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THIRTY-TWO PAGES OF ILLUSTRATIONS IN FULL COLOR

Kaleidoscopic Land of Europe's Youngest King

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Yugoslavia: Where Oriental Hues Splash Europe

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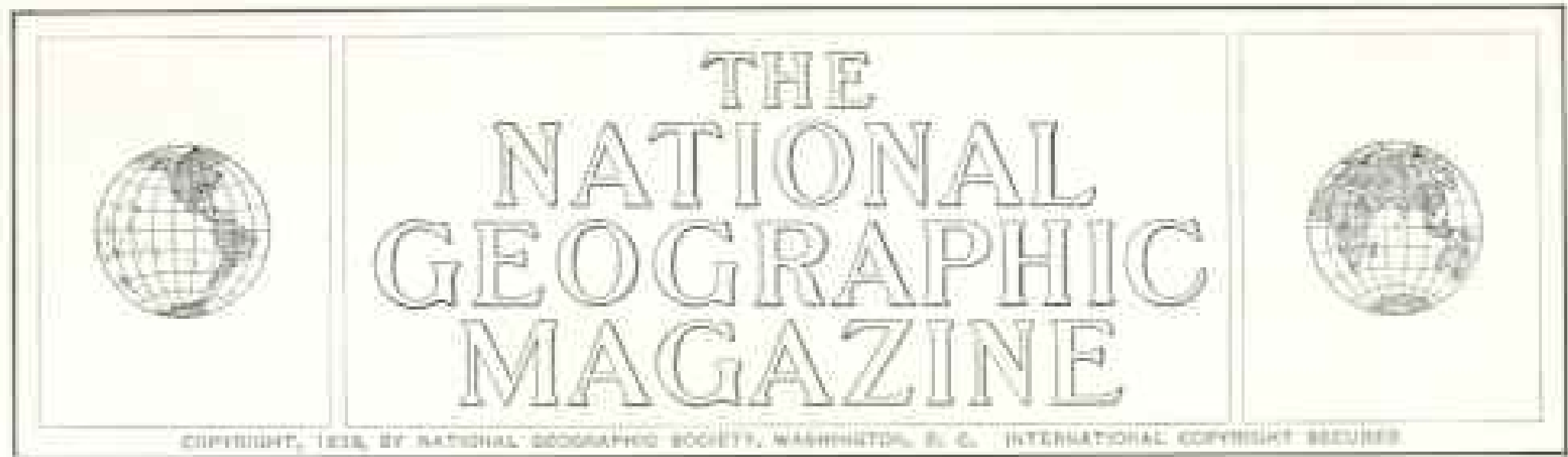
Looking Down on Europe Again

With 30 Illustrations and Map J. PARKER VAN ZANDT

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KALEIDOSCOPIIC LAND OF EUROPE'S YOUNGEST KING

Yugoslavia Holds a Mosaic of Slavs and the City Where
Pistol Shots Touched Off the World War

BY DOUGLAS CHANDLER

TAKE a chance: you Americans are good at that. You're all of you lucky! Americans are popular with the Yugoslavs, too. I think the border authorities will let you through."

My arrival at Trieste had coincided with a national holiday: all consulates closed, no Yugoslav visa in my passport. To comply with formalities, must I wait over and lose a precious day of the fleeting autumn season? No, we'll risk it!

After Monfalcone and Gorizia, the engine grumbled up the Adriatic watershed. Hills shut in like a V-shaped vise; in the blue-plush arc of sky glinted tiara clusters of gems. At Piedicolle the train burrowed into the four-mile tunnel which links Italy to high Slovenia.

Emerging on the Yugoslav side, we found cloud and mist in command of the night. I have many times shuttled through this tube, but never yet have found the same sort of weather prevailing at both ends.

"Passport, please."

"I have no visa," I apologized.

"Good, that we can arrange. Americans are welcome here. Have your hotel director at Bled send the pass to Jesenice for stamping."

The friendliness of this South Slav frontier officer made me happy that my country had adopted nearly a million Yugoslav sons. And so to Bled.

"Why all the decorations?" I asked next morning, September 6, eyeing a fluttering mile of bunting stretched over Bled's lake-side street.

"Our young King's birthday; he is fifteen today," was the response. "He will attend Mass in yonder church at ten."

After service I waited near the sharp-steeped little house of God; above it reared a crag topped by a thousand-year-old castle. The Queen Mother came out with her three sons.

13-YEAR-OLD KING BUILDS RADIOS

Yugoslavia's boy King, whose duties of state are being performed by a regency of three until 1941, is a well-formed, athletic lad, said by many to resemble his great-great-grandfather, "Black George," founder of the dynasty. He is a good rider, swimmer, and crack shot. A radio fan, he builds his own sets. Gardening is also a hobby.

At most public appearances young Peter II wears the becoming uniform of the Sokol (Slavic Gymnastic Organization), a gray jacket thrown over one shoulder and showing the dashing red of the lining. Reproductions of a Laszlo portrait showing him in court regalia hang in all public rooms, side by side with pictures of his martyred father, King Alexander I (page 693).

Crown Prince Tomislav, now eleven, is an enthusiastic, engaging youth whose great-



Photograph by Alfred Eisenstaedt from *Pitt*
CAVALRYMEN OF THE ROYAL GUARD PROTECT YUGOSLAVIA'S
BOY KING

The troopers' garrison is located in Topčider Park, once a summer home of Yugoslav royalty, but now a public reserve, just south of Belgrade.

est pride is that since the age of six he has held the office of president of the associated fire departments of the whole country. What youngster would not envy this distinction?

A MOSAIC OF SOUTHERN SLAVS

Bled is the summer capital, though Prince Paul of the Regency Council has his summer residence at Castle Brdo, halfway to Ljubljana. Ministers and diplomats leave brief bags in Belgrade (Beograd) and bring golf bags to Bled's magnificent new links.

The land of the boy King, which formerly bore the name "Kingdom of the

Serbs, Croats, and Slovenes," is a complex of chiefly southern Slavic peoples numbering some 15,630,000. The minorities include Germans, Magyars, Albanians, and others.

Different religions coexist within these comprehensive borders: Serbian Orthodox (49 per cent of the population), Roman Catholic (37 per cent), Moslem (11 per cent), followed in fractional percentages by some half a dozen others.

Geographically Yugoslavia with its 96,000 square miles, is slightly larger than Great Britain. It has a land frontier abutting on seven different countries, and a thousand miles of fantastically indented sea coast (map, p. 694).*

"While still widely employed, the pre-war provincial designations of Slovenia, Croatia, Serbia, Vojvodina, Bosnia, Herzegovina, Dalmatia, Montenegro, and Macedonia no longer actually exist," pointed out my informant.

"Their place is taken by nine provinces, roughly conforming to the old frontiers. We've named them after eight of our rivers: the Drava, Drina, Dunav (Danube), Morava, Sava, Vardar, Vrbas, Zeta, and the Primorje, meaning 'Littoral.' In addition, there is the Prefecture of Belgrade, corresponding to your District of Columbia."

With a friend's aid I planned an itinerary which in the next six weeks I covered by rail, bus, ship, beast of burden, and on foot (map, page 695).

* See "Yugoslavia—Ten Years After," by Melville Chater, NATIONAL GEOGRAPHIC MAGAZINE, September, 1930.



Photograph from Wide World

KING PETER II GREET'S OFFICERS OF THE ROYAL CAVALRY GUARD

The young monarch ascended the throne upon the assassination of his father, Alexander I, on October 9, 1934 (pages 696 and 717). The youth was then 11 years old. With him at this ceremony in Belgrade is his uncle, Prince-Regent Paul, one of three regents who conduct the duties of state. They will administer the government until the King is 18 years old.



© Atlas A. Gulliland

INSTEAD OF GAMBOLING ON THE GREEN, THESE SIX LAMBS TURN ON A SPIT
Throughout Yugoslavia, when spring comes the favorite delicacy of all classes is roast lamb,



Drawn by Ralph E. McAtee.

FROM ALBANIA TO THE ALPS, YUGOSLAVIA FACES ITALY ACROSS
THE ADRIATIC SEA

The pre-World War nations of Serbia and Montenegro, together with provinces of the old Austro-Hungarian Empire and bits of Bulgaria, have been united since 1918 into one nation of Southern Slavs. Its land frontiers border seven different countries, including Germany and Italy. Along the Adriatic Sea are a thousand miles of fjordlike coastline.

The day after the King's birthday a yearly Mass took place in the Church of the Virgin on Bled's island. From all the countryside came farmers and villagers by special train. Alas, they were clad in sober, conventional attire: national costumes have largely vanished from the Slovenian scene.

LEGEND TELLS OF THE MYSTIC ORIGIN
OF LAKE BLEED

An old Slovene legend tells that once there were only green meadows where now is the lake of Bled; the island was merely a hill,

crowned by a chapel through which grazing sheep were free to roam.

A voice from Heaven pleaded, "Put a fence around my church," but the people heeded not.

One morning the community woke to find a deep lake where the meadows had been; only the hill with its chapel protruded from the water. The watery "fence" served forever to keep the beasts of the field away (Plate II).

I lost no time in hurrying over to the black lake of Bohinj. Here, with my family, I had summered in 1934, not far from

the hunting lodge of the Prince-Regent Paul, and had seen the English Duke of Kent and his fiancée, Princess Marina of Greece, together with their host, casting brilliant flies on creaming ripples.

As in former times, trout were lying motionless in the green depths of chasm pools.

At picturesque Stara Fužina I saw granules of yellow cornmeal sitting down from ponderous mill wheels. Maize, scarce in many European countries, is an important crop in Yugoslavia (Plate XXI).

The miller's wife sat reading her Bible before her house on the hill, her face a mask of aged yellow wax etched with the Ten Commandments. We made a deal—photographs in exchange for tea. As I sipped the bitter brew in the chimneyless, smoke-encrusted kitchen, I knew that I had the better of the bargain.

PATRIARCH OF THE JULIANS

Grandfather Triglav, patriarch of the Julian Alps and highest mountain in Yugoslavia, challenged us to tackle his dizzy dome.

"No danger today with all the fool-proof iron ladders and handrails," we were assured. But that the ascent was once fraught with hazard is attested by the score of graves of luckless Alpinists lying in a little churchyard below the summit.

A dawn start, and by midafternoon we were crawling over the grim giant's shoulder where edelweiss seemed as thick as buttercups in a New England pasture. At a youth hostel came warnings of approaching stormy weather: "Better return for the night to the lower huts."

Clinging to the side of gaping abysses, the trail led us downward. Light held until we were ensconced in lamplit comfort. Then the storm burst.

An hour later the door banged open to admit a smiling figure streaming water from a rubber poncho—a young Ljubljana photographer supplying his picture postcards to the chain of mountain inns.

He drank a cup of coffee, transacted his business with the landlord; then, donning raincoat, made for the door.

"May I ask where you are going?" I inquired.

"To the next inn, up near the crest," he nonchalantly answered. "I have an electric flash in my pocket."

"That's madness!" I exclaimed, as he vanished into the night.



YUGOSLAVIA, GERMANY, AND ITALY
MEET IN THE JULIAN ALPS

A national playground in winter and summer, the majestic mountains are also a frontier for the land of the Southern Slavs.

The landlord only laughed at my consternation. "To our people, these trails are like a city street to you. From childhood they know every rock and crevice."

ACROBATIC FARMERS ON STEEP SLOPES

The harvest time was at its fragrant busiest as I drove with the Bled director of Putnik (Yugoslavia's efficient national travel agency) over fine, hard-surfaced roads to Kranjska Gora.

Sometimes the roads passed beneath fields which seemed almost standing on end; yet the farmers swung scythes through lush stems. Remarked my oracle: "It is said that often the grass falls upon the mower's head."



Photograph by Alfred Eisenstaedt from Picta

WITHIN THE CATHEDRAL OF OPLENATZ RESTS THE MARTYRED KING ALEXANDER

This Greek Orthodox mausoleum was erected by Alexander on the site of the old royal family estate at Topola, about 40 miles from the Yugoslav capital. Here the body of the king was brought after he had been slain by a Macedonian terrorist in Marseille on October 9, 1934. The ruler was paying a state visit to France and was shot down, together with Jean Barthou, French foreign minister, as they rode in an automobile. Permanent wreaths, many of them from foreign governments, stand about the crypt.



© Rejang from Three Lions

SKIRTS AND APRONS SWISH TO RHYTHMIC THUMPS OF STURDY BOOTS

Croatian girls in Sunday attire try new steps after attending church services. Each clings firmly to her neighbors' belts to keep in line. Hand-worked aprons are cherished, and flowing headresses are stylish in this community.

On to Planica we drove. Planica (pronounced "Planitsa") takes pride in the height of its ski jump. Records have been smashed here; now it is ruled that a spring from this lofty platform shall be called "ski flying" instead of "jumping," though just where the distinction lies has not been made clear to me.

Upward the motor road mounts again, up to a rooftop of the range. Let us call it The Road of Twenty Thousand Souls. Such is the tragic death roll of Russian prisoners who built it during the Great War. Starvation and exposure took this toll.

At the top of the pass stands a tiny chapel built by those prisoners' poor half-frozen hands. All the lamps, icons, and decorations are made of war material—lead, cartridges, empty shell cases—a pathetic plea against the futility of war.

We halt at Mojstrana at Triglay Hotel and are guests of "Dicker Max"—Max Robic—the 290-pound landlord. Max's voice, belying his bulky body, is a gentle falsetto; his modesty is such that one would not suspect his prowess as a hunter. Yet he was court hunter to King Alexander,

and prodigious are the tales of his fleetness and skill, of a big bet won in his youthful days by going afoot from Mojstrana to Triglav's top and back in six hours, a fabulous feat.

MUSIC IN WORDS

There is music in many a place name. What, for example, could be more charming than the Slav name for old Laibach—Ljubljana?

As in Salzburg, a castle dominates the scene. This castle is a home for the poor. In mid-city rises a "skyscraper," twelve stories high, with a café atop. Bookstores are many; their show windows fairly bulge with tomes. The restaurants bear an unmistakable Viennese touch. Most Ljubljana apartment dwellers take all meals except breakfast in public eating places.

The annual fair was in full blast; outstanding among exhibits were the photographs by Yugoslav camera artists.

A region with a past is the broad valley where Ljubljana nestles. Here, in prehistoric times, spread a vast lake. Lake dwellings such as those at the Lakes of Con-

stance and Geneva once stood here. The Museum of Ljubljana has many of these relics.

I lingered long before the museum's collection of beehive decorations. The old-fashioned Slovene beehouse looked like a chest of drawers, the drawer ends painted with fantastic and wonderful designs "so that the bees may know which is their door." Devils and animals linked with Slovene superstitions provided the main motif; the Devil was depicted sharpening women's tongues. All were painted in brilliant colors. Today's hives, alas, are daubed with solid colors.

Ah, but what honey comes out of Drava district hives! A Slovene breakfast offers coffee with a white cap of rich whipped cream (a trick learned when Yugoslavia was Austrian), crisp rolls, and a greenish-tinged honey with a tantalizing tang of pine.

Yugoslav bees turn out seven million pounds of honey a year; quantities go to Switzerland, Italy, Hungary, and Germany.

STONE AGE MAN HAD HIS SPA

"I want to drink Rogaška Slatina mineral water direct from its source," I remarked to the ubiquitous Putnik representative. Off we whirled to the springs whence comes that water, with a red heart on the bottle, sold in all restaurants and cafés.

I had no excuse for taking a "cure," but I none the less enjoyed drinking and splashing in springs so historic.

Romans knew the value of health waters, as did the Greeks before them. Around Vrnjačka Banja, another Yugoslav spa, have been found Stone and Bronze Age objects, indicating that even these primitive men liked to take their cure.

My stay in Ljubljana coincided with a visit from Dr. Kostich, who provided most of the color photographs which accompany this article. We joined forces and stalked the Slovene native at his work and play.

Buckwheat is a staple of diet among Slovene peoples. It usually is served after the manner of coarse hominy in the southern United States. But seldom does one see a buckwheat cake, U. S. size, in Yugoslavia; they are smaller. As for maple syrup, I attempted to describe our familiar sugar-from-trees, but I am sure the worthy Slav farmers thought I was romancing.

We were told of an important annual church festival taking place at the town of

Žeželj, and, dreaming of a large gathering in national costume, we traveled a hundred miles or more by car to reap a photographic harvest. A vast gathering indeed we found, but not a really colorful garb in the lot.

Around the base of an ancient church were pitched tents and booths, selling knick-knacks and picnic food. Spitted lambs sizzled over wood fires and were carved for the hungry multitude.

Village beaux jingled coins in the conventional black trouser pockets and bought cookies for their kerchiefed belles. These cookies are brightly decorated and shaped like children's toys; hobbyhorses, watches, dolls with lithographed faces pasted on the crust.

FRUITS OF SLOVENE LABOR

I was presented with prize samples of luscious Slovene fruits. All of Yugoslavia is plum-heaven. The local plum is a little smaller than the French and California types, but what flavor, what juicy flesh and bloom-covered skin! The plums not shipped as fresh fruit, these busy Slovenes and their cousins distill into a national favorite liqueur.

Dried mushrooms and hops are other large items of Drava export. The names of many Slovene villages, such as Hmeljnik, from the word *hmelj* (hops), show that the cultivation of this Jack-and-the-beanstalk vine has gone on here since early times.

Slovene women are industrious makers of lace, turning out "Cluny" and other familiar patterns.

MANY YUGOSLAVS LEARN ENGLISH

From Ljubljana to Zagreb I traveled in the compartment with a young English university man, director of Zagreb's English Club.

"Club for the English colony, do you mean?" I asked.

"No, for the natives. Every large city and many a small one have a society for the advancement of knowledge of the English language. Their clubrooms are meeting places for returned emigrants and local students. Look us up during your stay; you will make many friends!"

Of the many thousands who have wandered forth, part have gone to America, part to Australia and other British dominions. But to the older generation of farmers, every English-speaking country seems to be "America."

YUGOSLAVIA: WHERE ORIENTAL HUES SPLASH EUROPE



RICH BROCADES AND JEWELS ADORN THIS HAPPY COUPLE.
Their festive costumes, worn only on special occasions, may be 200 years old.



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Kodachromes by Konstantin J. Kostich

NIMBLE FINGERS EMBROIDER INTRICATE DESIGNS

She keeps her skin fair and soft with cosmetics made at home from century-old formulas.

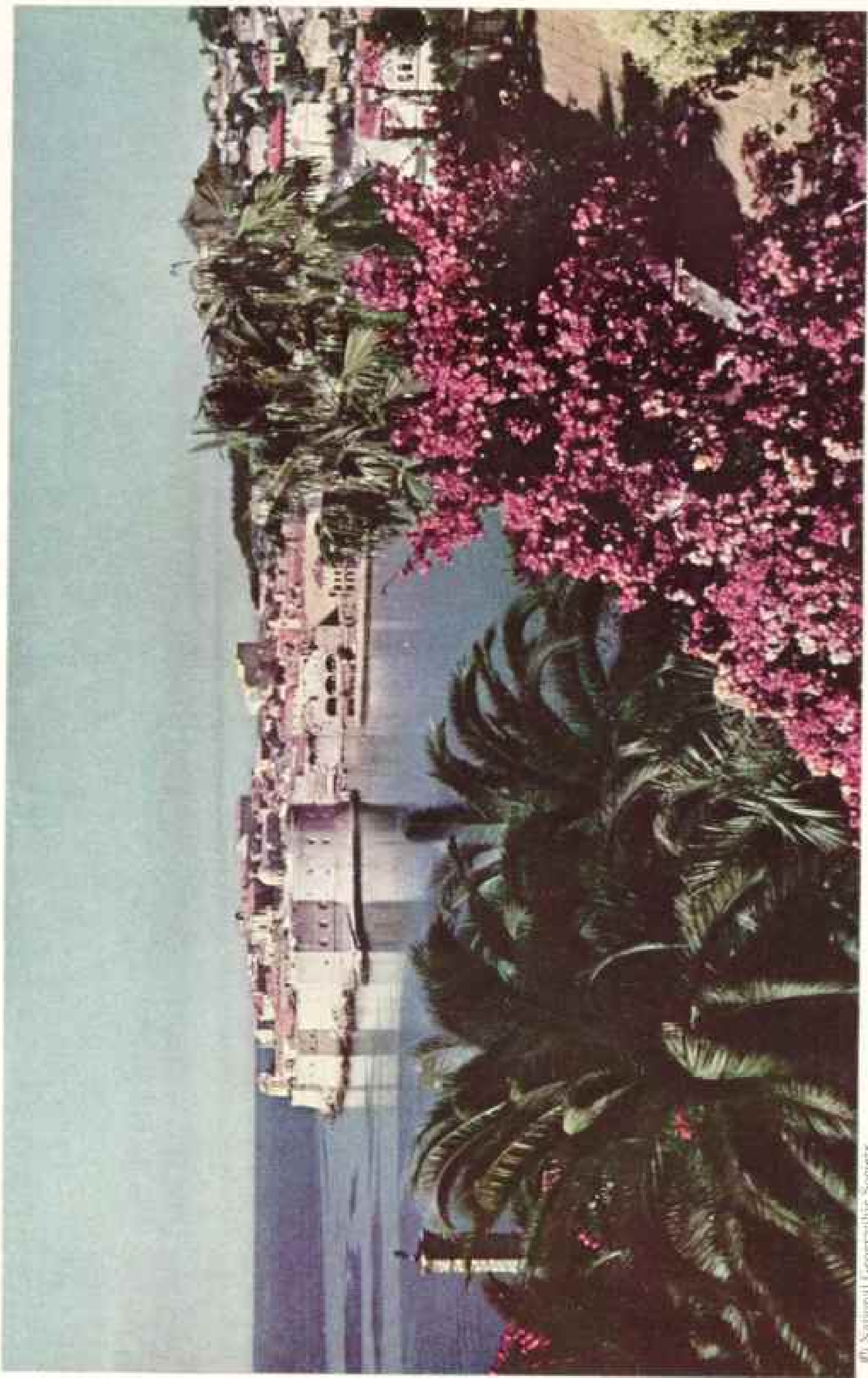


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Kodakrome by Konstantin J. Kostich

ON THE SHORES OF LAKE BLEĐ BLOSSOMED THE ROMANCE OF THE DUKE AND DUCHESS OF KENT

Before their betrothal, Prince George of England and Princess Marina of Greece were guests at the summer chalet of Prince Paul, chief regent of Yugoslavia, in this Alpine retreat. From the lake boat, propelled like a gondola, the village of Bled appears dwarfed by the giant backdrop of snow-topped mountains. Atop the crag broods a thousand-year-old castle.



