearing to me are the people of the hinterland—the shy Amerindians and the extroverted Bush Negroes, descended from 18th-century slaves who escaped to the bush.

For boatmen, my obvious choice was Bush Negroes, expert in maneuvering their long dugout canoes through foaming rapids. But first I had to master Taki-Taki, a pidgin language based on English and Dutch. In 1977 I met Mofo Soiso, and he soon taught me his language and shared his knowledge of the rivers and the bush. *Mofo* means "mouth," and his was always split in a wide grin, although at first he was puzzled by this foreign woman searching wilderness rivers for the *bigi watra dagoo* (big water dog), which wasn't even good to eat.

At the beginning of my study I caught only fleeting glimpses of otters diving into the water, their sunbathing abruptly interrupted. I quickly learned that the animals were active only during the day. Sometimes I stumbled on groups of seven or more as they swam side by side down the river. Once I saw 16 otters together, all charging toward the boat as I imitated their nasal barks. Most of the time only snorts of alarm or wavering screams told me their whereabouts in the thick undergrowth.

Even though the otters easily eluded me, they left signs behind of their presence. Staking out a territory, they deposit single

*Dr. Duplaix's research was funded by the National Geographic Society, the World Wildlife Fund, the Rare Animal Relief Effort, and the New York Zoological Society; the latter cosponsored the project with STINASU, Suriname Nature Conservation Foundation.

BATES LITTLEHALES (BELOW); NICOLE DUPLAIX

Crunch. *The otter dubbed Mr. Hummer by the author takes the first bite of his favorite meal, a large black pataka (**above**). Giant otters pull their larger catches to shallow water, as Mr. Hummer does with a tiger catfish (**below**), or to a convenient log for immediate dining. When the fish migrate into flooded forests during the rainy season, the otters follow, roaming far from riverbank homes.*

droppings on sloping logs or flat boulders at intervals along miles of creek bank. I also found that portions of the riverbanks were stripped bare, contrasting sharply with the dense green vegetation. Churning up the soil with their paws, the animals completely denuded a large semicircle 35 feet long and 20 feet wide.

These campsites, as I called them, announced the presence of a family of giant otters to others passing through. The residents saturated their campsites with urine and with scent from two glands under the tail. We could detect the musky, rank odor a hundred feet away.

Each camp had a communal latrine, set off to one side. Whirling around and stamping their feet, one otter after the other would deposit feces. Almost six feet in diameter, the area was quickly churned into a quagmire. Afterward, the otters would wriggle themselves dry in the peaty leaf litter of the central clearing. Then they would often fall asleep, mated pairs snuggled together.

Every group had a number of campsites on its stretch of river, some sites used frequently, others abandoned after a few visits. Those on territorial boundaries were usually the largest and were visited regularly.

We quickly fell into a routine on the rivers. Every evening Mofo and my other boatman, Jobari Mayodo, would erect a shelter of branches tied with lianas. It amazed me that this frail framework, covered with palm fronds, could support the men's hammocks.

My own tent, just large enough for my Doberman pinscher, Pegs, and me, was a cozy retreat from the bugs and the rain. Before dawn Pegs would nudge my face with her nose, then pace relentlessly until I lifted the tent flap.

Kingfishers Play Paul Revere

I remember a morning on the Zuid River, in southwestern Suriname. We had cut the outboard motor and were paddling along a placid, green-walled corridor, alert to every sound and movement. Kingfishers flew ahead of us, chattering like machine guns. Surely the otters that I hoped were around the next bend would heed their warning.

We examined boulders and logs for droppings. Mofo and Jobari competed to see who would first locate the little pile of fish scales or crab remains. The find was greeted with hearty laughter: Why would anyone want to measure and weigh such material, and then put it in an envelope? But by identifying the scales and bone fragments I could learn what kind of fish the otters were eating.

On larger rivers at the onset of the dry season, I found that giant otters feasted on crabs trapped in shallow pools by the receding waters. Once I saw a group of nine fishing together alongside a sandbank. They

Sleek curves of muscle, *giant otters reach five to six feet in length and weigh sixty pounds. Clumsy on land, they excel in small tropical rivers, where their powerful tails and webbed paws propel them through the tannin-stained waters. Native inhabitants call them "big water dogs."*

Curious yet shy animals, the otters mostly eluded the author during the early months of her research in Suriname, the first time Pteronura brasiliensis *has been studied extensively in the wild. Only after she won the trust of the Kapoeri Creek group she named the Hummers (**below left**) did she closely observe otter family life—how they travel and fish together, patrol territories, groom one another, and cuddle in sleep.*

*She also discovered the habits of otters that make them vulnerable to fur hunters: clearing conspicuous campsites, confronting intruders with loud snorting, and remaining active during the day, when they are most likely to meet humans. One victim of such contact between men and otters, this month-old cub (**below right**) was kidnapped before it had been weaned. It died days later at the Paramaribo zoo.*

Giant otter's habitat

During the past fifty years, fur hunters have nearly eliminated giant otters from major river systems of South America. But in Suriname, game laws have protected the otters since 1954.