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WALLED RAGUSA, BUILT UPON A ROCK, WAS A FORMIDABLE SEA POWER IN THE MIDDLE AGES

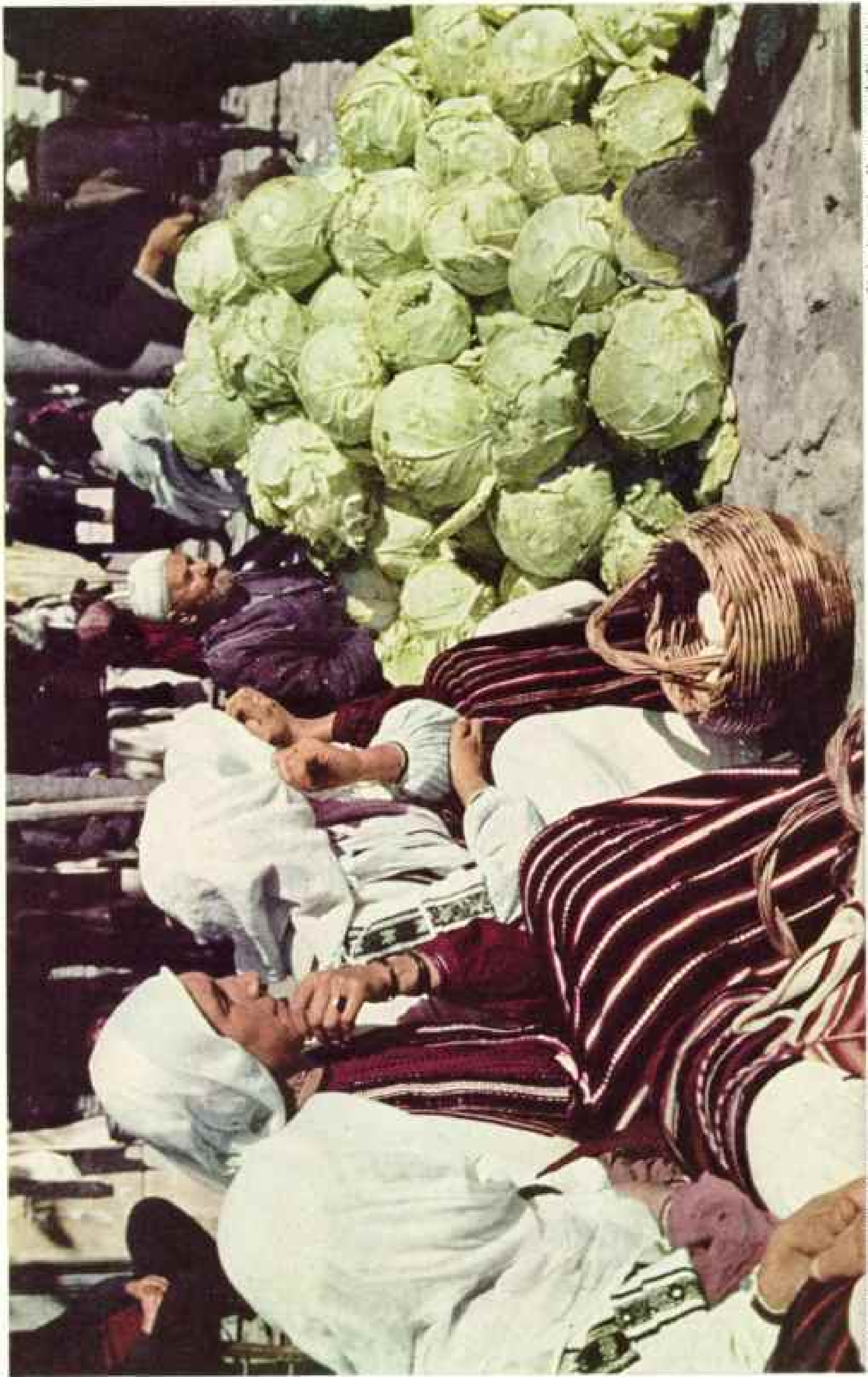
Kodachrome by Konstantin J. Kostich

The city-republic's ships sailed all the seas and were called "ragusians." English poets turned the name into romantic "argosy." Now known as Dubrovnik, this medieval Dalmatian town nestles in a tropical setting of cypresses, palms, and aloes, on an arm that juts into the Adriatic.



Kodachrome by Konstantin J. Kostich

© National Geographic Society
CROATIAN PEASANTS DISPLAY FRUIT, MILK, AND VEGETABLES ON LONG TABLES IN ZAGREB'S MARKET PLACE.



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CABBAGE IS KING IN THE MARKET CENTER OF THETOVO, ORIENTAL TOWN HIGH IN THE MOUNTAINS OF SOUTH SERBIA

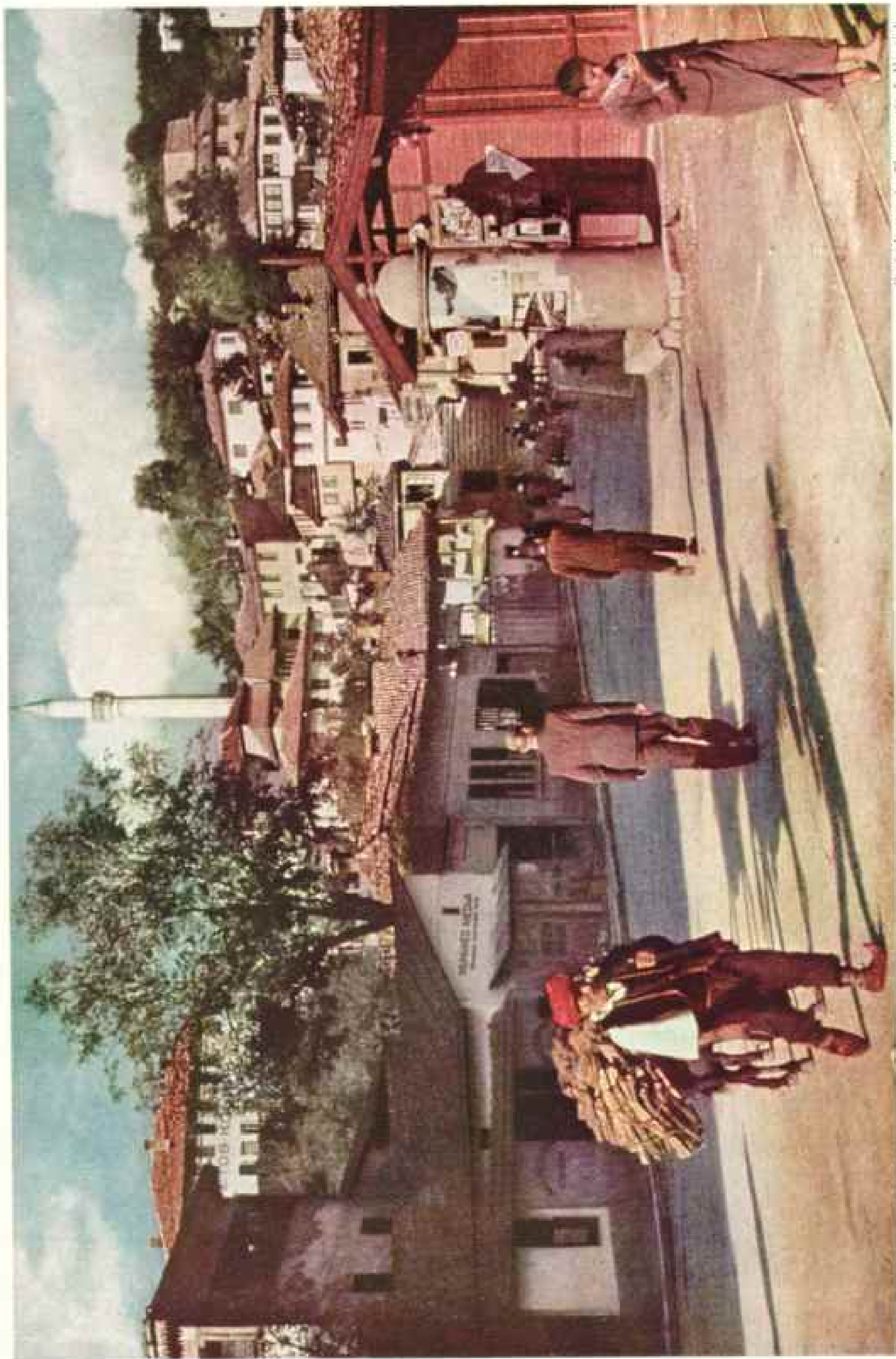


Photograph by Komtantin J. Kostich

STACKS OF HOMESPUN WHEAT DOWN COUNTERS IN ZAGREB AT WEDNESDAY MARKET

Near the equestrian statue of General Jellacic, Croatian statesman and hero, umbrella tents protect the hand-woven textiles. From the edge of the carvna dangle handmade shoes, with soft red leather soles and gaily embroidered aprons.

© National Geographic Society



Kodachrome by Konstantin J. Kostich

FIVE TIMES DAILY THE MUEZZIN CALLS THE FAITHFUL TO PRAYER IN SARAJEVO'S OLD MOSLEM QUARTER.

Christian suburbs surround the Oriental center with its many old mosques. A plaque recalls the tragedy of June 28, 1914, in this Bosnian city, that precipitated the World War. It was here that Gavrilo Princip, on the Serbian national holiday, assassinated the Austrian Archduke Francis Ferdinand and his wife.

© National Geographic Society



PIGEDONS PREFER THE GRAIN CORNER OF SARAJEVO'S MARKET

Perched atop the roofed fountain, they keep a weather eye open for spilled kernels. Here merchants also sell coffee from Mocha, Java, Hodeida, and Brazil. Later the beans are roasted and ground.



© National Geographic Society

Kodachromes by Konstantin J. Kostich

METALWORKERS HAVE THEIR OWN STREET IN THE ORIENTAL BAZAAR

Artisans sell their trays, pans, and jugs in Sarajevo shops where they are made. At prayer times workers leave their handicraft unguarded, leaning a stick across the doorways to signify "shop closed."



IT TAKES THREE MEN TO CONDUCT A WEDDING PROCESSION IN JAJCE

Leading the standard-bearer's horse is the "best man." At left walks the "master of ceremonies." The party is on its way to the Bosnian bride's home, to escort her to the groom, waiting at the church.

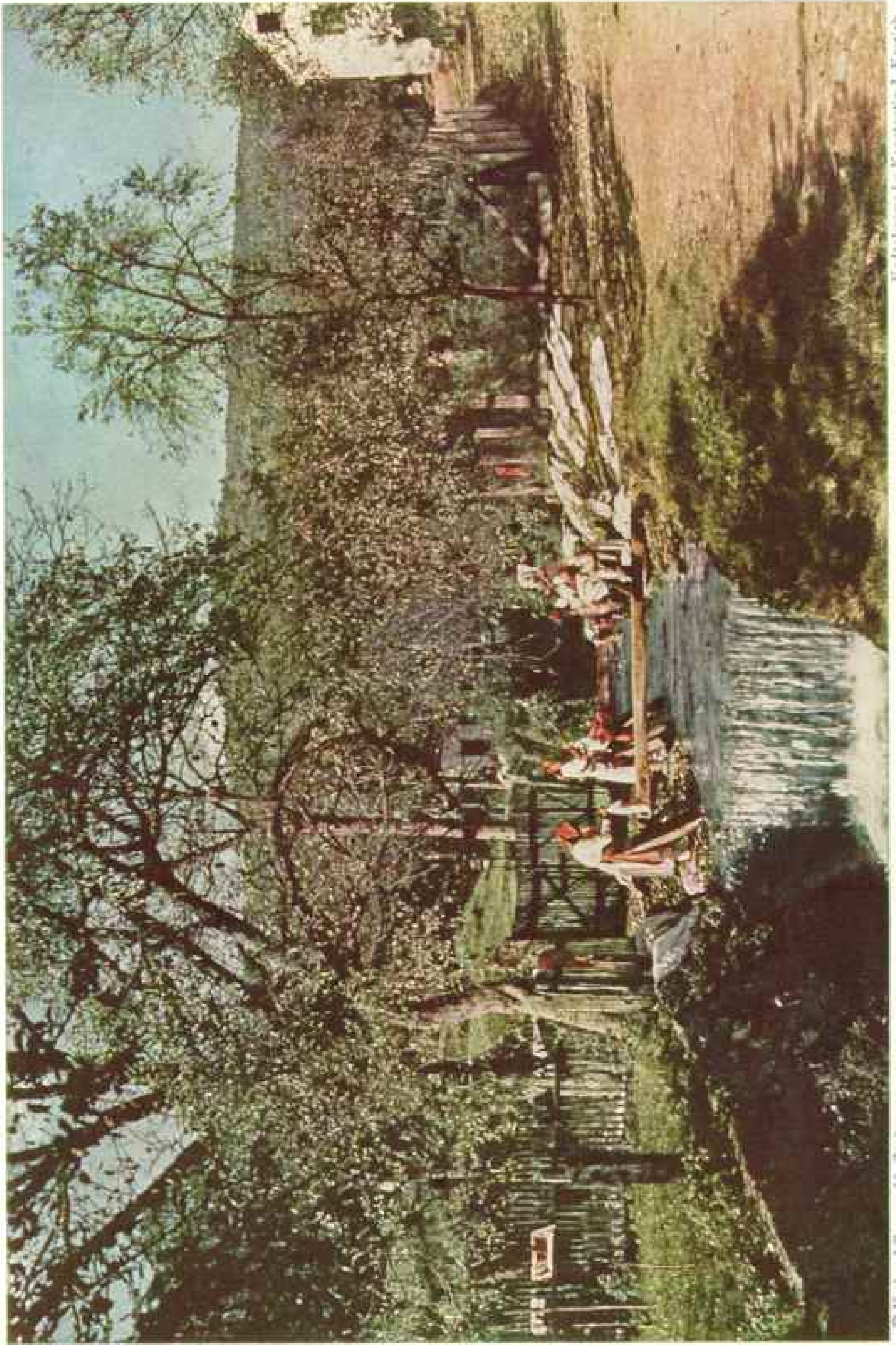


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Kodachromes by Konstantin J. Kostich

PLEATED SKIRTS ARE STIFFLY STARCHED FOR SUNDAYS AND HOLIDAYS

Summer or winter, Croatian countrywomen wear two or three petticoats beneath their embroidered linen skirts. Kerchiefs, silk or linen, they wind turban fashion around the head or tie firmly under the chin.



© National Geographic Society

CLEAR WATERS OF A MOUNTAIN STREAM KEEP HOMESPUN LINEN SNOWY WHITE.

On some Croatian and Slovakian farms sewing machines have displaced needlework, but electric washers are virtually unknown.

Kodachrome by Konstantin J. Koutich



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Kodachrome by Konstantin J. Kostich

FESTIONS OF SMALL-LEAF TURKISH TOBACCO GIVE VILLAGE HOMES A FESTIVE AIR

In fine weather this drying process is completed in about three weeks. Cigarette tobacco is grown extensively in southern Yugoslavia.



A SERBIAN MAID DONS A COIN-STRUNG HEADDRESS, NOW A MUSEUM PIECE.



© National Geographic Society

Kodachromes by Konstantin J. Kostich

FLOWERS BEDECK A BOSNIAN "LITTLE BROWN JUG" ON WEDDING DAY

Metal rims bind the wooden bowl, wrought by hand and carved with Yugoslavia's national emblem.

YUGOSLAVIA: WHERE ORIENTAL HUES SPLASH EUROPE



THEIR "BRACELETS" ARE TATTOOED ON

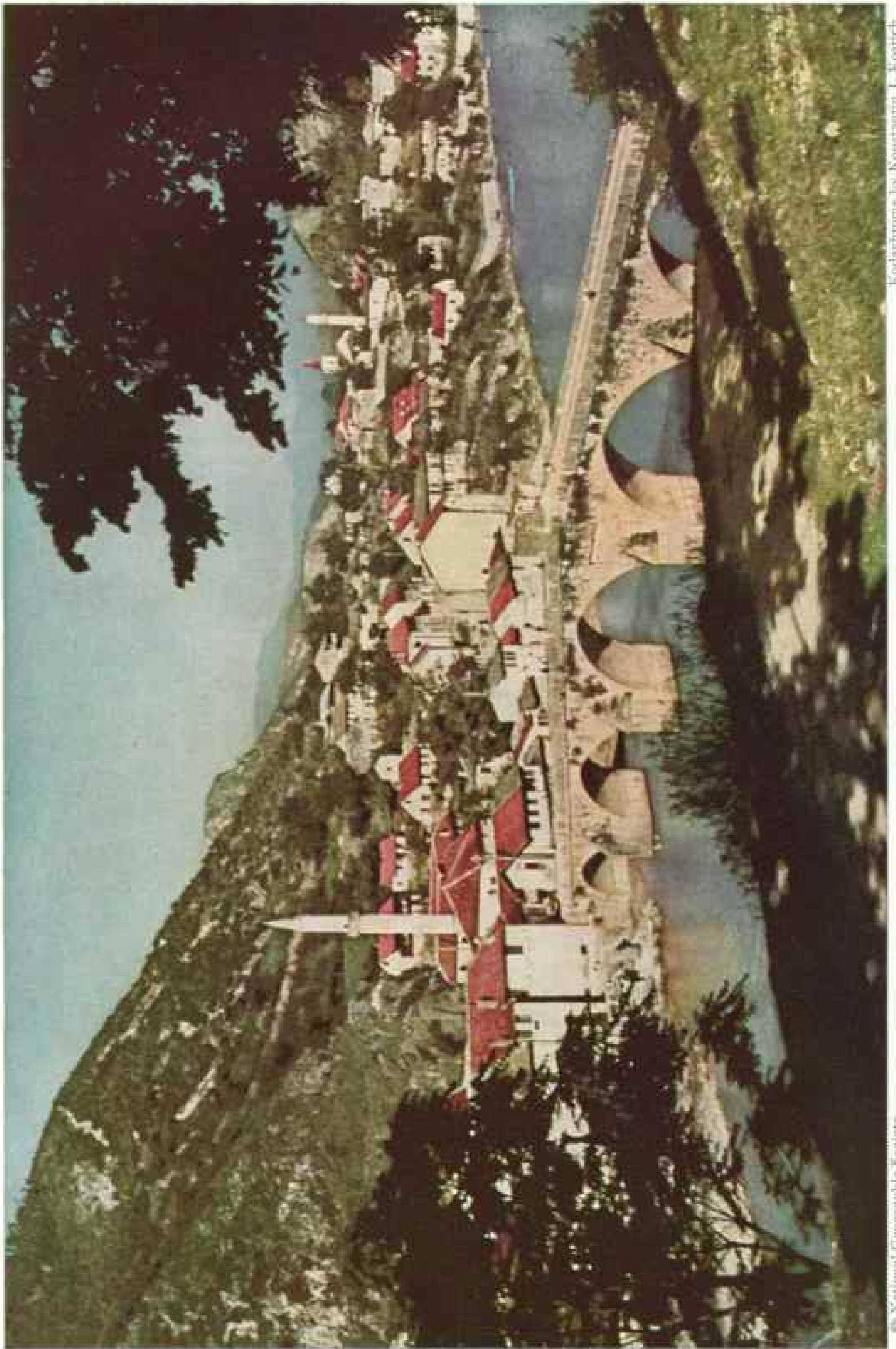


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GEOMETRIC PATTERNS ORNAMENT HER STIFF WOOLEN BOLERO

Handmade lace collar, over a linen dress, and a turbanlike kerchief complete the Croatian costume.



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MINARET-STUDDIED KONJIC, WITH ITS OLD MASONRY BRIDGE, IS A HAUNT OF TROUT FISHERMEN

Kodachrome by Konstantin J. Kostich



© National Geographic Society

FEATHER "HORNS" TOP HER CEREMONIAL COSTUME

She wears dalmatic sleeves, first seen in Dalmatia by travelers in the days of the Roman Empire. Since then they have become a part of many church vestments. Dowry necklaces and coins adorn the front of her blouse.



Kochchromes by Konstantin J. Kostich

THE FAMOUS "STEVE"

He is a real friend of the Anglo-Saxon traveling public. Montenegrin by birth, this former emigrant to the United States was for many years private driver and courier to the late King Nicholas of Montenegro.



LONG COVER-ALL MANTLES OFTEN CONCEAL LATEST WESTERN FASHIONS

When they appear on the streets of the Moslem town of Tetovo, women with modern ideas of style must conform to custom, so sometimes they wear shapeless robes that disguise the figure (Plate V).



© National Geographic Society

Kodachromes by Konstantin J. Kostich

BEFORE DAWN THESE COUNTRYWOMEN TRUDGED TO MARKET

"Praise Jesus," was their greeting to wayfarers they met on the road from their village homes. "Forevermore," came the cheery response. The women carried the baskets of fruit and vegetables into town on their heads.

I once heard, "Ja, I have two sons in America," inquiry revealing that one was in Australia, the other in New Zealand.

With upraised sword, Jellačić, 19th-century Croat hero, bestrides his bronze charger in the principal square of Zagreb, formerly Agram. Around the square modern office buildings contrast with the farmers' market at the center. Here, except in snowy winter months, alluring handicraft objects are displayed under giant umbrellas: dresses, blouses, aprons, table linen, embroidered by the farm folk. Erect, handsome, smiling in their brilliant costumes and rawhide slippers, they offer their wares at modest prices (Plates IV and VI).

In Croatia we have entered a region where historic costumes are universally worn.

"Come to the top of the Cathedral tower and regard the pattern of our city's life as it looks to the pigeons," suggested my conductor. From a balcony in one of the twin steeples of the restored Gothic cathedral we gazed across acres of city roof tiles to the wooded heights of Tuškanac, rich with oaks, chestnuts, beeches, and elms, glowing in the bright Indian summer sun.

Zagrebers revel in the joys of this accessible playground: students, artists with easels, nursemaids pushing perambulators, toilers weary from their chores. On week ends this is a scene of picnics, merry, orderly, leaving no trace of ash-can aftermath for the city sweepers with their twig brooms.

My companion sighs proudly. "The Hunchback of Notre Dame had, perhaps, a more impressive outlook from his eyrie, but has this not a quality all its own, this capital of old Croatia?"

A recent town ordinance had closed the upper reaches of the towers to the public except at certain hours; it had become notorious as a perpendicular lovers' lane.

THE YANKEE HAS NO MONOPOLY ON INVENTIVENESS

A club with a membership of only fifty is the Zagreb Society of Inventors. New gadgets invented by its members include a pocket umbrella, running shoes with retractable spikes, an automatic device for showing railway passengers the name of the next station, a 21-pound folding boat for three people.

Even in the field of legerdemain Yugoslavia is taking blue ribbons; a Zagreb magician won first prize at a Magicians'

Olympiad held at Munich, 16 nations competing.

The Croat choir last year toured Great Britain, winning high praise from English critics. And, proof that transplanting cannot kill the innate musicalness of the Croat, Chicago's singing society of ex-Croatians, Zora, organized 35 years ago, visited the fatherland not long since. Yugoslavia has 856 choral and other musical societies.

Frogs' legs and pheasant, endive salad and grapefruit, were partaken of by this hungry correspondent in the Palace Hotel restaurant. To this sophisticated meal was added a white wine from Vis Island, which smiles in the sun off Split.

"MID CRAGS THE EAGLE WEAVES HIS NEST"

Yugoslavia has three full-course universities: Belgrade, Zagreb, and Ljubljana; also a Faculty of Letters at Skoplje and a Faculty of Law at Subotica. One of the oldest historical traditions attaches to the University of Zagreb; its library, in a new fine building, houses some 380,000 volumes. Belgrade University has, as an important department, its Geographic Institute; Split has an oceanographical institute for marine biology.

Had my visit to Zagreb taken place a hundred years earlier, I might have been received by the then Governor of Croatia, Ivan Mažuranić, Yugoslav poet. His *Death of Smail Aga* is as well known to the South Slavs as *Hiwatha* to Americans. Typical and oft quoted is the couplet:

Mid crags the eagle weaves his nest,
For vain on plain is freedom's quest.

Goes another:

That race fear thou whose wont it is
With lightsome heart to die.

The extent of Austrian influence on the life and architecture of Zagreb is observable on every hand: baroque houses in the old town; the theater, a model of the Vienna Opera House; the huge cafés with their transients and their habitual patrons whiling away hours over one coffee and a dozen newspapers.

Despite warnings from conservative Zagrebians that "at such high speeds the vibration is disagreeable," I reserved places in the new Diesel-motor train which cuts the run to Belgrade from seven hours to four-and-a-quarter. I found it normally smooth.



© Relang from Thine Lions

HEADSTRONG!

Perfect carriage enables this Croatian woman to balance mortar box and shovel on her head with little effort. Many women of northern Yugoslavia are employed in the building trades.

On Knez Mihail Street, Belgrade's Fifth Avenue, sidewalk traffic was dense, vehicles few. Fences with advertisements surrounded excavations where the music of riveting machines sounded on new "skyscraper" skeletons. Visitors from the country in national dress seemed to outnumber the wearers of citified apparel. In and out of the open doors of Tata, Yugoslav 5-and-10-cent chain store, surged a mob that would have done justice to lower Broadway at a subway entrance.

Only a few minutes' walk takes one out of the rush and to the peaceful gardens of the Ministry of Justice, the Royal Palace,

and the Prince Paul Museum.

Across the Sava, spanned by a long suspension bridge, were the Exposition Grounds with another milling crowd. Special round-trip reductions brought the rural residents from the wide stretches of the land to see the wonders of the Second Annual Exposition.

My arrival was well timed, for it coincided also with the Ninth Balkan Olympiad, in which Albania, Bulgaria, Greece, Romania, Turkey, and Yugoslavia were competing.