NICOLE DUPLAIX (BOTH)

would porpoise methodically side by side, and if one surfaced with a crab or small fish, it would tread water while eating.

Each fish, grasped firmly between the forepaws, was eaten head first, crunched like an ice-cream cone. The favorite prey was a black fish with large scales called the *pataka*. It furnished the otters more than half their diet. The pataka lies on the bottom, showing only its eyes as it awaits a meal passing its leafy lair. Unwary minnows vanish in a swirl and a puff of silt.

Learning to Hate White Water

Two problems constantly dogged my efforts: rapids and outboard motors. With 600 pounds of fuel and supplies, the boats had to be dragged and pushed during the dry season and guided through roaring torrents in the wet. Once, as we hauled across shallow rapids, waist deep in swirling water, my foot slipped when one of the boats swung out of control. It crashed against the rock I was clutching, inches from my head—and my loathing of white water increased.

Our outboard motors repeatedly broke down, and I learned of necessity to repair them. Whenever an engine sputtered back to life, Mofo would proudly say to Jobari, "*Dati Mama Watra Dagoo a sabi ala sani*—That Mrs. Otter knows everything."

After visiting one lake, 21 rivers, and 41 creeks all over Suriname, I had observed 102 otters for a total of less than five hours. I needed to study them for much longer periods and at closer range to understand fully their biology.

I kept looking for the right spot—and finally found it on Kapoeri Creek, a tributary of the Corantijn River that forms the western boundary of Suriname. On my initial visit I saw ten otters and numerous campsites, more than I had ever found on one creek. Because the stream was narrow, I could watch the animals, and here they seemed less shy.

It was on Kapoeri Creek that I encountered the family of giant otters I came to call the Hummers. The first day of observation I was able to follow the two—and their cub—for an hour and 35 minutes.

The female was more skittish than the male, and the cub stayed close to her, while the mother "hum-growled" for minutes on

Alone with his reflection, *Mr. Hummer lost his spunk when his mate and cub vanished after a larger otter family invaded*

NICOLE DUPLAIX

their territory. The new group had been pushed upstream from the mouth of Kapoeri Creek by the commotion of crews of workers who were building a road to a government project in bauxite mining, lumbering, and hydroelectric power.

end, as if muttering under her breath. Gradually they accepted me and came to know me by sight.

Moli Benanoo, another boatman, and Mofo set up our camp at an old Indian hunting site, and I began otter-watching, using a rubber boat for ease of handling.

Soon I learned to tell the sexes apart and recognize individuals. The males had large heads and thickset necks; the females were of slighter build. Each otter bore a different pattern of creamy blotches on its neck, quite visible as the animals bobbed in the water. I made quick sketches in my notebook. The Hummers had distinguishing white bibs.

Checking campsites, I discovered each group's territorial limits—usually a mile or so on both sides of the creek. The Hummers traveled the length of their 1.5-mile strip every other day, cub in tow. Altogether I

counted 23 otters living on Kapoeri Creek.

Giant otters, like other otter species, dig dens in the stream banks. Located if possible near good fishing sites, dens usually have a single entrance on the stream bank and a rear exit used to escape into the forest.

Access to dens is by short tunnels usually a foot in diameter and two to eight feet long. They open up into a denning chamber just wide enough for a family to curl up together. Even during birth and care of new cubs, no nesting material is brought into the den.

Cubbing dens usually are situated away from campsites. Except during cubbing season, the otters prefer to sleep out on their larger riverbank campsites.

Otter Cub Lost and Found

A giant otter family, which often includes cubs from the previous year, forms a tight-knit group; members do everything together. The Hummers never allowed their cub to stray very far. One afternoon, while Mr. and Mrs. Hummer swam near my boat watching me, the cub wandered off downstream on its own. The parents gave sharp cries, answered with increasing urgency by the cub. All three craned their necks, trying to locate each other. Spying their youngster at last, the parents dived and surfaced downstream as a family again, uttering reassuring coos and chortling noises as they touched noses.

After the start of the rainy season in early April 1977, Kapoeri Creek rose nearly eight feet in as many weeks. Banks were flooded, campsites submerged, and the otters vanished into the forest, which had become a vast green swamp.

Face to face *with Mr. Hummer after watching him quietly for many months, Nicole Duplaix breaks her rule against close contact with animal subjects to share a farewell swim in Kapoeri Creek (**left**). Earlier attempts to lure otters into view with rubber decoys (**right**) had failed miserably. "The otters were not fooled in the least bit," she said.*

*On a creek bank she examines one of the dens (**below right**) where parents share the work of tending cubs. Litters of one to three cubs are born between early August and late October.*

ALL BY BATES LITTLEHALES

There they pursued fish among buttress roots, thorny palms, razor grass, and other tangled undergrowth. The otters mate in the swamps during this high-water season.

When the waters receded in September, I found the Hummers back patrolling the familiar stretch of Kapoeri Creek. However, the bond between parents and cub was weakening. Several times I saw the pair emerging by themselves from a den, or

NICOLE DUPLAIX (ABOVE AND LEFT); BATES LITTLEHALES (BELOW)

Otterly indifferent *to observers, Mr. Hummer reclines lazily on the bottom of Kapoeri Creek (***below***) after abandoning his campsites.*

*Otters strip the vegetation from such sites, which average thirty-five feet long and twenty feet wide, to mark their territorial boundaries. This vacant site (***left***), overgrown during the rainy season, was later reclaimed and denuded (***far left***) by otters returning to the river.*

*Campsites are also marked with feces, urine, and a musky scent. Otters patrol and re-mark sites so vigorously that at Nanni Lake several generations of otters have worn away a 45-foot "bite" in the bank at the tip of a small island (***above***).*

A noisy species, otters vocalize constantly. Pairs hum, coo, or chortle to their cubs as they swim. Adults and cubs alike scream in frustration when another family member catches the fish they were chasing.

And Mr. Hummer hummed even in his sleep. In all, the author distinguished nine basic otter sounds, from a startled "Hah!" to the squeaks of newborn cubs.

New wildlife preserves in Suriname may give additional protection to these attractive animals, whose numbers are dwindling elsewhere.

glimpsed the nearly full-grown cub taking a shortcut through the forest.

On October 2 Mrs. Hummer came out of a den with a very small cub crosswise in her mouth. It squeaked as, to my horror, she dived into the water. The cub spluttered as its mother surfaced but seemed not to suffer from its baptism. In fact, there were two new cubs, and Mr. Hummer shared the rearing chores. Both parents would enter and leave the den together, and I could hear them underground, purring as the infants mewed during suckling. At three months, while still nursing, otter cubs begin eating fish caught by their parents. Within weeks they are catching fish themselves and dragging them to the shallows for eating.

In November I had to leave Suriname for six weeks. When I returned in January, Mr. and Mrs. Hummer recognized me enthusiastically. But the younger cubs were gone. I later learned that a local Arawak Indian had impulsively taken them as pets. When he discovered that it was illegal, he released them, but they were never seen again.

Land-grabbers Invade Hummer Home

A road had been cut through the forest in September, and now a bridge spanned the mouth of Kapoeri Creek—construction that is part of the Western Suriname Development Project, a huge bauxite-mining, lumbering, and power complex based at Apoera on the Corantijn River. The noise of trucks, generators, and graders must have disturbed four otters and their three cubs living at the creek mouth. The Seven, as I called them, moved upstream, invading the Hummers' territory.

Otters—in captivity at least—are known for their playfulness. Not so with the Seven. Engrossed in expanding their territory, they spent their days in visits to new campsites and forays deeper into Hummer land. I only saw their cubs playing once, rearing up and falling down on each other in mock battle. With the Seven I never established the mutual trust developed with the Hummers.

Late in January the inevitable happened. The Hummers surprised the Seven marking a Hummer campsite. To my astonishment, the Hummers turned tail and dashed into the forest, while the Seven swam away in the opposite direction. I never saw any direct confrontation, but shortly afterward Mrs. Hummer and her year-old cub vanished.

I could only conjecture what happened to them: Did they flee to the swamps deep in the forest? Were they killed by a jaguar, the only predator strong enough to overpower an adult otter ashore? Could one of the Seven have killed them? I'll never know.

Now alone, Mr. Hummer no longer patrolled his dwindling territory or visited his campsites. I found him lying under a tangle of bushes or on the edge of a bank. As his last retreat, he took Arawaboo Pond. Arawaboo (Arrow and Bow) was a favorite Arawak fishing ground. Pataka were abundant under the floating reedbeds, and Mr. Hummer never had to venture far for a meal.

At the sound of a paddle dipped into the water, or at the distant hunting cries of the Seven, he would silently vanish into the forest. He seemed deprived of energy, and his eyes lacked sparkle. One day I was horrified to see a deep eight-inch wound on his flank, probably inflicted by the machete of a fisherman who resented competition. The acid water and diligent grooming kept the wound clean. It healed within three weeks.

I found it hard to leave Kapoeri Creek knowing that Mr. Hummer and the other otters were more and more threatened. In six months the development project had tripled the population of the village of Apoera, and plans envisage a city of 60,000 people!