A torchlight procession of assembled athletes opened the meet. A patron of the games was the young King, all-round light athlete himself, with a wicked wallop at putting the shot. Sport-minded Yugoslavia has

629 football clubs with 22,000 active members; 45 tennis clubs; swimming, rowing, fencing, skiing, cycling, boxing, and table tennis associations; a women's sport association with 28 clubs. This, for a country more than three-fourths composed of agricultural workers, where a generation ago the word "sport" was scarcely known!

TELEVISION TOWER ON ANCIENT FORT

Within the city limits is a park from which can be seen: the confluence of two giant rivers whose valleys serve as highways between the East and West; a hill from

which was fired the first blast of the greatest war in history; a fort, Singidunum, begun by the Celts in the third century B. C. and now bearing a television tower; a church rebuilt from a powder magazine; a zoological garden built into old Turkish fortifications, and a statue of Thankfulness to France, bearing a figure so streamlined that it seems ready to fly from its base.

RELICS OF THE ASSASSINATED KING

In the Museum of King Alexander Relics, also within the park, are assembled all his personal belongings: uniforms, a stuffed, sorrel-coated saddle horse, his favorite; writing desk with unfinished letter, pen, and pince-nez lying where he put them down when starting on the tragic trip to Paris in 1934. In an adjoining room is the limousine in which he was assassinated at Marseille, a model of a past decade, battered, roughly repainted, tires worn down to the tread. Upon its gray cushions are black-red stains from the ruler's mortal wounds.

Belgrade, rebuilt since the war, is again going through growing pains. A giant apartment house has been razed to provide a square in front of St. Mark's Cathedral. New streets are being cut, the Theater Square and Slavija reconstructed. On the deep-flowing Danube will soon rise a stadium, and across the Sava, on Ciganlija



© Relang from Three Lions

SHE BUYS BREAD BY THE STRING

The Croatian woman, on her way home from market, suspends twelve doughnut-shaped loaves from one hand, which also grasps a walking stick. Her other hand is left free to steady on her head the homemade sack, bulging with other purchases.

Island, another, each with a capacity of fifty thousand.

A dredging machine coughs and splutters, sucking up incalculable tons of Sava bottom and spewing them out upon a water-level area across from the city. Here on reclaimed land will rise an immense new residence quarter.

A CHANCE FOR NEW "HELLO GIRLS"

At the central bureau of the telephone company I found a service modern but sadly overtaxed. Eleven thousand subscribers were being served and thousands more were clamoring for service—a good index of business development.



© Douglas Chandler

STREET VENDERS DO A RUSHING BUSINESS IN "ROASTING EARS"

New-boys with hearty appetites are not the only ones tempted by the golden-brown corn, brought into the cities from the plains of Serbia. The author saw fashionably dressed Yugoslav women, priests, and merchants patronize the stands and then munch contentedly as they made their leisurely way down the street.

Formerly itinerant Gypsies with their trained bears were a familiar sight in the city, but no longer are they permitted.

The Belgrade airport is a busy spot. The last two years have seen strides in service which ties in with all the big trans-Europe airways. In summer the journey to or from London can be made in approximately a day.

My last afternoon in the capital I spent on the hill of Avala where soldier workmen were putting the last touches on the Tomb of the Unknown Soldier. To the east, the Danube rolled on its way through the Iron Gates, narrow canyon between the Carpathians and the Balkans, to keep its distant rendezvous with the Black Sea. In a few hours I would be in a sleeping car rolling southward to discover Skoplje and the land of the Serb Emperor, Stephan Dušan (Dushan).

This city of 80,000 (mostly Serbs, with Turks, Jews, Albanians, Cincars, and Gypsies intermixed), where Dušan was crowned almost 600 years ago, is the economic center of south Serbia, the Vardar Province. Dušan's palace is majestically imposed on

a hill across the river overlooking the thriving city.

Tsar Dušan at the height of his power was master of the Balkan Peninsula from sea to sea. Marching on Constantinople in December, 1355, he was seized with a violent "fever" and died in the arms of his men. Discouraged, they abandoned the expedition, only forty miles from the Imperial City. Had it not been for his untimely end, how might the map of Europe have looked today?

With my companion I inspected modern schools, the Faculty of Arts, and health stations; photographed in smelly Gypsy sections, and drank red wine as guest of rural mayors in huddled hill villages.

OPIUM PRODUCTION CUT

Skoplje is the center of a large opium-producing area. My visit was not at the season when the fields of nirvana-bearing double blooms were in flower, but my escort described the process by which the blossoms are slit through the heart with a knife. From the wound exudes a juice which yields the narcotic element. Production used to



© Reeling from Three Lions

MOSLEM GYPSIES CARRY SACRIFICIAL LAMBS IN A CHRISTIAN CEREMONY

They march around the church of Svati Naum Monastery on Lake Ohrid, in observance of an old custom. The monastery was built to the memory of the first Slavic monk, who later was canonized, and this annual festival is held in his honor (page 720).

be around 300,000 pounds a year; now it is cut to 200,000 through government restriction. The farmers are gradually being educated to substitute other crops.

In Belgrade I had met an American concert pianist who had toured the Balkan States for the last five years; she had just returned from a month in south Serbia, making recordings of folk songs and dance melodies. Now, in Skoplje and around the countryside, I heard for myself this wild music which is such a strange composite of East and West.

WITHIN SOUND OF FOUR WEDDINGS AT ONCE

Every Sunday marriages take place at various points about the city. The supply of brides seems inexhaustible. Gypsy bands provide the music, the "band" being sometimes one man thumping a drum, but more often two or three instruments. On my one Sunday in Skoplje, from the open windows of the Ethnographical Museum—five stories up, in the Chamber of Commerce Building—I could hear the weird strains of four different wedding groups.

What was once an important caravansary on the Europe-to-Orient trade route is today used as the lapidarium of the Museum of south Serbia—and likewise as a prison! Cutthroats, brigands, opium smugglers, looking docile enough under the eye of their guards, wandered about the inner courtyard lined with headless and armless marble sculptured figures.

Most of these caravansaries were constructed by the rich merchant syndicates of Ragusa during the 1,200 years that the tiny state existed as an independent republic (Plate III).

We lunched at the sidewalk café of the Hotel Bristol. Above me was the familiar cogwheel emblem of the Rotary Club. An amusing spot, this, to watch merchant, farmer, prelate, beggar, and sight-seeing traveler march by. At night this same street is a living tide of promenaders.

At native restaurants down on the bank of the Vardar one can order sheep's liver grilled on a skewer, or that delectable titbit of meat called *čevapčići* (small round hamburgers), which the French officers during the war liked but couldn't pronounce. For

dessert you can buy crystal-sugared figs, dates, plums, and grapes from sellers who wander in and out with trays.

LAKE OF LIVING FOSSILS

On a journey to Ohrid Lake, once cultural center of south Serbia, I spent a night in a hostel of the monastery of Saint Naum (Svati Naum), close by the Albanian and Greek frontiers (page 719). Rooms are available here for travelers and Alpinists who wish to scale the bleak, towering Galičica Mountains. One apartment belongs to the Royal Family. King Alexander used to come here with his Queen for an occasional fortnight's retreat.

The monks spoke only Serbian, but my language difficulties were solved by a young theological student from the Dalmatian isle of Korčula who was taking a rest cure here. We went out with the fishermen in their primitive, blunt-nosed boats, and saw them haul in their nets laden with the famous Ohrid fish (Plate XXII).

Lonely Ohrid is 18 miles long, and has a depth of nearly a thousand feet. It never freezes. Extraordinary is the transparency of the water and the fact that it contains "living fossils," species of prehistoric fish.

AND NOW TO FATEFUL SARAJEVO

As I retraced my way to Bosnia, the route took me past Zenica. Here in 1937 Krupp added some machinery to a steel plant. Formerly rails used for Yugoslav railroads were bought from Poland; now Yugoslavia rolls its own.

The journey after Čačak becomes a game of hide-and-seek, with 128 tunnels on the line. At stations white-fezzed boys with live chickens under their arms shrilled the merits of their wares through open windows. Children tended flocks of the strutting turkeys which Yugoslavia exports for John Bull's Christmas dinner—last year some 1,500 tons of the festive gobblers.

Scattered over wide prairies were cattle, goats, sheep, and the misanthropic water buffalo with green-white eyes like saffras lollipops; sunflowers, acacias, broad vistas of maize, bunches of small peppers spicing the picture with their mandarin red; pale squares of drying peat, brickyards with geometric piles of brick; haystacks on stilts or sitting halfway up the trunks of trees for protection against flood.

Finally came descent into the green salad

bowl where Bosnia's big city lies (Plates VII and VIII).

Sarajevo has come to mean "Castle in a Valley." The name is variously pronounced, the *j* always like *y* but with syllables receiving different stress. The Bosnian himself accents the first, Russians the second, Germans the third. Take your choice!

The skyline is punctured by 88 minarets, some sixty of which are today in use (Plate VII). Through the bazaars and on the pigeon-rainbowed market square surge masses in which the fez predominates. But, curiously enough, many types of headgear which at superficial glance would appear to be Mohammedan are not; these are the astrakhan caps, felt hybrids, and colored cloths, wrapped turban-fashion, worn by Christian countryfolk.

At the time of my visit every mosque flaunted a green flag. It was a time of local celebration, honor to a patron of the Faith who had built the Great Mosque; soon would begin the Ramadan with daytime fasting, nightly feasting, intensive thanks to Allah.

Pausing to buy a Paris paper at a cigarette- and news-stand by the big mosque, I saw a smile and two Nordic-blue eyes, surmounted by a fez rakishly set on a mop of blond hair. Ismet, the Moslem proprietor, greeted me in breezy, colloquial American-English. Two minutes later I was seated in his cramped little cubicle drinking scalding syrup-of-coffee from thimble cups.

Ismet's knowledge of world goings on would do credit to a metropolitan daily's editor-in-chief. He knows the middle names and inside histories of outstanding personalities. Many world celebrities who have visited Sarajevo call Ismet friend. His correspondence is enormous.

"... And that is what we Mohammedans think on the subject, by gosh!" expounds Ismet.

PLUM PICKERS AND THEIR VEILS

He sought to gain for me permission to witness a dancing dervish ceremony; he waited for hours on a bridge for the chief Hodja to pass. But that disciple of Mohammed refused; outland journalists, previously admitted, had laughed at the sacred rites.

The Putnik chief in his little German car piloted me on roads that looped like tangled ribbons above incredible domes. On the

heights we met a group of half-grown Moslem schoolgirls, off to while away a holiday by picking plums. In their baskets they bore long, striped cotton over-dresses with veils attached. "We shall wear them as we return through the town; it would be undignified for young ladies of good Mohammedan families to carry baskets of fruit through the streets and permit themselves to be recognized."

Veils are thinner today, as the point of complete emancipation approaches. Many face coverings are of such coarse mesh that the features are clearly visible. Some veiled ladies promenade in conventional dresses that might be out of Paris or New York shops; more generally, for street appearance they don sleeveless cotton over-mantles with attached veil. The material is sometimes striped, sometimes checked, often plain. Gray and blue predominate.

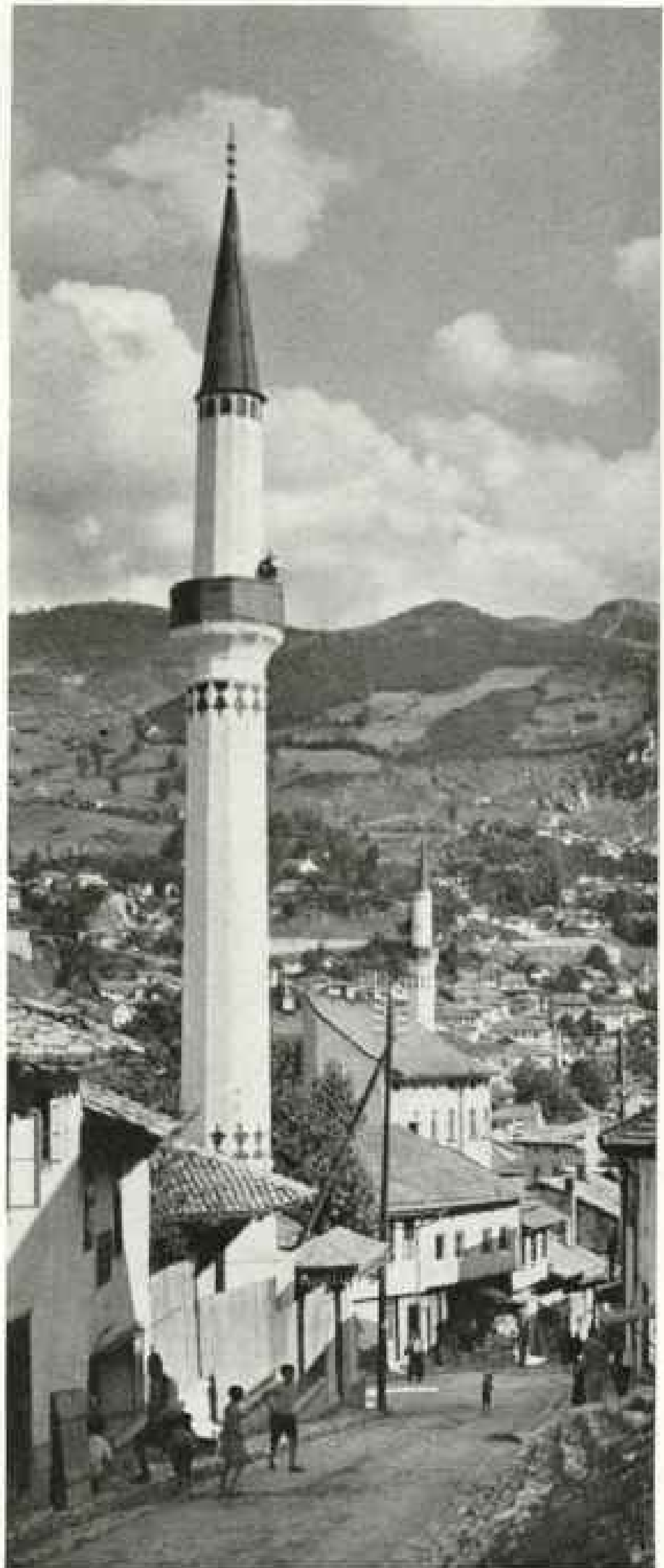
At the corner where the Archduke Ferdinand was assassinated stands a photograph store with gay advertisements for films and cameras. Into the wall above the show window is set a dark marble plaque with the inscription:

ON THIS HISTORIC SPOT GAVRILO PRINCIP ON ST. VITUS' DAY, JUNE 28, 1914, PREVISIONED OUR FREEDOM

Across the river from this fatal spot farmers peddle wood and charcoal from their loaded carts. Sharpening saws, playing on the one-stringed *gusla*, they while away the minutes between customers.

In the School of Arts and Crafts fez-topped lads and men labored at making coffee sets, cigarette boxes, vases, bracelets, and the like. Designs were applied by chasing, damascening, and the inlay of silver wire on wood. They seemed oblivious of our prying eyes and lenses. The English word "Lift" in Cyrillic letters on the elevator entrance strikes an odd note.

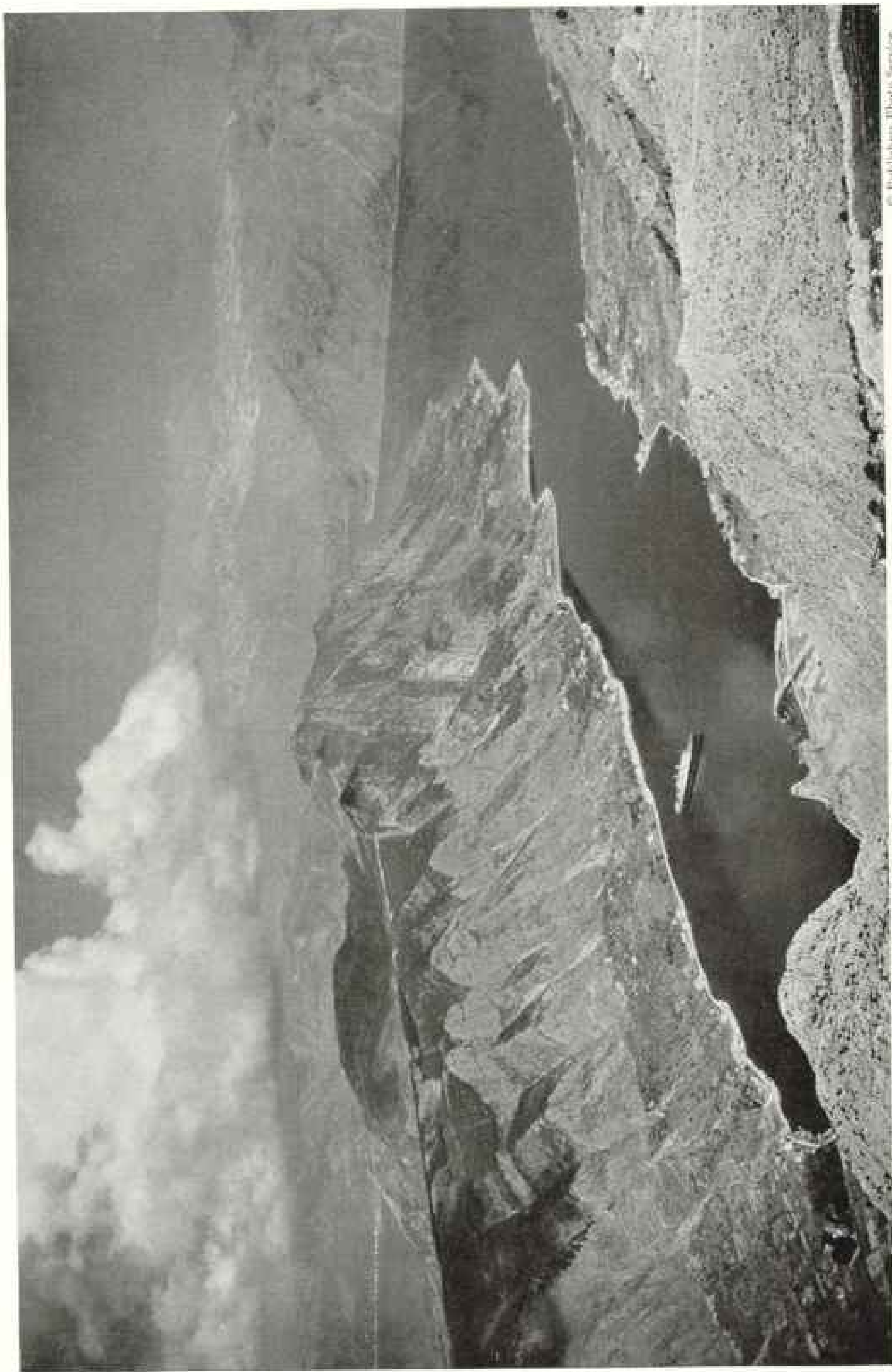
The Serb-Croat language permits an extraordinary richness in word play and trick phrases, since many words of identical spelling



Photograph from Douglas Chandler

MOHAMMEDANS PUT ASIDE THEIR BUSINESS WHEN THEY HEAR THE MUEZZIN'S CRY

From the balcony of Sarajevo's numerous minarets rings his high, wailing call. When it is heard, Moslems troop into the mosque for prayers. Before entering, they park their wooden or leather shoes in a rack outside the door.



© Publishers Photo Service

IN BREATHTAKING PANORAMA THE GULF OF KOTOR AND ENCIRCLING CLIFFS SPREAD OUT AT THE BASE OF A 5,700-FOOT PEAK

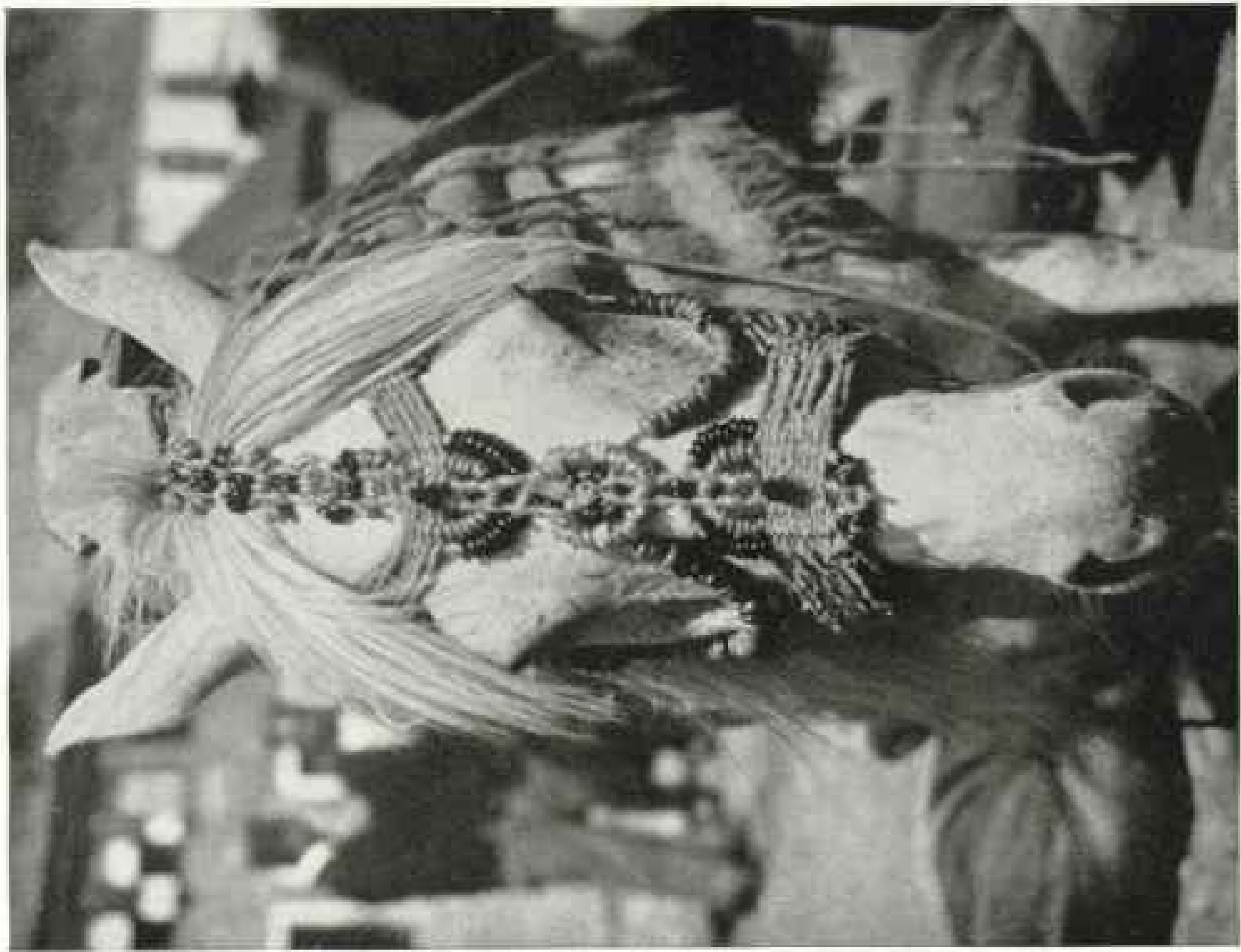
Like a Norwegian fjord, this celebrated inlet of the Adriatic Sea pierces the Montenegrin mountains and expands into five broad gulfs, united by narrower channels. The town of Kotor nestles on the shore at right. Across the gulf vineyards creep up the hillsides. Riding at anchor is the *S. S. Rotterdam* (page 726).



© Douglas Chapman

DALMATIAN FARMERS "READ" THE PICTURES OF THE GEOGRAPHIC

Round, visorless caps of the men were adapted from the fez. Girls wear their hand-embroidered yokes and girdles over spotless dresses of white linen.



Photograph by Schorn from European

HEADRESS IMPROVES DOBBIN'S LOOKS AND PRETTENS FLIES

At one toss of his head, forelock and beardwork combine to chase off the pests. Montenegrin farmers for generations have thus adorned their horses.



© Douglas Chandler

A SCORE OF ICE-CREAM CONES PAID FOR THIS PHOTOGRAPH

The author passed a Sarajevo primary school just after classes had been dismissed. "Picture, picture!" shouted the children as they spied his camera. After posing, they were overjoyed when Mr. Chandler invited them to an ice-cream parlor.

have totally different meanings through accenting. Example: "Gore gore gore gore," which is to say, "Up there the mountains are burning more strongly."