So far only Arawaks and a handful of Europeans visit the creek, but more people are bound to infiltrate the jungle. Yet I am hopeful. Suriname already has nine nature preserves and an excellent nature-protection system established by STINASU (the Suriname Nature Conservation Foundation). Plans are afoot to protect other areas, including Kapoeri Creek. The giant otters are a symbol of this small country's concern for its wildlife: Suriname leads where other countries have failed.

For almost two years my life was one with the otters of Suriname—a period that strengthened my determination that giant Brazilian otters as a species must survive. International awareness can buttress Suriname's efforts to save these attractive, intelligent animals. To that end, I have pursued my research and dedicate this account of the life-style of the imperiled giant otter. □

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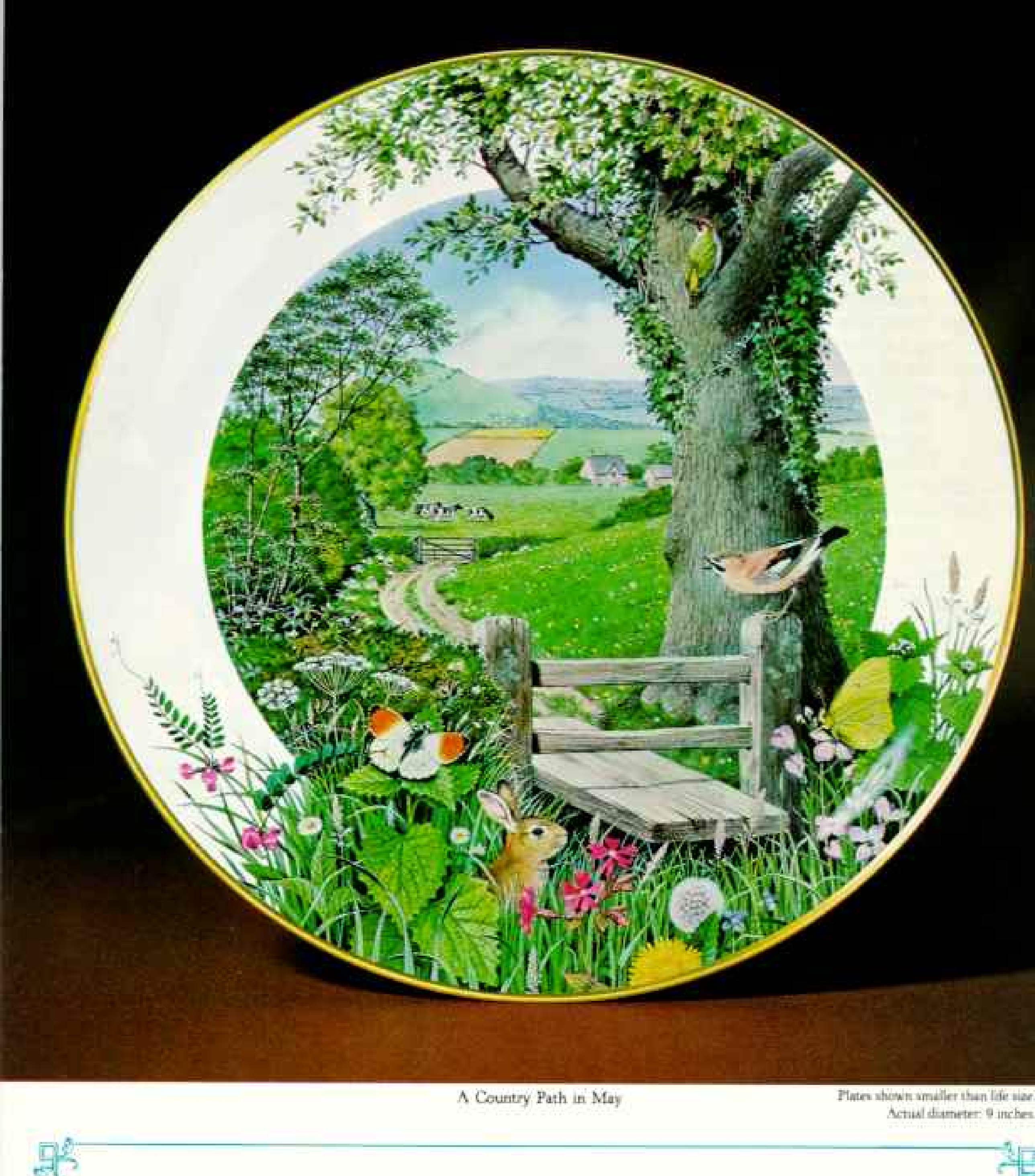
Veracruz: 8,000 years of habitation

ON THE STEAMY coast of Veracruz, scientists from the United States and Mexico dig into man's past. Under the direction of Dr. S. Jeffrey K. Wilkerson (**right top,** at right), research assistant Genaro Domínguez Sanchez sorts ceramic fragments and figurines unearthed during a seven-year National Geographic Society-supported study. A head (**right**), dating from 300 B.C., shows an incised "tattoo." Seeking to shed light on the present as well as the past, the team also investigated such folk traditions as the ritual acrobatics of Totonac *voladores* (**far right**). Read about this work in next month's issue, and help such research efforts by nominating a friend for membership below.