Serbo-Croatian is a beautiful language; once at a Pan-Slav congress it was voted the most harmonious and expressive of Slavonic tongues.

As the sun drops to the rim of the salad bowl, I mount to the sky meadows above the city, where sheep graze and turbaned farmers lead their pastoral life as if removed miles from the hubbub of the mart.

AN ICE-CREAM PIED PIPER

Returning through the upper reaches of the town, I chance to pass one of the new elementary schools just as the mixed-grill of fez-capped and Christian "small fry" are being let out.

"Picture, picture, picture!" cry shrill, insistent voices.

Dutifully I snap shutters as commanded, then ejaculate one of the few Serbian words I know, "*Sladoled*."

That is ice cream.

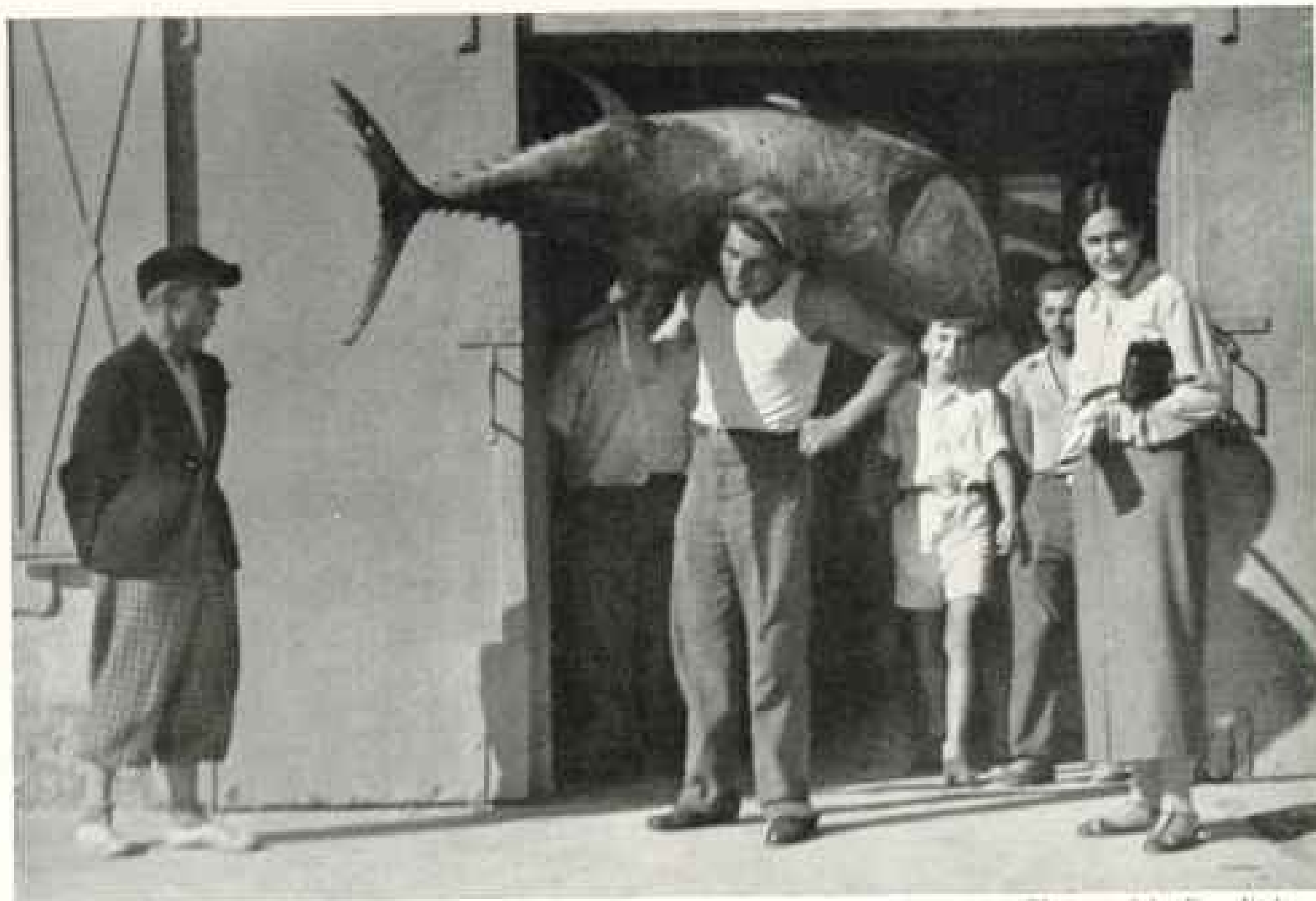
The urchins interpret it as intended, an invitation! I, the Pied Piper, continue

along cobbled ways followed by a grinning army, until we find a shop with the sign *SLADOLED*. The tumult and the shouting are silenced by ice-cream cones clapped over twenty-odd little muzzles.

The director of the National Theater of King Peter II, a Cambridge graduate, showed me his program for the coming year, with standard works of the western European and English playwrights predominating. The theater is being rebuilt, tripled in size to meet the growing demand of a town and country public.

Up to the door of the Hotel Europa drive luxury motor coaches, dusty, triumphant, bearing such route signs as "Berlin-Split," "London-Dubrovnik," and even "Oslo-Adriatic." Such runs may cause no surprise to an American, accustomed to 3,000-mile coast-to-coast bus hops, but to the European the distance from Oslo to Dubrovnik seems a sizable jaunt.

The Yugoslav stretch of the International London-Istanbul Highway is being rapidly put through; an Adriatic motor road already reaches from Sušak to Šibenik and will be extended to connect with existing roads the full length of the Dalmatian



Photograph by Erno Vadas

AN ADRIATIC FISHERMAN SHOULDERS A 350-POUND CATCH

His prize, a tunny, is not unusually large; sometimes these big members of the mackerel family grow 10 feet long and weigh 1,500 pounds. Lookouts watch for schools of the giants swimming shoreward. When they are sighted, men in boats encircle them with long nets. These valuable food fish are called "horse mackerel" in the North Atlantic and "tuna" on the Pacific coast.

coast. Plans have also been made for a Dubrovnik-Belgrade highway leading to the International thoroughfare.

Perhaps the greatest transformation at two ends of a tunnel is that to be experienced in passing through the tube between Bosnia and Hercegovina. One leaves a world of lush green and emerges into a moon-dry sterility of pale-gray rock known as the *karst*.

"How can such country as this sustain human life?" one asks. For answer, look at the countless narrow ledges of earth supported by rock terraces; at the silt holes, sometimes no larger than the dance floor in a night club. The temperamental rivers bring new and fruitful earth to these miniature valley-bottom farms when they do their annual disappearing act. And here, with intensive cultivation, the karst-land farmer earns a bare existence.

CATCHING SNAKES FOR A LIVING

A supplementary means of livelihood is that of catching the deadly giant viper. A chemical firm at Široki Brijeg offers a half-dollar for each snake with the poison

gland intact. The catching, a ticklish job, is done with a cleft stick or with a long, scissorlike trap on the principle of a mole trap. Vaccine manufacturers extract the poison and employ it in the making of snake-bite serum.

The visitor who has once walked over the moat and through the entrance gate of Dubrovnik (Ragusa) is forever a victim of its fascination (Color Plate III).*

The sun has to climb high before it clears the rampart of hill back of the town; then for a bewitched interval the walls and towers are rose gold. Laurel, myrtle, and blackish evergreen shrubs fraternize with militant agaves and cacti. A breeze exhales lightly from the land until noon, then turns and is inhaled again into the lungs of the sterile hills.

By noon your shadow directly encircles your feet on the flagstones of King Peter Place. Within the Sponza Palace courtyard an orchestra is playing *Balkanophonia*; the crowd of townspeople and travelers is swelled by laughing students.

*See "Dalmatian Days," by Melville Chater, NATIONAL GEOGRAPHIC MAGAZINE, January, 1928.

Dubrovnik has outgrown its handsome marble high school; while another is being built, the classes are taken in relays.

New hotels are going up; old boarding houses are being enlarged. The Gradska Kafana, for all its big halls and balconies, overflows at popular hours. The Yacht Club has a long waiting list.

But in spite of all growth and innovation, this Venetian masterpiece lies inextricably in the grasp of the past. Go into the apothecary shop in the Franciscan Monastery; a holy brother will sell you a tube of the latest sun-tan oil, but if he happens to murmur in your ear that St. Francis of Assisi was the founder of this institution, the color of your own particular epidermis suddenly loses importance.

SHAKESPEARE IN THE CROATIAN TONGUE

A group of actors in repertoire came down from Cetinje. Curious to hear the Bard in Croatian, I chose *Richard III*. On the program it appeared as: "Ričard III—Tragedija u pet činova—Viljem Šekspir." The intoning of the lines was sonorous, euphonious.

Renting a canoe, I paddled to Lokrum. On this rounded, darkly wooded islet the Lion-hearted Richard was once stranded. To Napoleon, to Maximilian of Mexico, to Hapsburg Rudolph, successively it has belonged, but now Yugoslavia has made here a haven where sick children mend feeble lungs and rickety legs.

"Telephone call for you, honored geographical guest. The professor has the trip all arranged, will call for you at sunrise tomorrow." Old Kati, puffing up the *pension* stairs, prepared me for departure.

Yugoslavia has created a new doctorate: Professor of Tourism. Involved in the attaining of this degree are many subjects which concern the traveler: knowledge of languages, geography, history, ethnography, and the like.

We were off with the lark, on a four-day loop through Montenegro to the Albanian frontier and back. The first detour brought us to Trebinje, in the tenth century named by Constantine Porphyrogenitus, as "Terbunia," seat of a Serb principality. In the harem of a former Bey we heard intimate details of Moslem life as it was lived within these walls. In the guest book were signatures of scores of celebrities.

On we pressed to the "Valley of Beautiful People," as Konavle is nicknamed, and

with reason, too. Where else can be found a people so scrubbed, tastefully costumed, dignified, and amicable as the godly Konavljani? "Here is racial purity for you," one comments in viewing their long, slim bodies and regular features. Here every day seems holiday.

ROMANCE OF VANISHED CITIES

The Gulf of Kotor was in one of its frequent frowning moods. Four other visits I had made in past years, and by coincidence I have never been blessed with a sunny welcome (page 722).

But, under dark skies or bright, the region has unearthly fascination. "The natives tell tales of cities engulfed in some dim past; their nets bring up carved fragments of marble. One fisherman even claimed to have taken from his net a beautiful silver cup, but, when asked for the proof, stated that he had melted it down and made icon lamps of the metal."

So writes a Yugoslav author, who asserts he has seen the dim outline of palaces in the depths.

In the Gulf of Risan, legend says, lies the city of Rhizinium for which the Gulf of Kotor was once named. This city was the capital of the Illyrian Queen Teuta. The traditional reports go on to say: "On the day of Christ's crucifixion, owing to an earthquake the city was covered in darkness; the sea closed over it so that even today it lies hidden." These legends stir the imagination.

From Kotor town over the cliffs of Mount Lovćen winds the breath-taking serpentine motor road into Montenegro, eagle's nest of stone. The occupants of this arid corner of Yugoslavia are today being taught that manual labor, which they once regarded as "women's work," is not beneath the dignity of men.

PRIDE THE KEYNOTE OF CHARACTER

"You ask about the Montenegrin character," mused the Cetinje Commandant of Gendarmerie when we later sat looking out across the ranges to Scutari Lake (Skadarsko Jezero). "The keynote, as ever, is inflexible pride. A perfect illustration is the trouble we have in counting off with soldiers in line formation. Supposed to count 'one, two, three, four,' and so forth, the number two man refuses to say 'two.'—'I am by the first' is as far as he can be induced to go in inferiority."

We visited the house at Njegusi where



Photograph by Erno Vadas

IN THE RUINS OF DIOCLETIAN'S PALACE TOWERS A STATUE OF A CROATIAN BISHOP.

When the Roman ruler gave up the throne A. D. 305, he returned to his birthplace on the Adriatic, to live on his elaborate estate at Split (Spalato). After his death the buildings crumbled, but 300 years later refugees from a near-by devastated city established their homes within the walls. The 50-foot bronze figure of Gregory Ninsky, an early leader of the Croatian Church, is the work of the famous Yugoslav sculptor, Ivan Mestrovic, and was erected only recently.



© Douglas Chandler

LUSCIOUS GRAPES DYE HER LEGS A RICH PURPLE

By the time the 16-year-old Dalmatian girl two-steps over a few score bushels of the ripe fruit, she will be tinted up to her knees. She seldom misses her footing in this old-fashioned wine press, although the small, round floor soon becomes slippery from the juice.

King Nikola, last Montenegrin sovereign, was born. The court was simple in his day; from a balcony in Cetinje he did most of his ruling. Every man had the right to come and make personal petition to his monarch.

So isolated from the world, its wars, and its changes is Montenegro that even in recent years farmers have come demanding permission to talk with "the King," knowing nothing of united Yugoslavia and its youthful King in Belgrade.

I was shaved by a Cetinje barber over whose door hangs the sign "Formerly Bar-

ber to the King."

A swift descent from Montenegro by a different route brought us out by the walled island town of Budva, where builders were toiling on the construction of a large modern hotel. The coast from Kotor to Albania, formerly neglected from a sight-seeing standpoint, is about to enter into a period of boom.

Pausing for a snack at Stari Bar, I heard a bell being rung through the streets. "An employee of the railway to Lake Scutari," explained the professor. "He rings for ten minutes before the departure of the train to notify prospective travelers."

As we munched our cheese and bread, the landlord told of a local farmer who, filled with *rakija*

(brandy) and rashness, bet that he could go on foot from Bar to the end of the line (some 15 miles of zigs and zags) more quickly than the train. He climbed straight up and won by a margin of minutes.

OUTLETS ON THE ADRIATIC

"More ports; that is what Yugoslavia needs!" The Mayor of Split was positive on that point. "Our thousand-mile coast has only four railway outlets to the sea—Sušak, Split, Metković, and Gruž-Dubrovnik. Steamers have to wait their turn to load and unload. The new railway line to

Split will increase the crowding."

An extensive program of supplementary building is being carried out; in the next months will rise additional warehouses, silos, bigger and more muscular cranes.

A DREAM SHORE IN A WAKING WORLD

From Split as a base, I journeyed, sometimes by boat, sometimes by automobile, to infinitely varied fishing villages and resorts which dot the coast.

If you are in a hurry, there are the express ships; for leisurely cruising you can take a combination freight-and-passenger steamer out of Sušak which makes nearly 30 stops on its way to Dubrovnik (Ragusa), Crikvenica, Novi, Krk, Rab, Pag, Šibenik, Trogir, Hvar—intriguing Slav names, gay and somber, bustling and sleep-walking anachronisms in carved stone, the noble touch of Venice implanted on a civilization which is Slav to the bone.

NATURE IN PRANKISH MOOD

Along this wonder coast Nature has played some of her unbelievable pranks. On the island of Rab is a spring the source of which is a stream from the mainland; under the salty sea it comes through some magic tube and bubbles to the surface, sweet and fresh, for the Rabites to quench their thirst.



© Relying from Three Lions

THE HAND THAT ROCKS THIS CRADLE ALSO MUST PAINT IT

Countrywomen inspect a model for sale in a Sarajevo timber market. If they find the rough wood crib "baby-worthy" they will buy it; and decorate it in gay colors at home.

Near Slano is a cave from the mouth of which blows unceasingly a gale of wind; trees near its opening bend and shudder under its steady force.

Mystery island of Mijet! Forty years ago the natives, during one entire year, were terrified by gigantic boomings as of underground cannon. Austria made preparations to evacuate the population, and suddenly the noise ceased. Viennese scientists came, studied, disagreed about the cause. Was it the anger of a pent-up earth monster, or air concussions caused by the sea passing in and out of some vast bottleneck cave?

Mljet, earlier "Melita," is mentioned as long ago as 300 B.C. In Roman times it was used as a prison for political exiles. In 1370 took place a heated controversy among historians and theologians as to whether St. Paul was wrecked here or on Malta.

As one approaches Šibenik from the sea, all that is visible to indicate the existence of a town is the magnificent sweep of the new King Alexander High School perched on the hill, with its white marble arms reaching out like a guardian angel of learning.

Šibenik itself is completely obscured by the pine-covered outlying land formation which guards its large harbor, with an entering channel looking scarcely broad enough to admit a full-sized ship. Yet here a fleet could conceal itself.

Within Šibenik's harbor is an aluminum plant of the Balkans; ore is shipped down from the mines of Ljubljana and here refined into ingots.

WHERE A "DEAD MAN" ROBBED A CHURCH

At Omiš I sampled the sparkling wine with aroma of roses for which the region is noted.

Omiš was once headquarters of marauding freebooters. Under the high altar of the church was found not long ago a treasure of ecclesiastical objects of Italian design. They had been acquired long ago by a bizarre stratagem from a church on the Italian coast across the way.

A crew from an Omiš privateer went ashore at nightfall, carrying the rigid body of one of their comrades. They begged that the body might lie in the church overnight.

The priest granted permission. In deep night the comrade "came to life," opened the door, admitting his accomplices, and made off with the booty.

The first officer of the *Zagreb* invited me to visit on the bridge with him as the ship approached Korčula. "Black Corfu,"

the ancient Grecians called it, because of a resemblance to the lovely Greek Ionian island.

A CLOUD CAP MEANS WET WEATHER

"That mountain at left is my barometer on this Split-Dubrovnik run," said the officer. "When it wears a heavy cap of cloud it's a sure bet there's wet weather at hand."

He pointed to the bare peak across the "canal" from Korčula. "This 'Monte Vipera' is overrun with jackals, and Korčula, too. When British men-o'-war anchor here jackal hunts are organized for the officers. Korčula has another exotic creature, the mongoose, brought over from Mljet, which imported the animal from India two generations ago. Korčula boys trap 'em and earn good money."

His discourse on local zoology was interrupted by arrival at the landing place. Farm women handed up baskets loaded with ripe figs and grapes by means of long hooked sticks.

I had fallen in love with this island town five years before. I felt anew the same infatuation.

KORČULA MAKES A CAPTURE

In the remaining few days of my allotted six weeks I revisited old scenes of delight: Lumbarda with its blue-gunwaled boats, drying nets, and prolific grapevines; Vrnik, islet which, from ancient days until today, has supplied stone to buildings in most world capitals; Velaluka, fishing harbor and beloved resort. I saw brown-legged laughing girls stamping grapes to pulp; donkeys taking surreptitious sips of the nectar while juice-filled skins were being tied to wooden saddles.

Then, one bright day, passing a house in Korčula town, an ancient house from the top story of which ran a covered bridge to a 15th-century tower, someone whispered in my ear, "That house can be bought." I hesitated, and was lost.

Now I must learn Croatian.

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Autacolor Photograph by Rudolf Balogh

A TISKET, A TASKET—APPLES FILL HER BASKET

Threads of silver and gold are woven into the headdress of this Slovene girl, who poses in the barnyard of her father's farm near Tržič, dressed in all her finery for the photographer. Harness for the heavy draft horses hangs on the barn wall.



Agfa-color Photographs by Rudolf Dulong
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PORTRAIT OF A YOUTHFUL TILLER OF THE SOIL



© National Geographic Society

ABC'S ARE TWICE AS HARD FOR YUGOSLAV SCHOOL CHILDREN—THEY MUST LEARN TWO ALPHABETS!

Airfactor Photograph by Ratholf Balogh

Serbian and Croatian, now part of the same nation, speak the same language, but they use different characters when they write. Neither could read the handwriting of the other, so now in this village school near Beograd (Belgrade) both alphabets are taught. Three pupils occupy each large desk in this modern classroom. Girls sit up front and boys prefer the seats farthest from teacher's desk, just as they do the world over.



OLD CROATIAN HOUSES HAVE BECOME FIXED PARTS OF THE LANDSCAPE
Comparatively modern is this dwelling of wood and thatch, built only two centuries ago. Some farm buildings now in use in this area are more than 500 years old.



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Agricultural Photographs by Rudolf Hultsch

STRINGING AROMATIC TURKISH TOBACCO IS A TEDIOUS TASK

One by one, the small leaves are pierced and the "lestoons" are hung on the walls, to dry a rich golden color in the sun (Plate XI). When cured, the leaves are graded and taken in baskets to the warehouses.

YUGOSLAVIA: WHERE ORIENTAL HUES SPLASH EUROPE



© National Geographic Society

Agricultural Photograph by Rudolf Dulogh

BENEATH A CANOPY OF DRYING CORN ELECTRIC LIGHTING SUPPLIES A MODERN TOUCH

From the old second-floor store loft the Slovene woman brings a basket of apples. They will be sold in the market at Tržič, nearest town. Switches beside the door show that farms are being brought up to date, but some of the implements and tools are centuries old. Dyes for woven goods are made from saffron and juices extracted from willow bark and wild pear roots.



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Articolor Photograph by Harold Halingh

EVEN MEDIEVAL PRINCES LONGED FOR THE DELICIOUS FISH OF LAKE OHRID

Once the ruler of Kragujevic, 200 miles away, boasted that he had everything in the world he desired except fish from this lake on the Albanian frontier. Nets, now drying on poles, yield *razbrykva*, a firm, pinkish lake trout, and *ljugalja*, or eels, which bring high prices in Beograd. Forty-pound carp also are plentiful. The sleepy town of Ohrid, today a small summer resort, once was an important way station on the Roman Empire road from



© National Geographic Society
Agfessolt Photograph by Rudolf Balth

PEACEFUL, TODAY IS THE MARKET PLACE IN NIS, BUT ONCE THE TURKS EMBEDDED SKULLS OF 952 SERBIANS IN A MONUMENT NEAR BY. Townspeople cherish the memory of the heroic defense here more than a century ago. Defenders, about to be overwhelmed, blew up their powder magazine, killing friend and foe alike. This town is a distributing center for bright-red Pirot rugs, mostly made in near-by Bulgarian communities.



"ON THE DISTAFF SIDE" SERBIAN HOUSEHOLDS NEVER ARE IDLE
The Yugoslav girl in her home near Beograd (Belgrade) is spinning thread from wool. Grapes overhead are drying with part of the vine attached, to preserve them longer.



© National Geographic Society

Agfancolor Photographs by Rudolf Balogh

CHEESES DRY IN OUTDOOR CAGES, PROTECTED FROM BIRDS, CATTLE, AND SMALL BOYS
Every few days the housewife inspects her prizes, brushing them with a clean cloth. After they have ripened thoroughly, the roll-shaped cheeses are ready for market.

PEDALING THROUGH POLAND

An American Girl Free-wheels Alone from Kraków, and Its Medieval Byways, Toward Ukraine's Restive Borderland

BY DOROTHY HOSMER

IT IS three years now since I bade farewell to New York from the bow of the *President Roosevelt* and turned my eyes across the Atlantic. At last I was actually off to see the world! The only indication of the future was a passport bristling with visas for lands from France to Japan. My anticipation was high, but it held no real inkling of the experiences awaiting a lone girl roaming strange lands.

My route had been mapped out methodically: three months in Europe, then on to India and the Orient. But other things were in store for me.

Eight days of the lazy life on board ship did more than put an ocean between the boat and New York. It instilled in me the conviction that traveling was something you had to take as it came along if you wanted to get anything out of it. Hence on the evening before landing I threw my itinerary to the winds and decided to cycle from Geneva to Trieste.

That spur-of-the-moment decision led me from one adventure to another in my zig-zag route across the face of Europe. Fortunately it was a process of gradual education, so that by the time I reached the Balkans and understood the attitude toward girls without chaperones, I had become better able to cope with the inevitable misunderstandings.

OCTOPUS, FRIED IN DEEP FAT

In these three years I have acquired smatterings of half a dozen languages, and have learned to eat anything set before me, even to baby octopus fried in deep fat.

There have been nights with and without sleep, on beds of straw or plain unyielding boards, in huts and castles, in student homes and hostels. I have pushed a loaded cycle in a driving rain up to the snow-patched summit of the Simplon Pass, where in a tiny inn enormous green wine bottles filled with hot water coaxed the warmth back into me.

At times I have temporarily abandoned

my bicycle to reach places a cycle could not go.

In Vienna I received a letter from an author friend. Several days in Kraków had convinced him he had made a find; the place fairly cried out for my camera; on what train would I arrive?

Why not? I would cycle through Poland! Ten hours later I alighted from the express at the Kraków station (maps, pages 743-4).*

I felt as if I had stepped into another world. Everything seemed unreal, from the soldiers whose caps were squared on the top like mortarboards to the long-bearded Jews who slipped about silently.

The feeling that it was all a part of an operetta persisted when Jack handed me into a shiny black droshky, one so lightly balanced on springs that it appeared to float along, swaying from side to side. The horses' hoofs echoed against the cobbles.

"FIDDLING" THEIR WAY THROUGH COLLEGE

On many corners violinists who were obviously more than mere beggars drew a few coins with their melodies. I learned later that most of them were university students.

We turned past the Rynek, the large cobbled square in the center of the town (pages 741, 747), and down a quiet street to a tall house at the end. Jack explained that it was the Dom Akademicki, the girls' dormitory where I was to stay.

For weeks I shared a room (one *sloty*, or nineteen cents, a day) with a girl who spoke German. It was a disappointment that only a small number of the students knew a foreign tongue. Postwar Poland realizes that a single language is a powerful factor in forging its people into national unity.

Most of Kraków's students are very poor and where possible they earn a pittance at odd jobs, the favorite being that of

* See "Poland, Land of the White Eagle," by Melville Bell Grosvenor, NATIONAL GEOGRAPHIC MAGAZINE, April, 1932.

Photograph from *Three Lions*

BENEATH HIS PORTRAIT SMIGLY-RYDZ CONVERSES WITH A FOREIGN CORRESPONDENT

Officially ranking second to the President, Marshal Edward Smigly-Rydz is head of the armies of the Polish Republic. He was a trusted associate of the late Marshal Pilsudski, father of modern Poland, who chose him to be his successor. The present Marshal captured headlines last year when he drew up 50,000 troops along the Lithuanian border in support of a Polish ultimatum. Lithuania yielded by opening the long-closed frontier, resuming diplomatic relations, and restoring railway, mail, and telegraph communication.



Photograph by Dorothy Hooper

FARMERS AND CITY FOLK—ALL KNEEL IN KRAKÓW'S RYNEK SQUARE

On Corpus Christi Day a short service is held at each of the four corners of the Rynek before religious pictures and banners of temporary altars (left) erected to the Apostles. At times not one person was standing of the thousands filling the square.

street musicians. Whenever I shopped for my penny nosegays at the Rynek flower market in the shadow of the ancient Cloth Hall, there were three or four of these minstrels sauntering between the tubs of flowers. They play as big a part in preserving the medieval character of Kraków as does the trumpet call that for almost 700 years has been sounded hourly to the four winds from the tower of St. Mary's Church.

TO AN ANCIENT SYNAGOGUE

I was eager to attend a service in a synagogue, for in Kraków one sees Orthodox Jewry unchanged.

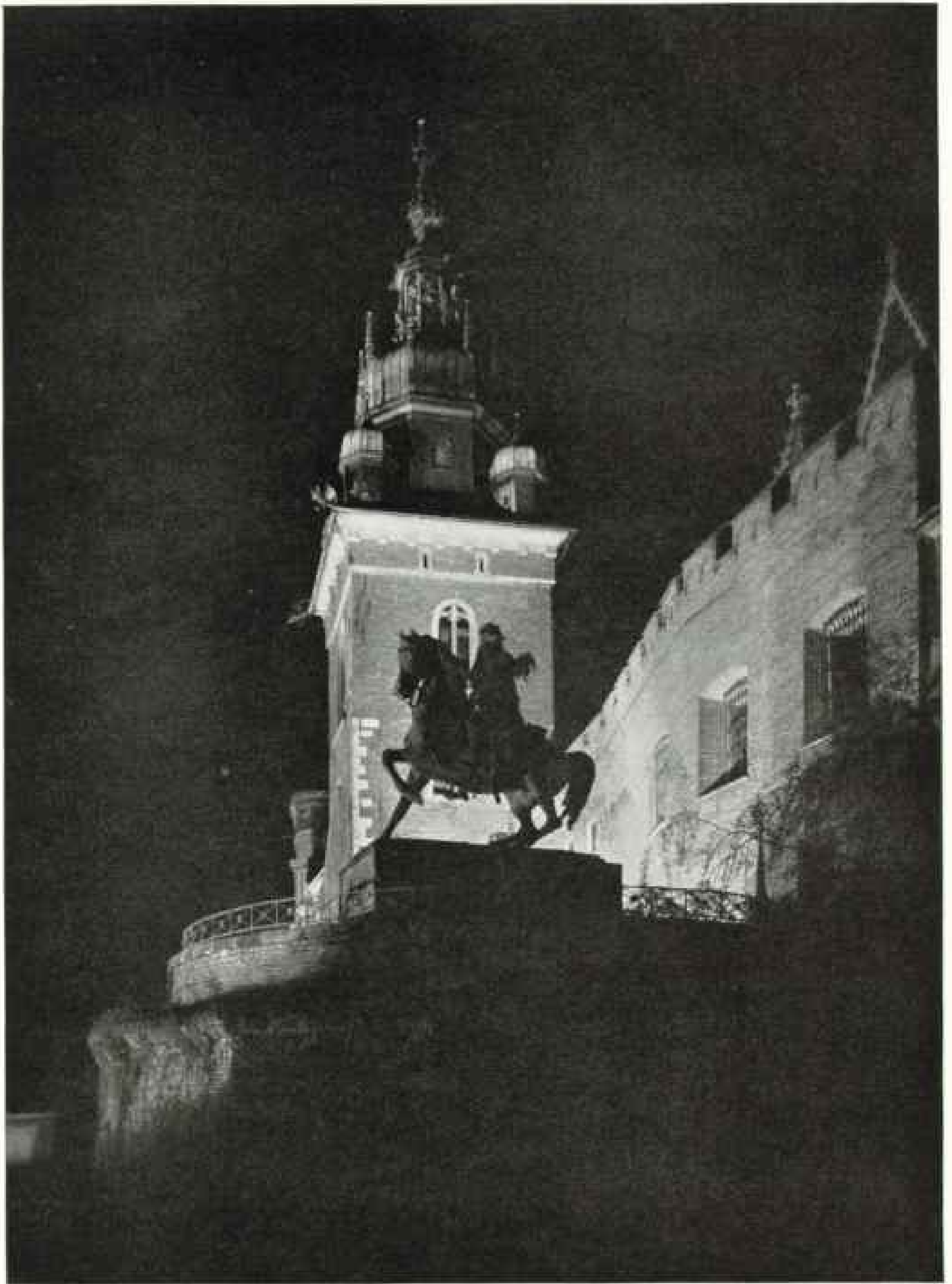
The Ghetto is called Kazimierz, formerly an independent city named after Kazimír (Casimír) the Great, protector of the Jews. Everything remains essentially as it was in

the 14th century; some of the old buildings still stand; the life, the types of Jews, their costumes, are much the same.

CORKSCREW CURLS, PILLBOX CAPS

Saturday morning the streets were deserted except for the men on their way to the synagogues (page 731). I shall never forget those long dark figures in black satin robes and fur-trimmed velvet hats. Most startling were the curls—a single corkscrew in front of each ear, the sign and symbol of Orthodoxy. After the men came the boys, with pillbox caps and their curls bobbing at every step.

Feeling very much alone in this strange procession, I arrived at the ancient synagogue in the heart of the Ghetto (page 749). From a closed balcony upstairs, the only place women are allowed to go, I could



Photograph courtesy Gdynia-America Line

KOSCIUSEKO RIDES AGAIN—ON A MARBLE HORSE SILHOUETTED AGAINST A TOWER OF
POLAND'S "WESTMINSTER ABBEY"

On Kraków's Wawel Hill ("the soul of Poland") stands the old Castle of the Kings, the former seat of national government. In the mighty 14th-century Cathedral, with its 18 chapels, are tombs of the country's saints, kings, and great citizens.



Drawn by Newman Eimstead and Ralph E. McAtee

AMONG PLACES AND PEOPLES IN THE HEADLINES—GHETTOS, UKRAINIANS, POLAND'S TENSE BORDERLAND—AN AMERICAN GIRL CYCLED FROM KRAKÓW TO ROMANIA

Arrows show Dorothy Hosmer's route through southern Poland. After climbing to market towns and mountain valleys of the Tatras, the author swept down the Dunajec River on a raft of roughly hollowed logs and pedaled across the Galician plains to Lwów. Heading southeastward, she briefly took to the water again, in a foldboat on the Dniester River. From Niżniów the way led south through country peopled largely by Ukrainians. A side trip took her into the eastern Carpathians, land of the colorful Huculs. Then the adventurous American girl doubled back and followed the course of the Prut River to the Romanian border.

look down through narrow windowpanes on the men below.

It was a strange sight. Heads and shoulders covered with striped oriental prayer shawls rocked back and forth to tuneless wails and chanting. Black-bearded men walked in and out. Others who were praying paused to chat with neighbors or looked around to see who had come in. Prayer books were opened and closed, rituals performed, and through it all the swaying and chanting went on. A century, or three or four, seem nothing in such a place.

PURSUED IN THE SECONDHAND MART

Again I went to the Ghetto, this time to the secondhand market, with an insistent young professor in tow as my "protector"—against what, I couldn't say.

The market is interesting and confusing. Streets and squares surrounding the synagogue are choked with people—town women, farmers, and Jews. Everyone carries in his hand what he has to sell or exchange.

Almost everything is long past any pos-

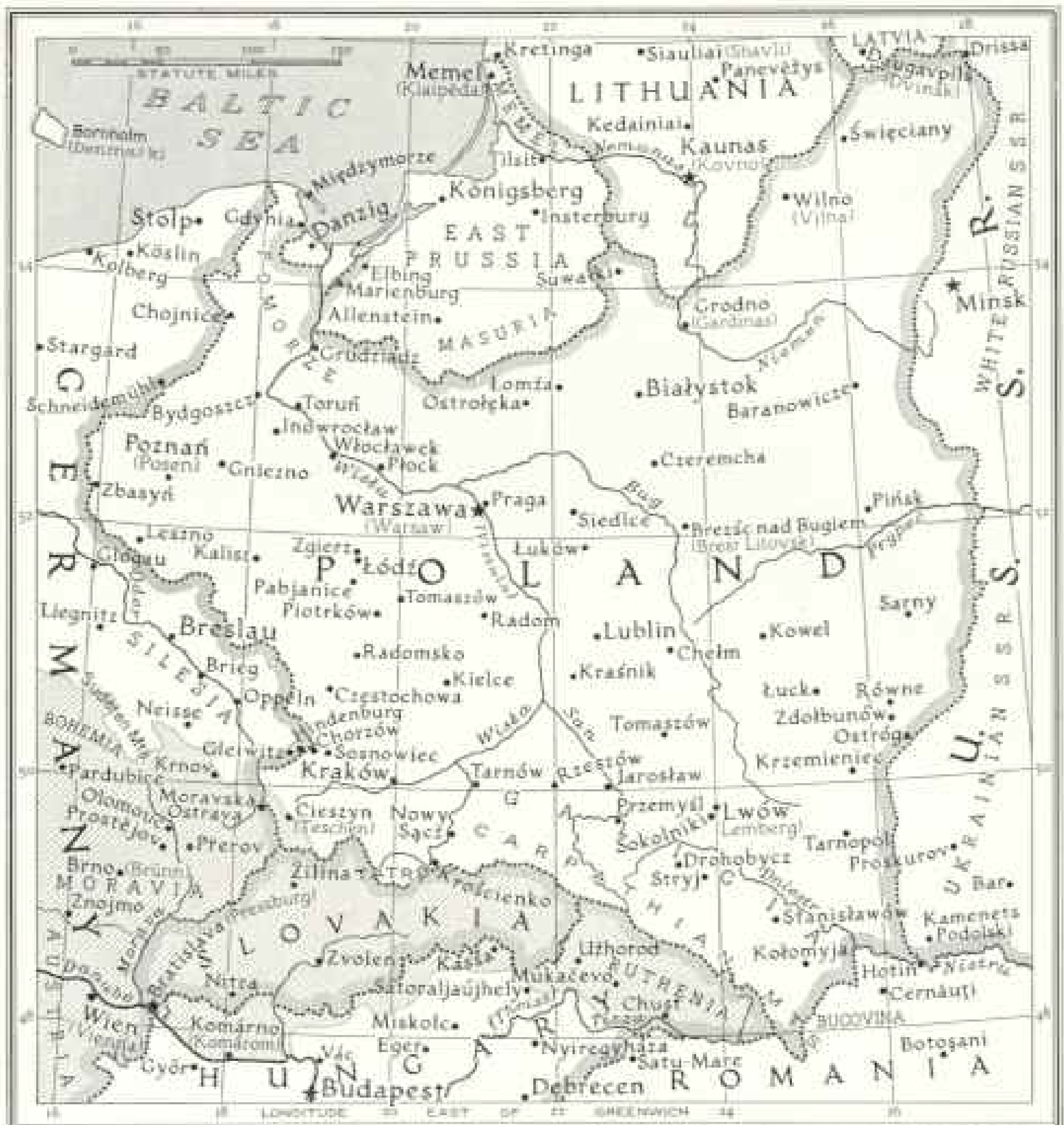
sible use: a single old shoe, an outmoded hat, or a saucepan with a hole in the bottom. Dresses and suits hang like scarecrows on the synagogue fence. Broken-down furniture is grouped in a corner. On the edge of the crowd stand some fifty persons, each with a rattletrap bicycle to sell.

To my consternation, one by one people stopped us to ask the price of the camera in my hand. I told them it wasn't for sale, but they couldn't be convinced—they had seen such barter tactics before. They hung on our heels and it was all I could do to keep my precious camera out of their grasp. So we were pursued, in and out of the throng, until we were finally safe beyond the bounds of this incredible market.

STRANGE FOODS ADD ZEST TO TRAVEL

Before starting out on my journey to the High Tatras (spring already beckoned me to be on the way), I learned something of what makes "fascination" in an old city. It has a great deal to do with food!

Though Continental Europeans approach food with a zest shocking to the average



Drawn by Newman Humphreys and Ralph E. McAleer

FIFTEEN MONTHS OF SWIFT CHANGES HAVE PUT NEW LINES ON THE
PURROWED FACE OF EUROPE

Recent territorial shifts in this all-important area centering around Poland are shown by diagonal shading. Across the south, it indicates where Austria has become a German province and Czechoslovakia has been split into bits: Bohemia and Moravia, German protectorates; Slovakia, autonomous under Germany's protection; Ruthenia and a slice of Slovakia, occupied by Hungary; and the Teschen region, now a part of Poland. To the north is another recent trouble spot, Memel, which Lithuania ceded to Germany in March, 1939. Farther west are Danzig and Pomorze, "the Polish Corridor," with the port of Gdynia, Poland's window on the Baltic. At the left is Germany, at the right the Soviet Ukraine. Beside place names that defy the Anglo-Saxon tongue are three familiar monosyllables, the towns of Luck and Bar and the river Bug.

Anglo-Saxon, I am initiated and discuss food with enthusiasm. It's half the fun of travel: strange dishes in strange places.

In Kraków I ate heaps of dry mashed potatoes and wurst, and didn't like it, nor the excess of caraway seed, not only in bread but in vegetables, sauces, and roasts.

But there was Poland's version of a crêpe suzette, served with cheese, or, still better, with jam. It's a meal in itself. Then there were those queer little dumplings filled with cheese or plums and served hot with lemon sauce. Of beetroot soup I never could get enough.

Geese are a familiar part of the Polish landscape. Jack loves them (roasted), but had looked for them on the restaurant menus in vain. Finally we went to a Ghetto restaurant. One small room, bare save for an elaborate wooden chandelier, was crowded with Jews, all men, and all eating roast goose. They sat with their hats on, as if in the synagogue. After undergoing their stares for a few moments, Jack reached for his.

The Krakovians don't lack quantity in food. They eat five times daily. Office hours being from 8 o'clock in the morning straight through to 3 p. m., they take their first breakfast at home, a second in the office at 11, dinner at 3:30, tea in the late afternoon, when everyone goes to his favorite café, and supper around 9.

After the abundance of good wine everywhere I had been, it seemed strange to be in a country where its cost was considered prohibitive—60 cents a quart! The Krakovian drinks beer and vodka and quantities of soda water. More than these he likes his amber *miód*, a fermented honey drink (old English mead). It is also the favorite of the students, who have made a tradition of dashing out between classes for a glass of it, steaming hot, on winter days.

Several old taverns are given over en-



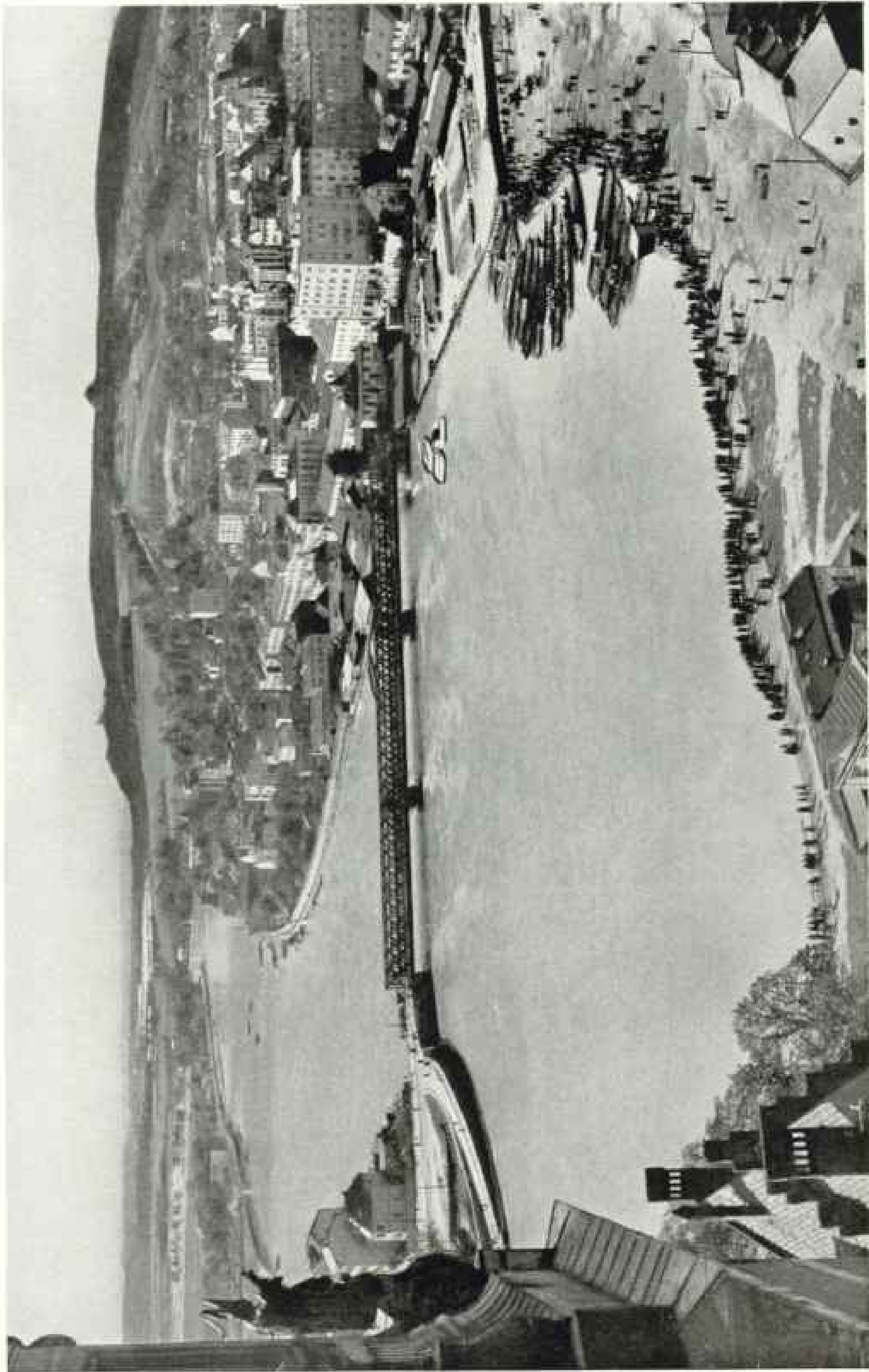
Photograph by Dorothy Huxner

SHE SITS IN SHADOW TO WORSHIP THE MAN OF SORROWS

Devout passers-by give her small coins to light tapers before this street-side shrine in Kraków. Three-fourths of Poland's people are Roman Catholics.

tirely to the drinking of *miód*. The most interesting of these haunts is the Pod Krzyżykiem ("Under the Little Cross"), where the intelligentsia of town, university, and Ghetto gather, and where we too formed the habit of lingering over our steaming glasses and ginger cookies.

The ragged vender who wandered from table to table selling his cold cooked lentils seemed like an old acquaintance. And like a friendly ghost from the past, a bust of Kazimir the Great looked down on those paneled rooms where, tradition says, he once came to see the Jewish girl he loved.



Photograph by Stanislaw Mucha

CURIOUS HUNDREDS LINE THE BANKS TO WATCH THE SWIFT VISTULA IN FLOOD

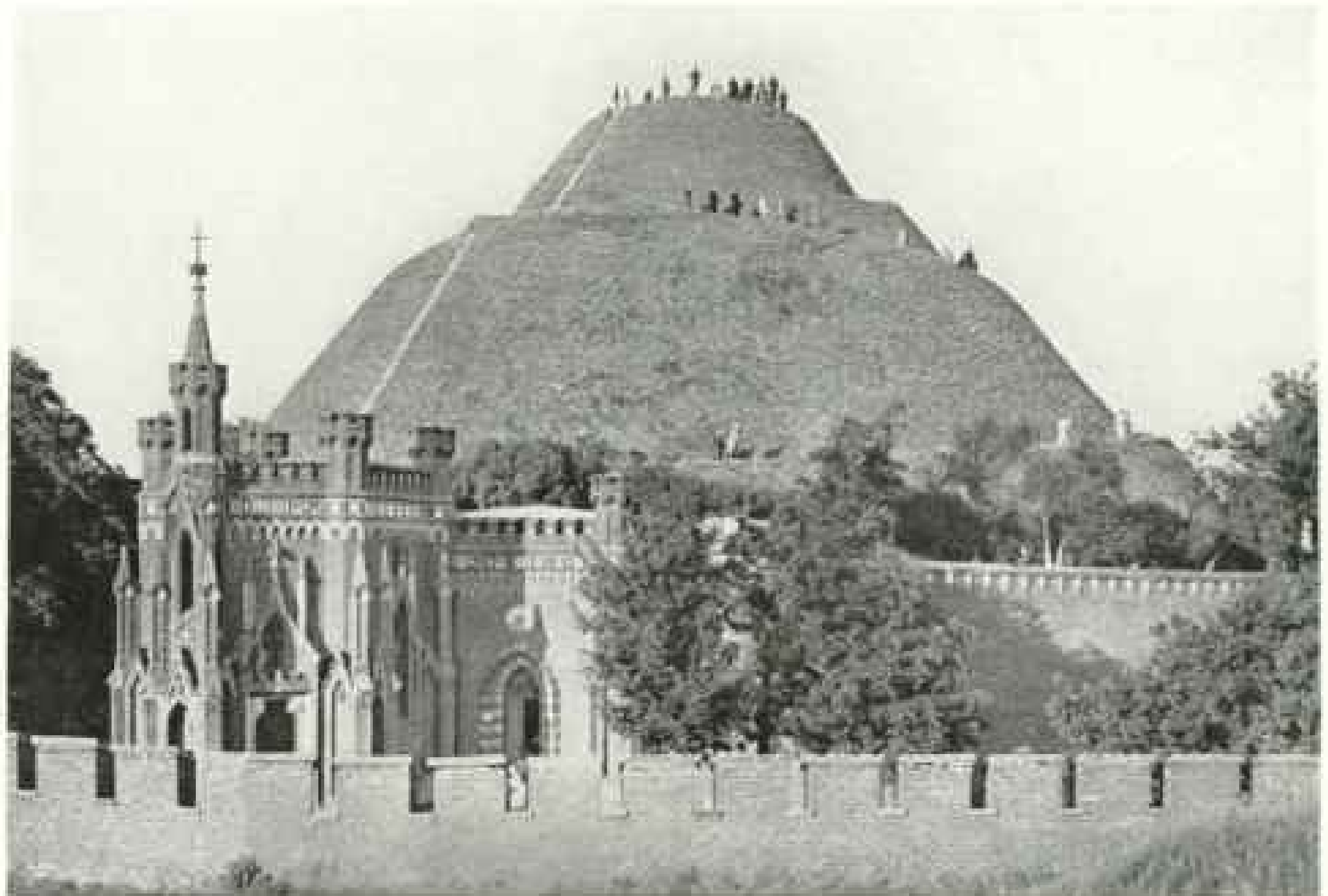
Below the Cathedral towers on the Wawel Hill, Kraków (page 742), curves the river which, with its tributaries, links cities of central Poland. Flat river barges, like those clustered against the bank (right), carry heavy loads of produce downstream about 200 miles to Warsaw, the nation's capital. The conical memorial mound to the hero Kosciuszko rises from the distant hill (page 748).