ALL BY DAVID HISER



A Country Path in May

Plates shown smaller than life size
Actual diameter: 9 inches

IN FINE ENGLISH PORCELAIN...

The Country Year

BY PETER BARRETT

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The April plate, for example, conveys the loveliness of Spring from the perspective of a secluded bluebell bower... The adventurous spirit of May invites us to follow a quiet country lane...August brings us to a golden wheatfield, where poppies, daisies and thistles abound, and swallows swoop low in search of food...

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Because of the international interest in Peter Barrett's art, a second edition will be made available overseas, with equally stringent limitations. In the tradition of the finest porcelain, the collection will be available only until the end of 1980, at which time the subscription rolls will be permanently closed. To enter *your* subscription, you need send no money now. But please note that the application at right must be mailed by August 31, 1980.

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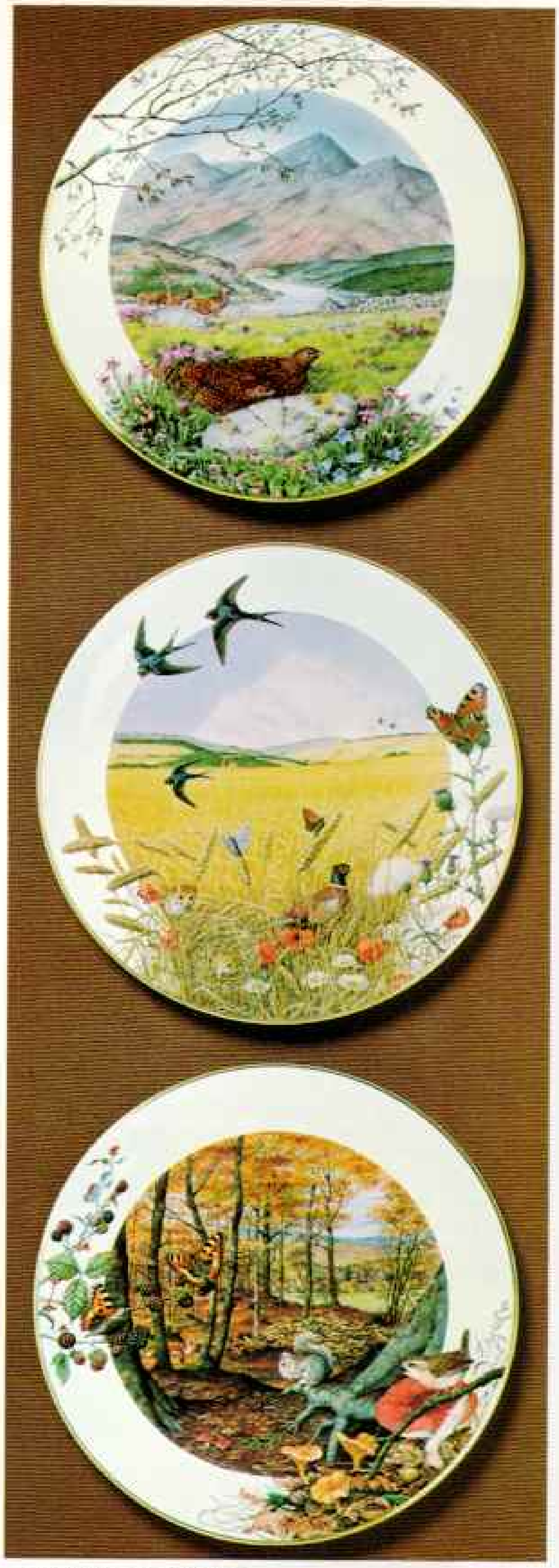

Top: September on the Moors
Middle: Wheatfields in August
Bottom: The Colors of Autumn in October

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Write us on your company letterhead, and we'll send you everything you need to decide whether your company can profitably use a Beechcraft. And which Beechcraft suits you best. Write to: Beech Aircraft Corporation, Dept. A-5, Wichita, Kansas 67201, and please mention if you're a pilot. If you'd rather call, call collect and ask for Dick Showalter, Jr. (316) 681-7072.

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The Celica GT Liftback. A unique combination of the fantastic and the practical. What other car can inspire such feelings, yet be bought and maintained without remortgaging the house?

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The Celica GT Liftback. It's lean and clean and a little bit mean. Make it your machine.

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Salad time and the dressing is easy!

Make your own fresh dressing... It's easy with Hellmann's® Real Mayonnaise.

CREAMY ITALIAN

1 cup HELLMANN'S Real Mayonnaise
1/2 small onion
2 Tbsp red wine vinegar
1 Tbsp sugar
1/4 tsp Italian seasoning
1/4 tsp salt
1/4 tsp garlic salt or powder
1/8 tsp pepper

Place all ingredients in blender container; cover. Blend on medium speed 15 seconds or until smooth. Cover; chill. Makes about 1 1/4 cups.

CREAMY FRENCH

1 cup HELLMANN'S Real Mayonnaise
2 Tbsp sugar
2 Tbsp cider vinegar
1 Tbsp milk
1 tsp paprika
1/2 tsp dry mustard
1/4 tsp salt

Stir together all ingredients. Cover; chill. Makes about 1 1/4 cups.

RUSSIAN

1 cup HELLMANN'S Real Mayonnaise
1/3 cup chili sauce or catchup
2 tsp lemon juice
1 1/2 tsp sugar

Stir together all ingredients. Cover; chill. Makes about 1 1/3 cups.

Bring out the Hellmann's and bring out the BEST!

Beauty that's more than skin deep.

Architect: Wendell Lovett, AIA, Seattle, Washington

Olympic Oil Stain. Not only does it bring out the natural beauty of wood, but it keeps it looking beautiful. Year after year.

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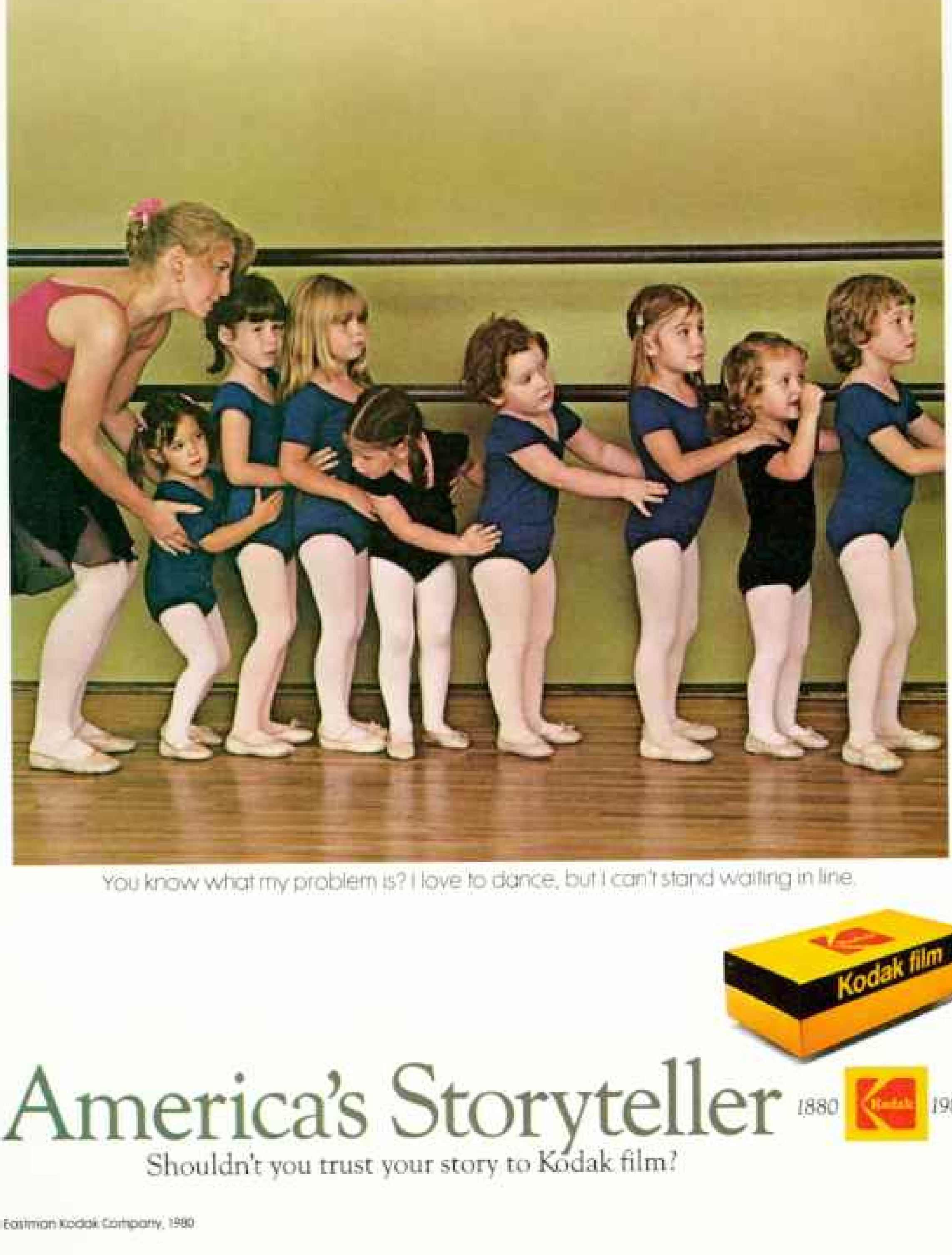