Photograph courtesy Gdynia-America Line

IN MEDIEVAL RYNEK SQUARE, KOSCIUSZKO AND HIS FOLLOWERS PROCLAIMED A POLISH "DECLARATION OF INDEPENDENCE"

Here was touched off the revolution of 1794. Fine clothing is sold today in shops in Krakow's old Cloth Hall (lower center), in whose vaulted interior once stood the booths of the cloth-makers' guild. The tower (left) is all that remains of the Town Hall, which antedates the birth of Columbus.



Photograph by Stanislaw Mucha

SOIL FROM BATTLEFIELDS OF TWO CONTINENTS IS BURIED IN THE KOSCIUSZKO MOUND

The Polish national hero is revered in the United States for his voluntary service as an officer in the army of George Washington during the American War of Independence. Earth from scenes of his military triumphs in Poland and the United States has been placed here. The 100-foot high tumulus, a few miles from Kraków, was erected more than a century ago. Kosciuszko's tomb is in the Cathedral on the Wawel (pages 742 and 746).

In Kraków I saw the important role politics plays in the university life. First the conservative and then the anarchist men students divulged to me their ideas, which, during my stay in Kraków, broke out several times into conflicts and riots that required government intervention.

These rumpuses, which gave vent to the students' excess energy, went on until "chestnuts bloomed along the Planty," the ring of gardens replacing most of the medieval city walls. This was Kraków's way of saying students must stay indoors to study for exams.

Professor Roman Dyboski, historian and brilliant English scholar, who is Poland's intellectual ambassador to the English-speaking world, took me under his wing. He introduced me to that Kraków which, since the founding of the Jagellonian University in 1364, has been the cultural and historical center of Poland (page 750).

Professor Dyboski's *Poland*, written in an English which rivals that of his compatriot and onetime friend, Joseph Con-

rad, gave me an understanding of Poland's romantic history and present problems.

When the moment came, I was overwhelmed at the thought of leaving Kraków, where for many weeks I had lived the life of a Polish student.

Everyone heaped kindnesses upon me, from the students who kissed my hand and were so interested in a "real American, not just a returned Pole," to the professors, each of whom brought in a last word of advice or warning about my route. This was to take me along the Carpathians to southeast Galicia and through Romania to the Black Sea.*

BICYCLE BUILT FOR TROUBLE

Off for Zakopane! Zakopane, the Mecca of Polish sport (page 760). Everybody had it next on my itinerary, but—to the Tatra Mountains, the highest peaks of the Carpathians, on a bicycle! And a girl

* See "An American Girl Cycles Across Romania," by Dorothy Hosmer, NATIONAL GEOGRAPHIC MAGAZINE, November, 1938.



Photograph by Dorothy Hesser

HOME FROM THE SYNAGOGUE STROLL BLACK-ROBED JEWS

The Ghetto section of Kraków, called Kazimierz, was originally established as a separate city by Kazimir the Great, medieval benefactor of the Jews (page 741). In the background is one of Kraków's oldest synagogues, where the author watched a service through narrow windows of a "ladies' balcony." A round "pillbox" cap is the Orthodox boy's proper headgear.

alone, with only a handful of Polish words! That was a thing unheard of.

Then I found an ally, one who dares to be seen on a bicycle and who has added to his fame by a cycle tour of England.

Hearing of my proposed folly, he offered his help. He took me to his bicycle man, who made me a sturdy cycle fit to cope with bad roads. Its parts came from all over Europe: Polish frame, Belgian tires, English brakes, French handle bars, and so on.

Afterwards, whenever this cycle was in a tight place, my thoughts went back to that dim little bicycle shop where, as is the custom in Kraków, an oil wick burned before an image of the Virgin on the wall.

SAUCY GESE RULE THE ROAD

The fields were red with May poppies when I set out southward through the Raba River Valley. It took three days to Zakopane, up and up toward the mountains, past thatched villages, log cabins chinked with blue, wayside crosses and chapels; houses with niched statues of the Virgin,

farmers in wagons, and others walking miles and miles, who waved as I went by.

All along the way saucy geese chased me. The danger of being de-winged was apparently outweighed by the joy of getting in a few good honks at my impertinent challenge to their long-established rights of the road. As dinnertime approached, I revengefully thought of having one roasted. But no. I was told the time to eat goose is at the end of spring, that no one would kill one now because the down, particularly that of the goslings, was required for pillows and feather beds.

NIGHTFALL, AND NO BED

Whenever I saw crocks sunning on a cottage fence, I knew that here I could have a refreshing drink of sour milk; the farmers themselves drank no more than I.

With the approach of nightfall, I was still far in the country. The shadows lengthened. Farmers coming in from the fields stared at me strangely. Where was I going to sleep? I resolved not to be caught on the road again after dark.



Photograph courtesy Göttingen-America Line

STUDENTS OF THE JAGELLONIAN UNIVERSITY OF KRAKÓW, 272 YEARS OLDER THAN HARVARD, RE-ENACT A MEDIEVAL DRAMA

The stage is in the courtyard of the Jagellonian Library, affiliated with the University which was founded in an academy by Kazimir the Great in 1364 (page 748). Most illustrious graduate was Nikolaus Copernicus, 16th-century Polish astronomer and mathematician, who described the sun as the center of a great system with the planets revolving around it. Modern astronomy was built on the Copernican System.



"WELL, NOW, ISAAC, DON'T BE CAMERA SHY"

On their Sabbath, Orthodox Jewish men wear the traditional costume which calls for long black satin coats and fur-trimmed velvet turbans. Usually they are bearded and display a corkscrew curl in front of each ear. Under the coat of the man at left show edges of a black-and-white striped prayer shawl.



Photographs by Dorothy Hoemer

HEADWORK IN THE GHETTO

At the busy secondhand market in the Jewish quarter of Kraków, well-dressed townspeople mingle with countryfolk. Here one may buy worn shoes, pans, trinkets, baby carriages, bicycles, dresses, and furniture. Old clothes hang on the synagogue fence (background).



Photograph by Henryk Poddębeki

BUSLOADS OF VISITORS STOP TO GAZE UP AT "HERCULES' MACE"

Not far from Kraków stands this odd limestone formation, more than 50 feet tall, in legend supposed to have been planted here by the Greek hero in his wanderings. Intact and still occupied is the medieval castle behind it, Piskowa Skala.

Finally, much to my relief, I saw the lights of a small inn outside the village of Rabka. The smell of fresh paint reached my nose before I had opened the garden gate. I was the first guest!

That, plus my being an American, was a glory to share; the innkeeper sent his children scampering to round up friends who had lived in America: burly fellows, who took repeated doses of plum brandy to overcome their shyness.

In their friendly competition of telling me things, it seemed that every other word of their broken English was Andrzej this and Andrzej that. Now this Andrzej is a great personage in the land—an artist! He is only a poor farmer among poor farmers, but admired and respected throughout the Podhale for his art and learning (page 758).

So early the next morning I stood before his door. It was opened by a sprightly little man practically lost to sight within the folds of a long smock and a curly beard. Andrzej drew me in with a welcoming hand. The walls were covered with violins, Italian and Polish guitars, and religious carvings, his handiwork.

Spreading on his work table his frugal breakfast of cheese and black bread and sharing it with me, he told me tales of his people, their superstitions, traditions, their deep religious faith.

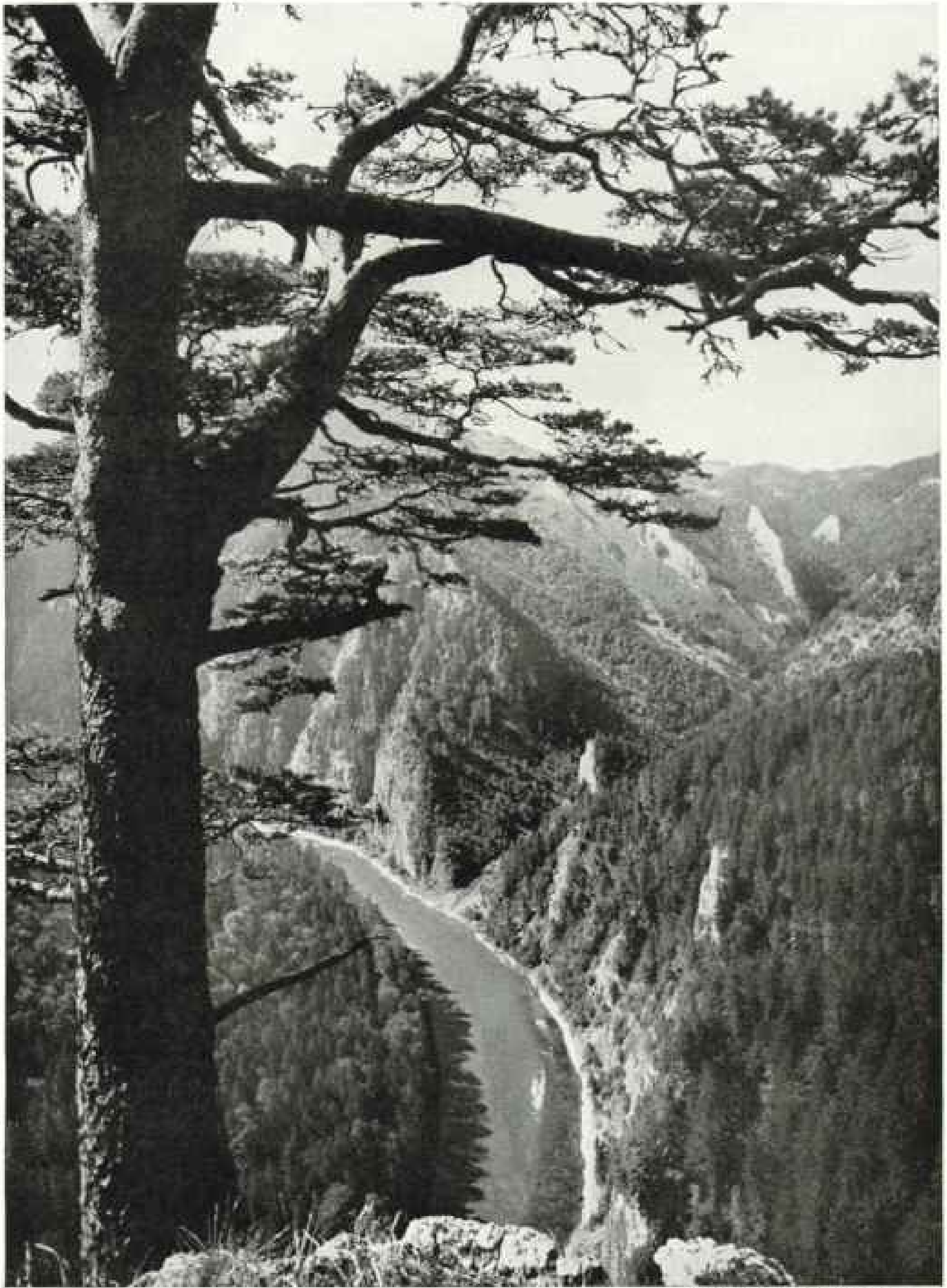
SONGS OF THE "MOUNTAIN MEN"

Then I sought to learn why the Górale, or Gorals ("Mountain Men"), about Zakopane were renowned as the handsomest of Polish country folk (pages 759 and 761).

"Because it is in the High Tatras that one finds the true Poles," said Andrzej. "This strain has escaped the invasion of Tatars and others who camped in the Carpathians and remain there to this day."

Here was an explanation not only for the handsome men but for Mongolian features I had seen in the Podhale.

The sun was rising higher and higher and still I lingered, for Andrzej now sat before his cello playing mazurkas, notes from the wild *oberek*, and the *zbojnicki*, fire dance of the Górale, those bold mountaineers who never knew serfdom but lived as highwaymen, robbing the merchants who crossed the Tatras.



Photograph by Stanislaw Mucha

THROUGH LIMESTONE PEAKS THE RUSHING DUNAJEC RIVER HAS CARVED A SPECTACULAR FURROW

The author and her bicycle careened down the Polish "Grand Canyon" on three hollowed logs lashed together to form a crude boat-raft (page 755). Balsam branches stuffed between the timbers broke the force of waves that swept the craft, which two mountaineers guided with poles. Both the Carpathians and Tatras afford Poles places for skiing and hiking.



Photograph by Dorothy Hosmer

MIKOL WAS A HAPPY-GO-LUCKY GUIDE

From a mountain climber's refuge in the eastern Carpathians, this bright-eyed Hucul boy led the author over high ridges to Dzembronia. For her he picked handfuls of wild flowers and blueberries (page 767).

The last notes seemed to follow me as I went on toward the mountains which were my goal. It was the second day, and then the third, and still no mountains were in sight. Only as I came into Zakopane did I see through the mists the peaks of the Carpathians.

Zakopane, in fact—after all the climbing I had done!—is only at the foot of the High Tatras. From here sportsmen set out, in the winter for their skiing, in the summer for their excursions. The Poles love their hikes, the longer and higher the better.

What a strange magnetism the mountains exercise over those who live near them! There is a challenge to the muscles and spirit that gives no rest until one has climbed to the top.

The Rabka wood carver had told me not to forego the pageant of the Podhale, the Thursday market at Nowy Targ. Ten to fifteen thousand people flood the town (page 756). The morning before the big day I was on the downhill road from Zakopane. Suddenly I put on my brakes.

Three wagons topped a rise on a side road and hurtled down the incline. The occupants, whooping and singing, waved branches streaming with ribbons. A country wedding! Excitedly I adjusted my camera.

Now I could see the white lamb's-wool trousers of the Górale embroidered in rose and green and blue, could hear the wail of a violin. They reached the main road, turned, a wave of dust receded. And I had my snapshot!

HAILED IN PUREST "AMERICAN"

The June sun piled agony upon my peeling nose. When I stopped to adjust my rucksack on its carrier for the tenth time that day, I let out a loud "Oh, darn!" A laugh and the words in English, "Better leave it here," startled me. From his cottage door a farmer grinned good-naturedly.

This was not the only incident of its kind; I came across many Górale who had worked in the United States before the World War. They looked up from shearing a sheep or came to the door of a grain mill to question me, and then to chat.

During a storm I took shelter in the cottage of one of them. We talked over the "good old days," and he expressed regret that his Polish-born son wasn't home to meet an American girl; only the day before he had taken their three cows and half-dozen sheep up into the high mountain meadows where, following the Góral custom, he would remain for months, tending the animals and making cheese in the company of other mountain shepherds, until the beginning of winter drove them down.

He invited me to sleep in his hayloft. But I went on over the freshened hills, to market, to market . . .

In Nowy Targ little sleep awaited me. Before four in the morning wagons from every corner of the Podhale ("Below the

Mountain Meadows") creaked over the cobbles to the square. The overflow choked the side streets.

MARKET SIGHTS AND SMELLS

When I arrived at eight, the market place was bedlam. Animal, fowl, and farmer were in pell-mell confusion with the long carts, piles of vegetables, sacks of grain, clothing, notions, cheeses, flowers, and fruits.

I soaked it all in enthusiastically, its noise, color, and smells. What is so vital, so near to earth, as a village market!

The only outsider in this rustic pageant, I walked around with camera in hand. Every detail was a marvel to me: the wagonloads of rock salt brought from the world-famed Wieliczka mines near Kraków to be sold for cattle, the pipeman hawking the silvery little trinkets smoked by men and women alike, Górale bargaining over strips of raw leather from which to make their moccasins and wide belts.

And the black-robed Orthodox Jews with their two dangling curls! Whenever I so much as looked at one, he shouted a warning to his fellows and pulled his coat over his head.

SHOOTING RAPIDS, BIKE AND ALL

In the Carpathians I met no Hun, Mongol, or Tatar, but I had real adventure. The greatest sensation was shooting the rapids of the Dunajec.

At Czorsztyn I dismounted and pushed my cycle down to the river's edge. A group of Górale eyed me curiously.

"Where can I get the boat for the trip down the river?" I asked.

They pointed to roughly hollowed logs spread along the shore. I looked aghast. Through the rapids in one of those! I pointed to my bicycle—take me, take my cycle. They told me to watch.

Selecting three logs of even length, they lashed them together. In the curved bow and between the logs they stuffed balsam branches to break the force of the water. A board was placed across the rear for a seat. They pulled this queer boat-raft into the river, I sat where directed with my cycle practically in my arms, and we were off, a Góral at each end to pole us along.

The Dunajec broke through the mountains, unfolding magnificent vistas of fir-topped crags and limestone rocks rising al-



Photograph by Denzil G. Ridout

CRYING BABY, CHILLY FEET, AND STILL SHE SMILES

Bare branches show it's winter near Kolomyja, yet this Ukrainian mother goes barefoot. Embroidered stripes decorate her wrap-around skirt.

most sheer from the water to well over 1,000 feet. The river churned into marbled swirls. I clutched my cycle to me, but couldn't save it or myself from repeated drenchings (page 753).

The worst of the rapids behind us, we drifted along swiftly with the current. Had I not had my arms full of bicycle, I would have felt like a livelier edition of the Lady of Shalott floating down the stream.

Gypsy children waded out from shore to where I passed. In their grimy hands were woodland flowers which they tossed into the boat in exchange for a few coins. Nor



Photograph by Dorothy Houser

THURSDAY IN "NEW MARKET" IS A RIOT OF COLOR, NOISE, AND SMELLS

Thousands of countryfolk from every part of the Podhale district crowd into Nowy Targ's main square before the Town Hall and into the neighboring streets. Farmers often bring only one or two articles to sell or barter: a pig, two chickens, a pail of berries, or a few cheeses. Customers and vendors haggle among piles of flowers, clothing, trinkets, and wagonloads of rock salt.

was even music lacking. A Gypsy violinist came into the water to beg from me with a song.

For days I pedaled through a haze of heat over roads deep in fine white dust. The log cabins of the Tatra foothills, striped with vertical lines of whitewash, gave way to villages of sod houses, surrounded by droves of horses that lost themselves in the endless plains.

Wagons hauled away peat, leaving gaping rectangles cut into the earth.

Already I sensed the influence of the East, in the Ukrainians' long white smocks and the touches of red in blouse or head kerchief of the women and girls.

Souvenirs of the war were still visible—shell-torn buildings and roofless houses.

WHERE DASHING HORSEMEN FOUGHT

I recalled the Polish cavalry officer who had told me that the day after he was returned, wounded, from the front, his battalion was here wiped out to the last man.



Photograph by Dorothy Horner

GEORGE DOES IT, WHILE TWO FRIENDS DISCUSS HOW IT SHOULD BE DONE

Drab clothes are not for men of Krościenko. Their white wool trousers, split at the cuffs, are piped with scarlet. What looks like a plume on one round-crowned felt hat is its owner's upraised hand. Painted on the wall in the shadow of the shop's deep eaves is a list of merchandise for sale: novelties, perfumes, stationery, and photographic supplies.



Photograph by Hans Hildentrund

POLISH VOLUNTIERS IN THE WORLD ARMY OF BOY SCOUTS

The Association of Polish Scouting has enough members to do 165,000 good turns every 24 hours. More than a third are girls. As in America, they receive instruction in practical sciences, handicrafts, and semimilitary drill. This cheerful troop has stopped near Nowy Targ.



Photograph by Dorothy Hume.

WITH MELLOW STRAIN, A CELLO REPAYS ITS MAKER

Andrzej is respected by his fellow farmers of Rabka for his skillful craftsmanship. Backed by walls hung with violins, guitars, and religious carvings made with his own hands, he played mazurkas and other native dances for the author (page 752).

I remembered the Hungarian officer of Hussars who told me how, at the very beginning of the war, his regiment was sent here also, and, in red breeches and gala uniform, made its first charge against machine guns which mowed the men down as a child with a sweep of the hand knocks over his toy soldiers on the floor.

Near here were fought and fought again the decisive battles around Przemysl. It seemed to me that cavalry was still charging around me, back and forth over the plains. Not only the evidence of war still remained here, but that spirit of war, inherent

in certain places and peoples, as well.

The Poles say their character and temperament are much like those of the Hungarians. Both dashing horsemen and bold fighters, they couple chivalry with nonchalance and romanticism with refinement of manners.

For an example, there is Count Gyula Batthyány, the officer of the Hussars who told me of that cavalry charge on the Galician front. The youngest officer of his regiment, and almost the only one to come out alive, he was saved, he said, because he rode into the battle with a rose between his teeth!

Lwów is a paradox. As Austrian "Lemberg," capital of Galicia, it played a bloody part in

the World War. Taken and retaken, its population afterwards divided against itself, Ukrainian fighting Pole. In the cemetery are graves even of girls who took up arms in the fray.

GAY AGAIN IS WAR-TORN LWÓW

Nevertheless, the people are nicknamed the "lively Lembergers" and Lwów was the gayest city I saw in Poland.

In the evening everyone promenades back and forth along the poplar-lined Akademicka, chatting, laughing, exchanging greetings, the men and boys eyeing the pretty girls.

Anyone who is anyone sits outside at the Café George at the little scarlet tables. It was there I caught up on the state of the world. Not having seen a newspaper in five weeks, I gloated over all the American and foreign language papers the boy kept running around the tables to bring me.

There also I first saw the Polish vodka-and-*kanapka* combination. The partakers drink a vodka, eat one of the most complicated-looking canapés imaginable, down another vodka, another *kanapka*, and so on. It very efficiently "breaks the ice."

In Lwów I stayed at a student house, the Dom Studentek. Every morning in the lower hall a barefoot farmer woman with a hamper of strawberries and a set of scales sold me my quarter-kilo breakfast of berries.

On the topic of food: here the beet-root soup was graced by what the Poles call "ears." These "ears" resemble ravioli, even surpass them. Sour cream was served more often, with certain sweets, meats, and always as a salad dressing. And then, my first cold strawberry soup!