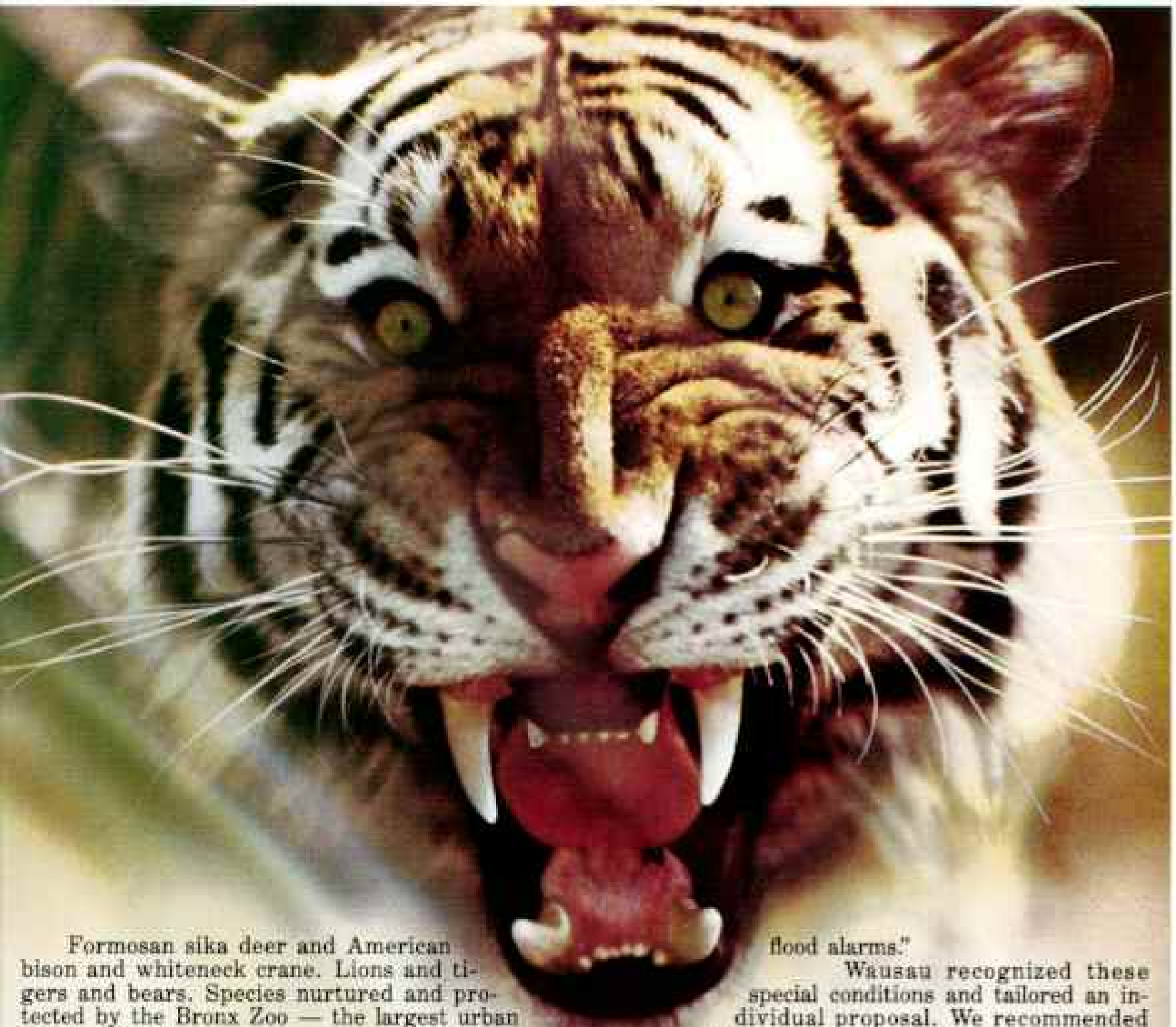
You know what my problem is? I love to dance, but I can't stand waiting in line.

America's Storyteller

1880 1980

Shouldn't you trust your story to Kodak film?

How the Bronx Zoo tamed an insurance problem by teaming up with Wausau.



Formosan sika deer and American bison and whiteneck crane. Lions and tigers and bears. Species nurtured and protected by the Bronx Zoo — the largest urban zoo in America.

And who's protecting the Bronx Zoo?

Wausau Insurance Companies.

The Bronx Zoo needed a more efficient way to protect its property.

John G. Hoare, Comptroller of the New York Zoological Society, explains: "Our zoo buildings are far more secure than those of most businesses. They were designed with safety foremost in mind and are equipped with sophisticated fire and flood alarms."

Wausau recognized these special conditions and tailored an individual proposal. We recommended that the zoo should insure against only catastrophic losses, and buy a high deductible policy. "Today," says Mr. Hoare, "we have two to three times the coverage — in terms of numbers of buildings — at a 30% savings over our previous cost."

Together, the New York Zoological Society and Wausau work as partners to manage risk at the Bronx Zoo.

The partnership works effectively to make business insurance earn its keep. That's the Wausau Story.

WAUSAU INSURANCE COMPANIES

Employers Insurance of Wausau

WAUSAU WORKS.™

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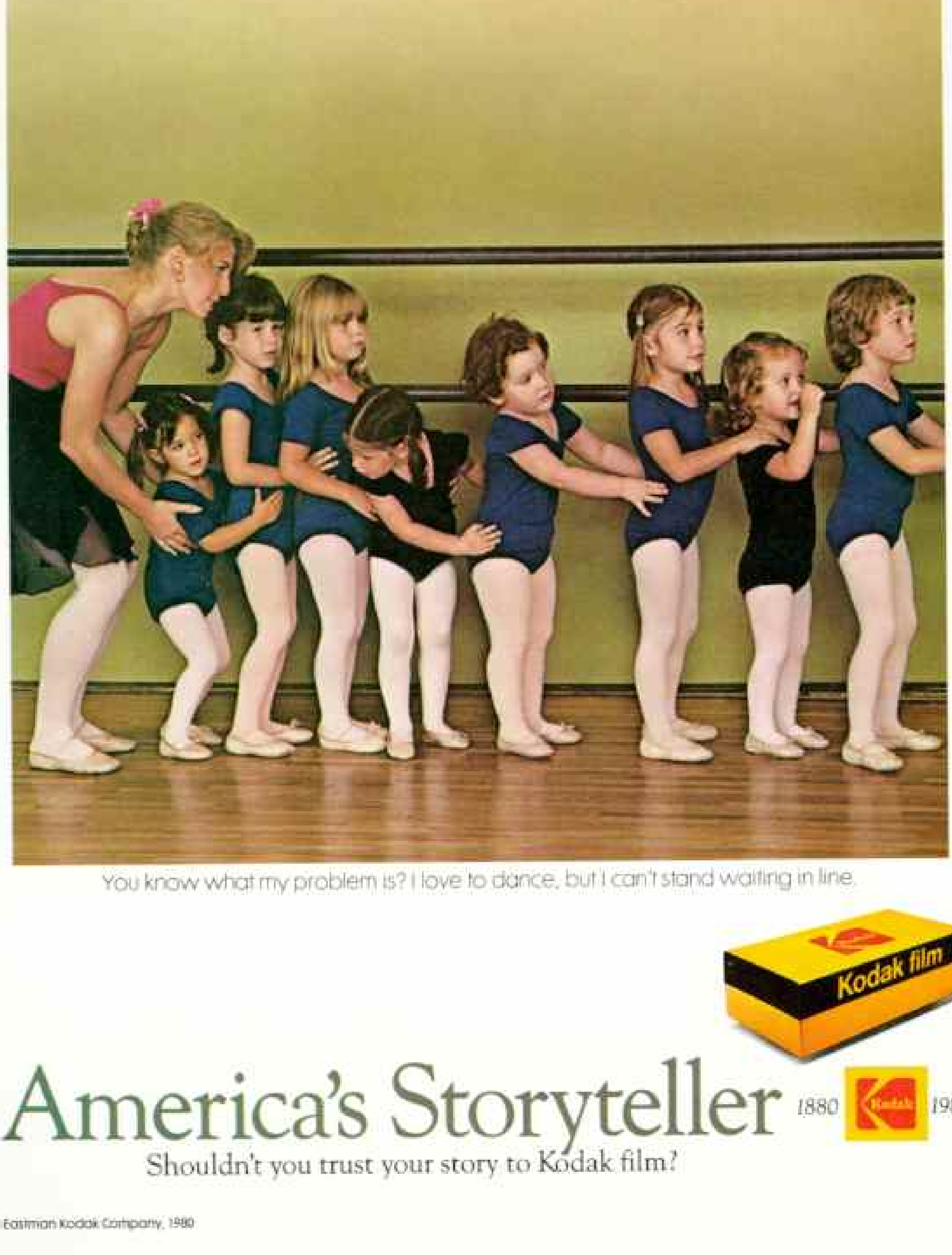

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