SUSPECTED OF BEING A SPY

One day a young Pole, a reserve officer in the Air Corps, offered to take me for a



Photograph by Maynard Owen Williams

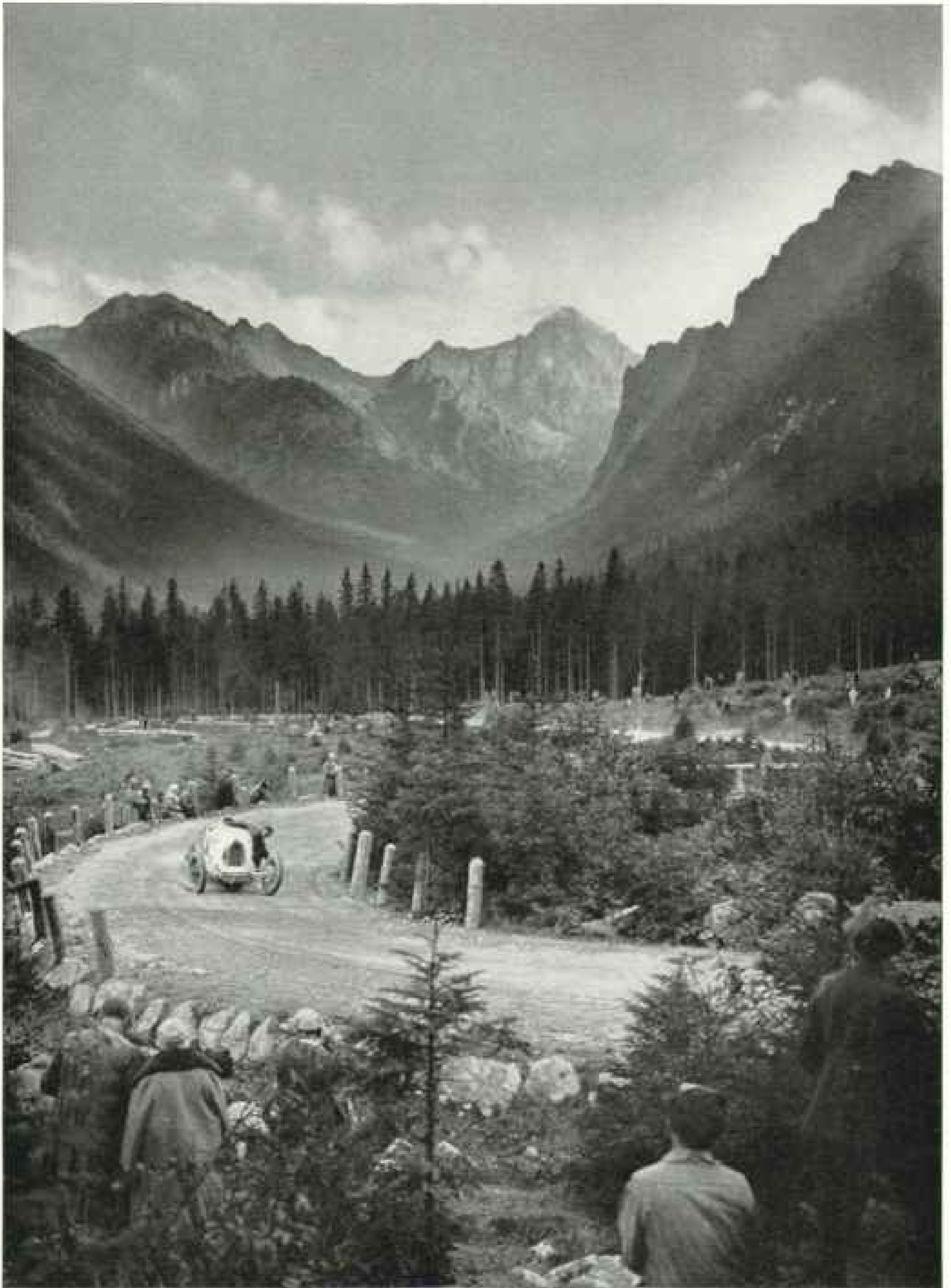
"OLD MEN OF THE MOUNTAINS" PUFF AWAY THEIR SUNSET HOURS

Góral patriarchs are content; behind them the third generation outgrows its clothes. Characteristic are the sharply curved pipestems. These mountaineers of Zakopane are comfortable in trousers of coarse white homespun, sheepskin coats, and felt hats with bands of strung sea shells. The man on the right holds the Góral *ciupagi*, a combined walking stick and ax.

spin in a Government plane. Unwittingly he gave me a double sensation.

Neither he nor I was prepared for the dark looks his colleagues all tossed in my direction when we entered the hangar. One by one they drew Stanislaw aside. How long had he known me? Was I harmless or was that innocent look only a part of the scheme?

They weren't convinced by his assurances and when we went aloft they "asked" me to leave my zipper bag on the ground. I quaked lest they open it and discover my



Photograph from Globe

HE LEANS OUT TO HOLD HIS RACER TO THE ROAD

An entry in the annual Tatra road race slithers around a curve. Spectators on the side lines enjoy the thrills of this international speed feature up the serpentine highway from Zakopane. This region at the foot of the High Tatra is a popular summer and winter sports resort.



Photograph by Dorothy Heenan

WELL-DRESSED GÓRAKS ARE GOOD CUSTOMERS FOR WELL-DRESSED HIDES

Wearing ribbon-piped split trousers, mountain men at the Nowy Targ market bargain for strips of leather from which they fashion thonged moccasins, broad belts, and cane handles (pages 754-5).

camera, the mere possession of which I had early found to have the potentialities of so much dynamite.

The entire matter slipped my mind until that evening when a police agent came to the student house. After inspecting my papers, he questioned me at length regarding my stay in Lwów. I had been taken for a spy!

AMONG POLAND'S UKRAINIANS

My first foldboat trip,* down the Dniester, took me through the land of the "Little Russians," a region largely inhabited by Ukrainians.

It was in Lwów, at the home of an eminent Polish scientist, that I met three foldboat enthusiasts. Hearing that I was

* See "Entering the Front Doors of Medieval Towns," by Cornelia Stratton Parker, NATIONAL GEOGRAPHIC MAGAZINE, March, 1932.

heading southward, they offered to take me down the Dniester over the week end. It was arranged that we should send my cycle on ahead and that we should arrive at the village of Niżniów for the Ukrainians' Peter and Paul's Day celebration.

Our starting point, Halicz, we reached by the Saturday afternoon train. It was loaded with Jews, who through window and door brought in packages and bundles until the compartments were filled from floor to ceiling, and with farmers who had their share of baskets of chickens and sacks that wriggled, grunted, and quacked.

When the whistle blew and we got under way, the farmers crossed themselves. And at each stop there was a pell-mell exodus from the cars to get a drink at the station pump.

Halicz, incorporated into Poland in the 14th century, was the center of an early



Photograph by Maynard Owen Williams

WHO, THIS WEEK, HAS CROSSED THE BAR?

On a church bulletin board at Lwów, black-edged cards announce deaths in the parish. Often such notices are tacked up in other places, in the incongruous company of circus posters, concert programs, and auction notices.

duchy, from which was derived the name Austria gave to her whole province of Galicia.

When we arrived, we collected our own enormous bundles of mysterious foldboat parts and got them off after a heroic struggle. Putting the boats together looked like playing jackstraws.

We pushed off down the broad Dniester, between rolling fields stretching to the hills. Long after nightfall we paddled on, the moon silvering the dipping paddle blades. The current was swift, filled with eddies from side streams. Every few minutes we backed water. Did that rushing sound

mean rapids or shallows? After nearly capsizing several times, we made camp by flashlight under a sandy bluff.

SUNDAY BATHERS, INNOCENT OF CLOTHES

Bells from a white-walled monastery near by awakened us to a river teeming with life. Apparently Sunday is general washday on the Dniester for everything except linen.

Ukrainian men and boys stood naked in the water, scrubbing down horses, cows, and themselves. No-less-naked girls splashed around without hint of bashfulness, calling to us merrily as we drifted along.

Two by two, church-bound women in full skirts, standing in a scow, were poled across the

river. From children on shore we bought birch-bark cornucopias of wild strawberries.

It was midafternoon when we arrived in Niżniów. The village was still in festive dress and spirits after the religious ceremonies of the morning.

Girls in velvet jackets and high leather boots were scattered in groups along the village road, feigning indifference to the young men in embroidered shirts who sauntered by, arm in arm in groups of ten, singing chorals in their soft Slav tongue.

Old men in white linen trousers and belted smocks, small pillbox caps atop their square-bobbed hair, sat before houses

with roofs of deep overlapping thatch that turned up at the corners like pagodas.

In the middle of the square was a canopied pavilion where priests performed the Peter and Paul's Day rituals.

Though they wore Greek Orthodox vestments, they were of the Uniat Church, which for reasons of policy was created in 1596 during the Counter Reformation. It retains the ritual and outward forms of Greek Orthodoxy, but owes allegiance to Rome (page 773).

At the foot of the pavilion, from a canal which traversed the square, throngs of women in the rich reds and blacks of the Ukrainians were filling bottles with water which the priests had blessed.

Returning to the river bank, we took our foldboats apart piece by piece and put them back in the sacks. My foldboat interlude had brought me into the midst of the *mu-
zliks* in perhaps the only region left where their mode of life is the same as before the war.

SUNBURN, AND A SANATORIUM

Three great figures of postwar Poland were Pilsudski, Paderewski, and Dmowski. The last named, Roman Dmowski, lifelong antagonist of the dauntless, headstrong Pilsudski, and one of the leaders, through days of strife and painful reconstruction,



Photograph by Dorothy Hoemer

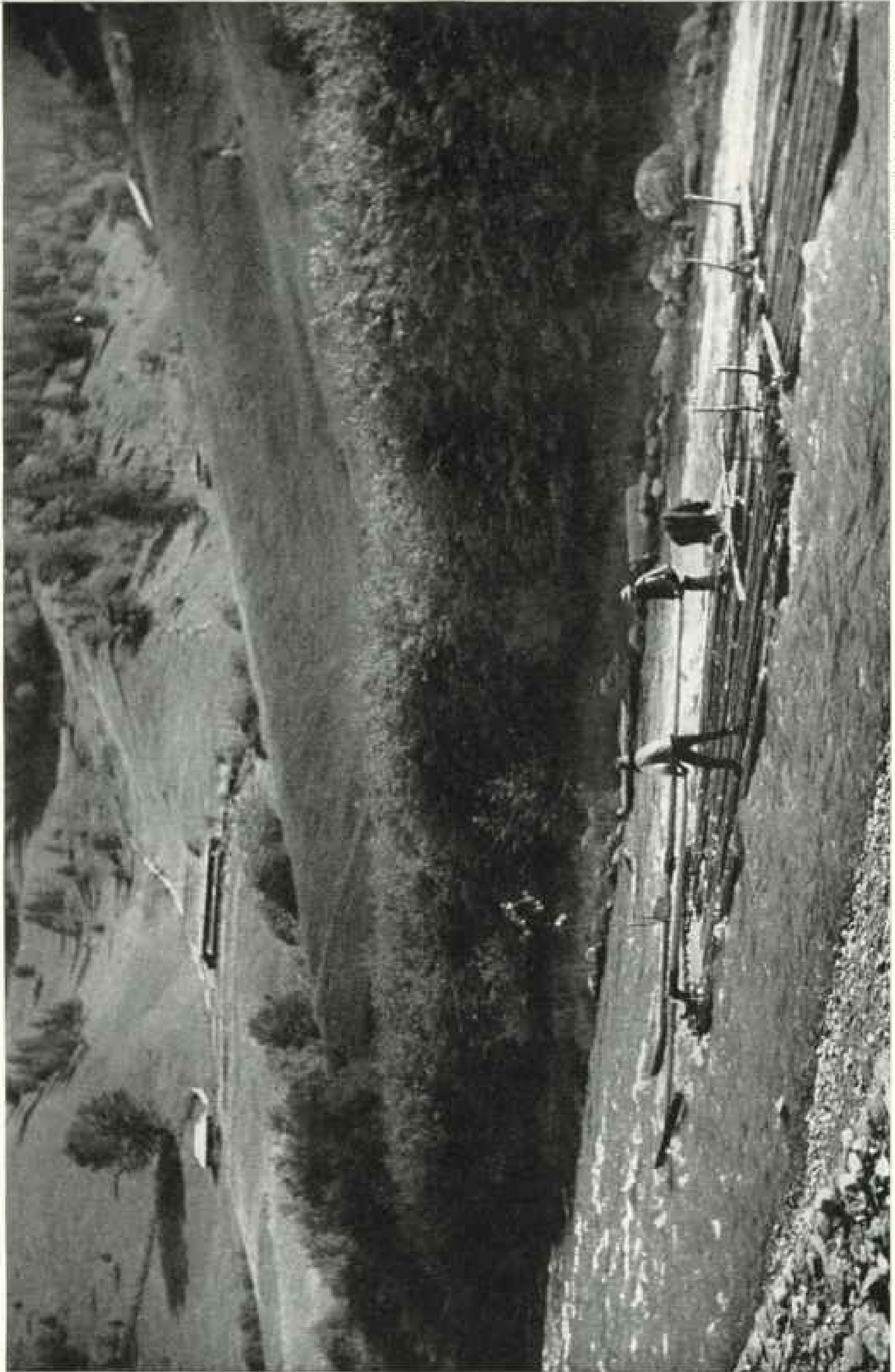
THEY CAN LEAD A SHEEP TO MARKET, BUT CAN'T MAKE HIM LIKE IT

Round felt hat and short coat identify the man as a Góral, or mountaineer. The woman prodding the sheep at Nowy Targ has thrown back her fringed shawl to her shoulders. Housewives on the sidewalk wear theirs as headgear. Words on the wall say "Post Box."

of a people outstanding for their heroism and sacrifice, nevertheless expressed his astonishment at finding an American girl venturing alone on a cycle into the "wilds" of Poland's mountains.

Our chance meeting was one of surprises. I had been invited to a famous health resort, the nature-therapeutic sanatorium at Kosów.

My road thither from Nizniów led me through Kolomyja, where I tarried again at a market, losing myself in a maze of wagons among which Ukrainians bought and sold homemade twig brooms, glazed pottery, and chunks of lime. From the lime they make the whitewash for their cottages,



Photograph by Dorothy Houser

WITH LONG SWEEPS, RIVERMEN GUIDE RAFTED LOGS DOWN A CHURNING MOUNTAIN STREAM

Spruce and fir logs are lashed together into floating "cars" of timber. As many as six of these are hitched to form a train of rafts. On the unpronounceable Czarzy-Czeremosz River, in the Carpathians, dams are opened to swell the flood so wood may be run through shallows and rapids (page 768).



"WELL, IF IT'S GOOD AND THE PRICE IS RIGHT—"

Typical of Ukrainian countrymen are the men's high-crowned straw hats and shirttails. The woman wears a black woolen overskirt. Feet are bare in summer; in winter leather sandals bound with thongs are worn over woolen socks.



Photographs by Dorothy Hoemer

ENVIIOUS OF THE FINERY A GROWSUP MAY WEAR

At a church door in Sokolniki, a country maiden waits for that certain "friend." Her black velvet bodice is trimmed with sequins and silk flowers in pastel shades. For church, the younger girls twine a flower or two in their braided hair.



Photograph by Dorothy Burner

AFTER CHURCH—"NOW, WHAT'S THE NEWS?"

Sheepskin jackets of Huculs at Worochta are trimmed with bands of leather studded with small metal rings. Long linen shirts hang outside heavy wool trousers. Some men decorate felt hats with cockades of leathers. Their women wear two aprons, horizontally striped in shades of red and yellow-orange (p. 769).

whose thatched roofs are so like their own thatched heads.

After leaving Kolomyja, for miles and miles I still met farmers on the road to or from the market.

It was heavenly to rest in the sanatorium. My souvenir of the Dniester trip, a sunburn, was cause in itself to require the "cure."

One afternoon a hearty old man with the most exuberant good humor asked me if it were true that I had come all the way from America on a bicycle. It was Roman Dmowski!

Reminiscing, he told of the Paris Peace Conference at which he was one of Poland's representatives. "I shall never forget," he said, "the Tatra Góral peasant in embroidered white lamb's-wool trousers who wound his finger around President Wilson's coat button to hold his attention while pleading Poland's cause."

My route suddenly changed from horizontal to vertical. I went to visit an observatory under construction on the easternmost peak of the Carpathians, and simultaneously discovered a battle line above the clouds.

An engineer was on his way to inspect this governmental observatory on the Polish frontier atop Pop Iwan (6,646 feet), and invited me

to make the journey with him and his wife.

From a forester's, where we left the car, we climbed steadily for hours through stinging rain and clouds that parted occasionally to show azaleas against a snow patch or a precipitous drop below a ledge we were skirting. It seemed an eternity until, soaked to the skin and my hand almost frozen to my staff, I was hauled into the cabin on the summit.

The observatory, though built by the League of Polish Air Defense, is for scientific purposes, chiefly astronomy and me-

teology. Nearly 500 tons of material had been carted up by mountain pony.

For several days I remained on the other side of the peak at a refuge for alpinists. Sometimes parties of mountain climbers stopped for the night. One time we danced the polka and the wild, foot-stamping *oberek* by firelight. Another night I listened to plaintive Polish ballads while lightning flashed and thunder rolled.

SOLDIERS FOUGHT ABOVE THE CLOUDS

By day I walked the mountains in almost perpetual clouds. Once, along a ridge, I came upon tangles of rusty barbed wire, rock-lined trenches, and ruined dugouts. Now everything is stilled but the distant piping of a shepherd, and the blue campanula blooms where formerly Austrian and Russian fought above the clouds.

Meditating on how long it would be before another generation of soldiers would face each other on these skyline peaks, I sat there for hours in the rolling mists till the horn of a shepherd boy who had been sent out to search for me brought me back to the reality of chimerical peace.

When I left the refuge, I was given Mikol to guide me over the ridges to a Hucul village. The only human beings we saw were two men leading ponies loaded with casks



Photograph by Dorothy Hoopes

A UKRAINIAN PEDDLER SITS ON HIS FUTURE

The long-haired trader rests on the sack of produce he must sell. At his side hangs the metal-studded leather bag that holds his money, perhaps a knife, and bread for his next few meals away from home. Fellow barterers in the Kolomyja market mock him for his idleness.

of sheep's milk cheese, which they were taking down to Żabie.

An imp with bright, shoe-button eyes, a cockade of flowers in his hat, Mikol shouted across the valleys to bear the echo and strayed every few yards, returning to fill my hands with wild flowers and blueberries (page 754).

ONE OF LIFE'S EMBARRASSING MOMENTS

I could not have foreseen the circumstances which made me pass a night alone in a cabin with a Hucul (Huzul), one of those reputedly handsome mountaineers.

said to be the descendants of outlawed Polish nobles.

Many tales are told of the Huculs.* During troubled periods of Polish history, unruly nobles fled to the mountains, taking refuge with these people in the eastern Carpathians. The outlaws, legend says, carried native women off to their lairs. Be that as it may, many present-day Huculs bear noble names.

Others tell of isolation camps established in this remote region during the Russian campaign of the Napoleonic armies.

More prosaically, ethnologists, still trying to untangle the racial heritage of the Huculs, maintain they are a mixture of Ukrainian, Pole, and Wallach (Romanian), with a dialect influenced by all three of these tongues (pages 766, 769). What reception would I have from these people?

Mikol had guided me to the first of the scattered log houses which comprised the village of Dzembronia. It was surrounded by a high rail fence. Rather than slide back the half-dozen poles of the gate, we climbed over and found a woman inside, who agreed to put me up for the night.

Some time after Mikol had gone, the woman disappeared also. I was left alone. It was already growing late. After a long time I heard the poles slide in the gate and a man with drooping mustaches, an ornamented sheepskin jacket, smock, and short red trousers walked in.

I tried to ask him where his wife was, but he didn't understand and busied himself making a fire in the crude, shapeless, open stove in the room, which, as I found, served for living, eating, and sleeping.

AN AMERICAN DRAWS A CROWD

A crowd of young men, who had come on the run as soon as they heard who had arrived, sat in a row on the benches along the four sides of the room and looked on. All were dressed in sheepskin and wool costumes. One had a new town-bought wallet which he kept bringing out.

Followed then a group of girls who came in and took their places on the benches, adjusting their front and rear aprons of thick wool woven in maroon and gold, and smoothing the skirt of their white smock over bulky woolen socks bound by bright cord. Their feet were incased in moccasins

* See "Bright Bits in Poland's Mountainous South," 16 natural color photographs, NATIONAL GEOGRAPHIC MAGAZINE, March, 1935.

and around their necks hung heavy loops of beads and silver coins.

For a time all of them, girls as well as men, sat and smoked hand-rolled cigarettes while I squirmed under their stares. They had none of the upturned noses or blond childish faces of the Slavs; some of the men, with straight or aquiline noses and sensitive nostrils, looked almost aristocratic.

HEIGHTS OF HUCUL HOSPITALITY

When these young Huculs had left, I tried again to ask where the man's wife was. He made me understand he would take care of me. He did.

He brought cheese, hot milk, and the potato cake with cornmeal crust which serves the Huculs as bread. When I had eaten, he made me take off my muddy socks and insisted on washing them.

Then he went into the other room and over the boards of the one bed of the house spread several hairy woolen robes, rolling up another one for a pillow. I understood that this was where I was to sleep. He himself slept in what was apparently his usual place on the wide bench around the kitchen stove.

At sunup I was awakened by the stamping of hoofs, and looking from the window saw a mountain pony, that most precious of Hucul possessions. That was why the woman had disappeared the night before—to fetch this horse with which to take me down to Żabie!

With a hearty good-morning greeting, the man, Juriy, breakfast already prepared, brought me cornmeal mush and milk.

The woman smiled a little. By putting her hand so high and pointing at me, then at her husband and herself, she explained that they once had a daughter. Then, closing her eyes, she leaned her head against her hand and pointed to the ground.

Dividing the contents of my rucksack into the two sides of the linen saddlebag, Juriy threw one of the robes from my bed over the horse, strapped on a crude wooden saddle frame onto which I climbed, and we set out, Juriy walking beside me, over the rocky mountain path to Żabie.

We forded sparkling streams, wound through leafy glades, and reached the road along the Czarny Czeremosz River. Today it was a rushing torrent, the sluices high in the forests having been opened to float the log rafts, six lengths joined end to end, down to the lower valley.



ONE HORSEPOWER PULLS THE "SHOWCASE" OF THE POLISH "BRUSH MAN"

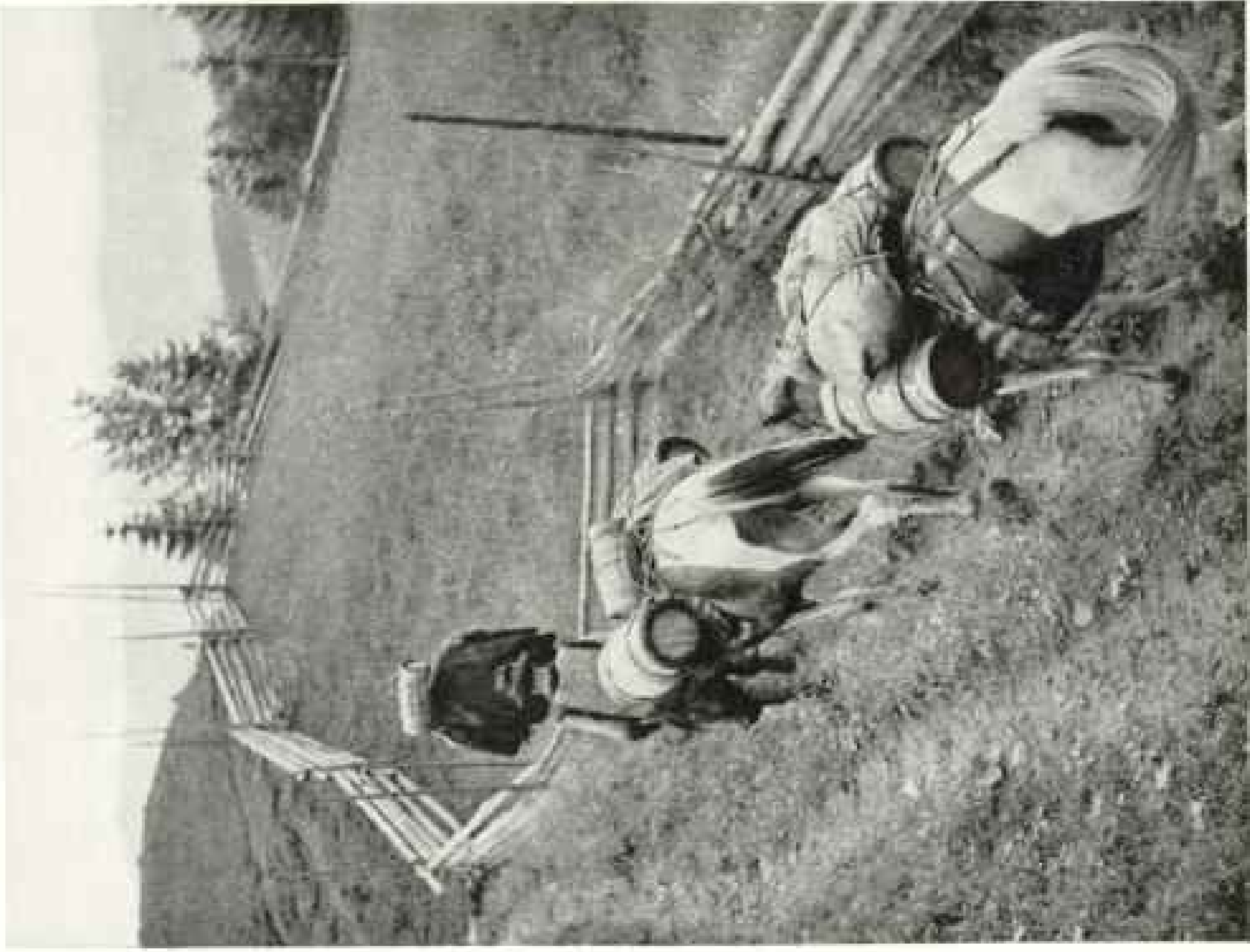
A countryman from the flat fields of eastern Galicia arrives at the Kolomyja market. He offers for sale twig brooms which he and his family have made between chores on their farm.



Photographs by Dorothy Hosner

"MY HORSE WAS IN ONE STALL AND THIS AMERICAN GIRL'S BICYCLE IN THE NEXT!"

Two aged Huculs, who look like twins, listen raptly to a friend's yarns outside a church at Zabliv. The men's jackets are of sheepskin, with the wool worn inside. They are embroidered with orange, green, red, and black yarn. Suspenderlike insets are braided of black and white leather strips.



Photograph by Dorothy Hoisinger

A POLISH PACK TRAIN CARRIES CASKS OF SHEEP'S MILK CHEESE

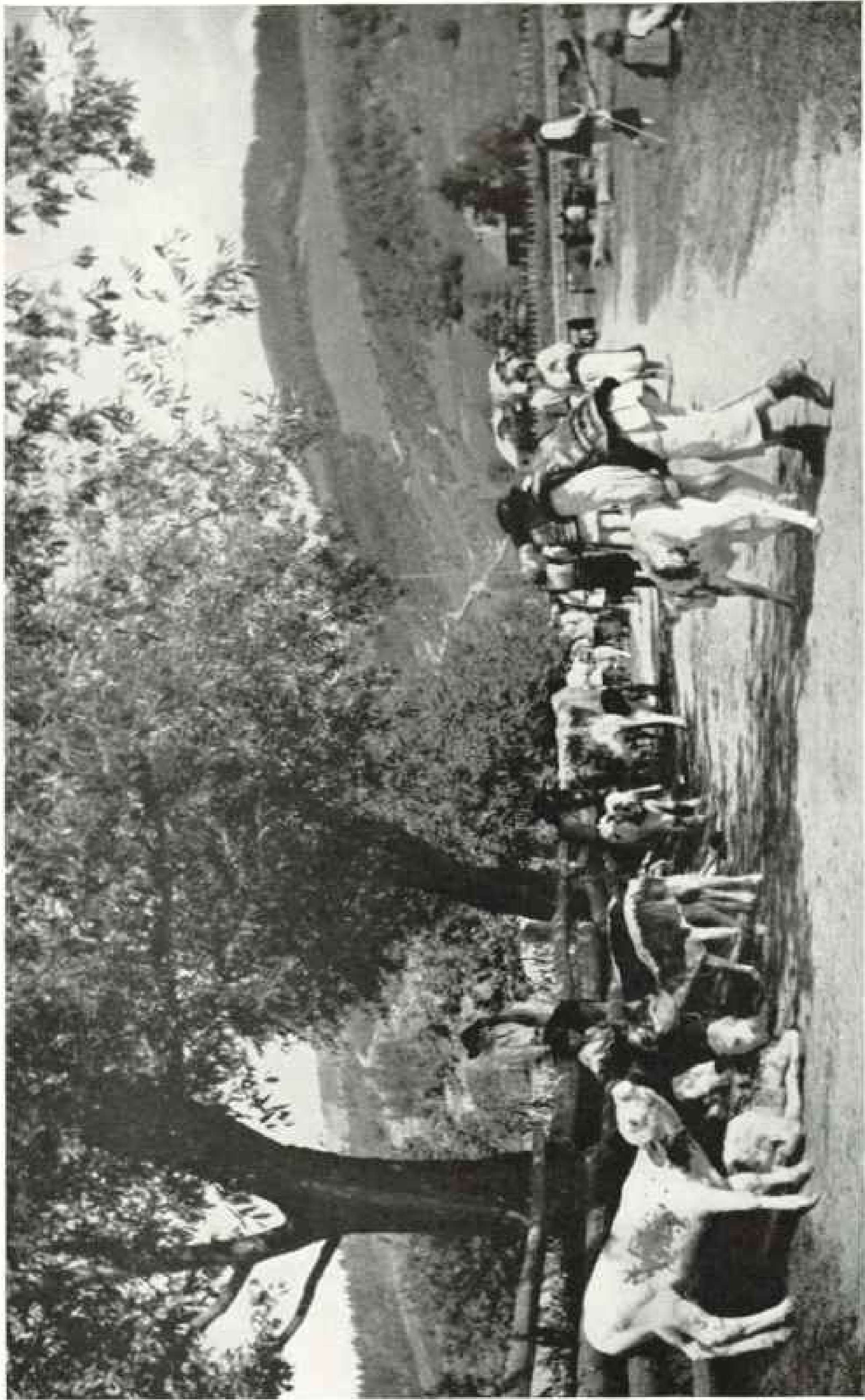
Two Huculs lead their ponies down from upland meadows to market at Zabite. These people bake no bread; diet staples are soft cheese, cornmeal mush, and inch-thick potato cake with a cornmeal crust.



Photograph by Maynard Owen Williams

SHABBY HER CLOTHES, BUT FAT HER GOOSE

Fondly a woman of Kosow clings to the plump bird that will make a savory holiday feast for her husband and children. She wears a sheepskin coat with the natural wool for lining, a wrap-around skirt, and a scarf tied around her head.



Photograph by Dorothy Hamner

COLORFUL HUCULS LINE UP THEIR CATTLE, SHEEP, AND PIGS FOR THE MONDAY ANIMAL FAIR AT ŻABIE.

Most of the beasts put up for sale are driven down to the village from mountain pastures. The majority of the buyers are Jewish merchants. Meats and meat products are the country's most valuable agricultural exports. The United States is a large purchaser of tinned Polish hams.



Photograph by Hans Hildebrand

WHERE WAGONS ARE FEW, PASSENGERS ARE MANY

Merry Hucul hitchhikers, clad in elegant raiment, are bound for church at Stanisławów. The nervous colt takes an elementary lesson in roadmanship.



Photograph by Dorothy Hunter

EASY TO EAVESDROP, CROWDED UNDER THE DRIPPING EAVES

A sudden thunderstorm sent village women and the author scurrying to shelter under a church roof at Wolczkowce, close to the borders of both Russia and Romania. Here, on the Prut River, Miss Hosmer sat on the bank while a native girl scrubbed her back. Here also she learned the leisurely Ukrainian art of eating sunflower seeds (page 775).



Photograph by Dorothy Hooper

BELLS ARE HUNG AND RUNG IN THE PAGODALIKE SHED (LEFT) NEAR THE EASTERN CHURCH

This Uniat Church at Zablotów is built entirely of wood. The Uniat faith retains the ritual of Greek Orthodoxy, but owes allegiance to the Church of Rome (page 763). In the foreground is an old well.

It was exciting to watch them being guided through the rapids and rocks by two men with long sweeps (page 764). At a bad turn one raft piled up, and the men worked frantically to pole it free before the oncoming raft crashed into it, while farmers along the road shouted advice. Even Juriy left me and ran down to the water's edge to put in his few words.

After four hours on that Hucul saddle, my legs felt like candles left in the sun.

Before we arrived in Żabie, where we parted, Juriy made known to me that he wanted to adopt me, so that I should come back and live with them in the cabin and take the place of their dead daughter.

Back in Kolomyja, my circle of the Hucul region complete, I started off toward the border, following the Prut.

Here I came upon Zablotów, a typical

little town of Galicia. The Ukrainian farmers, who spend their days in the fields, have their cottages on the outskirts. In the center is a long, very rough, and stony street lined with little shops before which sit the black-robed Jews.

My first need was for lodgings. In the wink of an eye I had a crowd around me, plying me with the most extraordinary and personal questions. Where had I come from, where was I going, how much had my cycle cost, how much money did I have, and where did I get it?

All these were fired with bewildering rapidity. The crowd grew. As each newcomer approached with the same set of questions, I in desperation referred him to my self-appointed historian near by, who was creating such a heroine of me that even I tarried to listen.



Photograph from Dorothy Hooper

"POLAND TO ROMANIA, AMERICAN GIRL, RIDING BICYCLE, TRAVELING ALONE—"

Thus might have read the customs report the day Miss Hooper crossed the border from Śniatyn, Poland, to Oraşeni, Romania. Polish officers examine passport and rucksack, her only baggage.

Long before, I had adopted the habit of telling imaginary versions of my life history so that in the face of such a grilling I should not lose my sense of humor.

In one characteristic Ukrainian village where I stayed the one-store was run by a Jew. It was marvelous to behold the way he officiated at his scales, adding one tiny weight, removing another, and finally reckoning the price with his wife in Yiddish, the buyers standing by as solemnly as in church while mysteries are being performed in Greek or Slavonic.

This Jew did much of his trading by barter—so much ground meal for so many potatoes; and for each fresh egg the girls brought in—and sometimes they came with only one—they received so many glass beads to string on their necklaces!

I had only a few miles left of my trip in Poland. An automobile would have eaten

up in no time the distance left to the Russian or Romanian border. But for me, like tumbleweed, with time and the joy of freedom, a puff of wind was enough to set me rolling down another lane.

So I came to the village of Wołczkowce (page 772). I had stopped to eat my lunch on the edge of a cornfield. A tall old man in a funny high-crowned straw hat seated himself cross-legged beside me and plied me with questions in Ukrainian.

Farther on, off to the right, I saw onion-shaped church steeples above the trees. A little wagon road led me to the broad village green where a flock of black lambs rested around a tall covered wooden cross.

I cycled the lanes bordered by white fences and oriental lich gates until I found a likely thatched cottage in which to spend the night. The couple brought in from the fields spoke only Ukrainian, but after I

had admired their baby and had been approved by the neighbors, they hospitably took me in.

RIVER SERVES AS TUB

Hot and dusty from my ride, I was led to the Prut by their young daughter Zorika. I washed clothes and shampooed, and Zorika proudly scrubbed my back, to the wonder of several naked little girls splashing about and of some surprised-looking goats tethered near by.

In the evening, while the mother lulled her baby in the queer oriental singsong I heard so many times, the grandfather taught me the Ukrainian art of eating sunflower seeds. The work of removing the tiny edible part occupies the hands mechanically while the mind is at a peaceful standstill.

I lay abed in the "company" room, its walls adorned by composite colored prints, wreathed by paper daisies, of saints, all with bleeding hearts.

In the next room, the kitchen, slept the father and mother, two children, and the grandfather. The wife, believing me already asleep, closed my windows from outside to safeguard me against the night air.

When I awoke, a pungent odor filled my room. Zorika brought my breakfast of cherries, then set out in the middle of the yard a basin of water for me to wash in. Her grandfather was stringing bunches of freshly pulled garlic on poles suspended from the eaves around my bedroom window.

As I cycled away from this clean and friendly cottage, Zorika ran to the gate to kiss my hand.

My last night in Poland, I had a sooth-saying mouse in bed!

My entrance to Uście disrupted a volleyball game among the youths of the village. I don't know who was more amused, they at a girl in a divided skirt on a bicycle or I to see them hopping around in tight white costumes with flapping smocks.

At times that evening as many as thirteen Ukrainian villagers crowded into my room, listening to the versions of my story as told by a neighboring German colonist. As each dramatic incident unfolded itself, the men spat green field tobacco on the sod floor.

A FORTUNE-TELLING MOUSE

The family's one mirror was brought in and hung up on my wall, then used as a pretext by the different members of the family to come into my room after I had

gone to bed. When quiet finally settled over the household, I tried to close my ears to the activities of a mouse which burrowed through the straw under my ear.

In the morning, the old granny who sat on the doorstep told me that a mouse in the pillow meant there would befall me many strange things and events. But hard as I tried, I could not understand more of what they might be.

I went down to the church, disrupting the holiday service as effectively as I had the volleyball game the day before. His last words barely finished, the plump priest came running out. I thought I would get a scolding from him for drawing his congregation away, but instead he invited me to a second breakfast of cakes and glasses of tea flavored with cherry preserves in the Ukrainian fashion.

The night before, an invitation had come from "the landed gentleman on the hill, who owned 600 fields and who wanted to talk for hours with someone from the outside world." A farm woman carried me pickaback over the stream at his estate.

An hour later I sat down with *Pan* (Mr.) Komar and the administrator of his lands, to a dinner of goose smothered in a cream sauce faintly colored by paprika.

The house was a postwar substitute for those fabulously large and old-established estates of the Polish aristocratic families of the eastern borderlands. The calamities of the war dealt a shattering blow to these old homes, with their cultural refinement and treasures of art. Bolshevism wiped them out completely.

DOWNHILL AND ACROSS THE BORDER

I had been asked by many incredulous Poles whether it was really so that I had left America, the Land of Promise, to visit their country. Pan Komar was the last to ask me this question, and he seemed moved when I told him that to me Poland had been a revelation, of charm in the cities and of folklore riches in the country and mountains, and that in the few months I had been there I had learned to love his homeland.

On through the border town of Śniatyn, coasting down a long hill—and then, before me, a bar across the road (page 774).

The frontier guards stepped out. Behind me was Poland. In front of me, Romania. What had the old granny prophesied for me ahead?



SHE BROODS TWO YOUNG IN A NEST LITTLE LARGER THAN A PING-PONG BALL.

Ruby-throated hummingbirds are usually seen in such rapid motion that their wings are a blur, but this tiny mother sat still long enough for a time exposure in color. The branch, however, swayed in the breeze and had to be anchored at both ends. This and the picture below and on page 788 are black-and-white prints from color film.



Photographs by Arthur A. Allen

MOTHER BITTERN TURNS HERSELF INTO A PARASOL

One gleaming yellow eye is cocked in the direction of possible danger as she presents her back to the camera and the sun and partly spreads her wings to shade her well-fed, spunky young (Plate VI, lower, and p. 789). About a foot long, she is a least bittern, smallest of the heron clan.

STALKING BIRDS WITH A COLOR CAMERA

An Expert in Avian Habits Persuades His Subjects to Sit
Where He Wants Them, Even in His Hat

BY ARTHUR A. ALLEN

Professor of Ornithology, Cornell University

FOR YEARS I had dreamed of making natural-color photographs of birds, but the slowness and costliness of the film, the unsatisfactory results from short exposures, and the evanescence of the colors warned me not to begin.

Even in black-and-white photography, where because of modern ultraspeed films one is not handicapped by weak light, many technically perfect negatives are ruined by the motion or poor position of the birds. In color, action shots seemed out of the question.

Then, suddenly, all this was changed. At last the Eastman Kodak Company had perfected a color film which was nearly half as fast as the black and white films with which I had started bird photography 25 years before. Moreover, since the final image was composed of stained gelatin instead of silver particles, it would stand great enlargement without showing the grain that is the bane of the darkroom artist working with black-and-white negatives.

Here indeed was a chance to capture the charm of birds in action in living color.

BIRDS CAN'T COUNT; HENCE THE "GO-AWAYSTER"

Looking out of my study window at Ithaca, New York, about June 1, I was greeted by a fine little flock of purple finches, as well as by chickadees, nuthatches, and blue jays that had frequented my feeding station all winter and spring.

The finches were good subjects to start on, but the light close to the house and under the mulberry tree was too dim for a color camera. Therefore I moved the automatic feeding device farther from the house, next to the garden, and set up one of our grass-mat blinds near by, so the birds would become accustomed to it.

Almost as important as setting up the blind the day before the pictures are to be made is the need for an accomplice to walk away from the blind when all is in readiness for the photographer.

Birds apparently cannot count, and if one person leaves, even though two were present a moment before, they are well satisfied that danger is past. My small son, David, served as my right-hand man in most of the photographic undertakings and was officially known as the "go-awayster."

Birds are so active while feeding that exposures of a mere fraction of a second are necessary, and with color film the lens must be wide open to admit enough light in that brief wink of time. In fact, I had learned from sad experience that the correct exposure for close-ups of birds feeding in bright sunlight was exactly $\frac{1}{40}$ th of a second when the diaphragm was set at F. 4-5, its largest aperture. At that stop there is little depth of focus, so the birds must come to exactly the right spot and stand more or less in profile before the lens.

To accomplish this, I set up, near the automatic feeder, a slender post with a cross board on top less than two inches wide and six inches long. On the middle of this strip of wood I fastened a small pan to hold sunflower seed. In this way all the action would take place squarely in front of the lens—that is, if I remembered to empty the food from the adjacent automatic feeder before going into the blind with my camera.

The tin seed container was not artistic, so I camouflaged it with flowers from the garden. A couple of milk bottles hung to the post served as concealed vases for the flowers and kept them from wilting.

I am afraid my love of color and zeal for giving the Kodachrome film a real test often got the better of my judgment, with the result that many of the earlier pictures resembled an old-fashioned nose-gay with a bird stuck in the middle (Plate III, lower) or a glimpse of women's Easter bonnets on Fifth Avenue in the gay nineties.

Later in the season I provided a section of a log and fastened the feed pan to the back of a projecting piece of bark where it could be concealed by the floral arrange-

ments. The resulting pictures seemed a little less artificial and fully as colorful (Plate II, lower).

FENCIES GET BRIGHT NEW SUITS

By this time the purple finches were molting, and though the portraits were interesting to an ornithologist for showing the progress of feather change, the birds were not at their best.

After molting, however, some of them were much improved, particularly the young males of last year. They resembled their brown streaked mothers until July and then gradually acquired pinkish feathers. By the last of August they were rosy red all over, somewhat more intensely so on the crown and rump.

The change from this pale rose color to the deeper crimson of the old males is accomplished without molting by a curious type of feather wear that for years was not understood. It was formerly thought that new pigment had to be introduced into the feathers to brighten them, but we now know that in most birds the acquisition of new finery consists in wearing off the whole tip of a feather, which is frequently gray or rusty, thus exposing the color underneath. The house sparrow, for instance, acquires a trim black cravat in the spring by this sort of feather wear, and snow buntings change from brown to white merely by wearing off the rusty edges of their white feathers.

With the purple finches, on the other hand, the feathers are not edged with gray and there is no apparent change in their shape by feather wear. The fact is, the red pigment exists only in the shaft of the feather and the main branches or barbs, and this color is more or less concealed by the gray secondary branches of the barbs, called "barbules." These wear off without changing the shape of the feathers, and as the red shaft and barbs become more conspicuous the birds seem actually to change color, becoming much brighter. The color film accurately registered some of these changes.

MANY SUBJECTS IN SIGHT

It must not be thought that I spent all my time in the grass blind in the garden, though I enjoyed watching the birds at close range and prayed for sunshine between eight and nine in the morning so that I could make a couple of snaps

before speeding to the campus to hold my classes.

My graduate students began telling me about some of the birds' nests they had been observing. A grouse was incubating out by the rifle range; a kingfisher was feeding young in a sand bank not far away; a veery had a nest by the path in some near-by woods; and so on. There were obviously plenty of subjects upon which to try out the color film. Whenever the sun shone, therefore, I planned to make hay by slipping out of the laboratory and into a blind that I had set up near some nest the evening before.

When a person sits quietly in a blind for two or three hours he not only learns a great deal about the birds he is observing and photographing, but he likewise locates by their songs the territories of the other birds in the vicinity. While waiting for the grouse to return, for example, I located the nests of a scarlet tanager and an indigo bunting, while the kingfisher led to a chestnut-sided warbler's home.

NESTS AMID THE ROSES

At various times I sought other subjects that would make good compositions for the color camera. About the first of July, for instance, the Cornell rose garden was at its best and what could be more desirable than the combination of beautiful roses and interesting birds in the same color film?

A search of the garden revealed several nests of robins, chipping sparrows (Plate VII, lower), and song sparrows, the deserted nest of a spotted sandpiper, and, most remarkable of all, the nest of a purple finch. Every purple finch's nest I had ever found previously had been in the top of an evergreen tree; hence, what an opportunity was this!

When I discovered the nest in the top of a Lady Gay rose arbor the male was incubating, but, unfortunately for the color film, he was still in immature plumage; this, among the pink roses, was rather dull. He showed his immaturity and lack of sophistication in other ways also, because in spite of all the visits I made to the garden, I never saw the female bird. Apparently he had accepted the entire responsibility for hatching the eggs and rearing the family. This he proceeded to do in a highly efficient manner, paying

COLOR CLOSE-UPS OF FAMILIAR BIRDS



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Kodachrome by Arthur A. Allen

LIKE A MAGICIAN, THE CEDAR WAXWING PRODUCES FOOD OUT OF EMPTY AIR

A moment ago there was nothing in his bill. Now from his distended throat the Cedar Waxwing whisks up insects and nice ripe cherries until he has fed the whole family. The branch of winberries was provided as an extra food supply, but they were ignored since the parents always returned with full market baskets. Dr. Arthur A. Allen, Professor of Ornithology at Cornell University, made this remarkable series of photographs in natural color at Ithaca, New York.



"GOOD-BYE DADDY—HURRY BACK!"

The brilliant male **Scarlet Tanager** has just fed his youngsters, and now, while they look after him hopefully, he starts his search for the second course of a meal that lasts all day. Well camouflaged, the young resemble their olive mother rather than their dazzling dad.



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Kodachromes by Arthur A. Allen

A BLUE JAY ADOPTS THE GOLD STANDARD

The bold individual in the shining blue coat readily came to the feeding station even though it had been surrounded with goldenrod. The aluminum leg band, acquired on a previous visit, may eventually show how far the **Blue Jay** wanders and how long he lives.

COLOR CLOSE-UPS OF FAMILIAR BIRDS



14-CARAT GOLD IN COAT AND DISPOSITION

"What's mine is yours," the **Goldfinch** might be saying as he coughs up seeds for his hungry young. A devoted husband and father, he feeds his incubating mate the same way while she sits on the nest of thistle-down and fibers, fluttering her wings in apparent delight.



© National Geographic Society

Kodachromes by Arthur A. Allen

"FRAMED" BY THE PHOTOGRAPHER

A female **Purple Finch** is drab compared with her rosy spouse, so Dr. Allen "said it with flowers"—a screen of larkspurs and four-o'clocks to cover the feeding pan. Mrs. Finch calmly lunches on a sunflower seed, never suspecting the camera in a blind three feet away.



Kolachanas by Arthur A. Allen

"SOMETHING TELLS ME I AM NOT ALONE"

From his perch among the sedges (carefully arranged by the photographer) a suspicious **Redwing** surveys the blind before going in search of food for his young. The nestlings, out of sight below, are even nearer the camera.



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"GOOD HUNTING! WHO WANTS A FRESH GRASSHOPPER?"

An **Eastern Meadowlark**, resplendent in yellow shirt front, white coat-tails, and black cravat, looks around for possible dinner before feeding his quadruplets. They repose of all places, in Dr. Allen's hat (opposite right).



© National Geographic Society

"NOW, NOW, CHILDREN, YOU'VE JUST BEEN FED!"

Two baby **Robins** continue their wide-open tactics, though a closing order has just been delivered. The mother built her nest on top of a birdhouse fastened to the window casing—a sort of penthouse apartment. It rests directly against the glass, in view of her human neighbors.



Kodachromes by Arthur A. Allen

A HATFUL AND A MOUTHFUL

Moved from their nest to the photographer's hat, four young **Eastern Meadowlarks** make themselves at home while mother brings two large green katydid. After each meal the old birds carefully carried away all excrement, keeping the hat as clean as if it had been their own nest.



STARTLED, "THUNDER PUMPER" FREEZES LIKE A CLUMP OF GRASS.

The American Bittern received its nickname because of its booming call. Sneaking back to his nest, this one came so close that the camera caught only his head and shoulders. Standing like a statue is this marsh dweller's best defense; but if wounded he may deal a wicked blow with that javelinlike bill.



© National Geographic Society

Kodachromes by Arthur A. Allen

"LET'S SELL OUR LIVES DEARLY, MATES!"

These young Least Bitterns were not much larger than sparrows, but they stuck their little bayonets into the air and tried to appear as formidable as possible. Their down, like hair standing on end, rather belies their courageous attitude, as it makes them look scared to death.

COLOR CLOSE-UPS OF FAMILIAR BIRDS



WHEN THE WIND BLEW, HER CRADLE WOULD ROCK.

In fact, to get this picture, a time exposure, Dr. Allen had to brace the little chokecherry tree to keep it from swaying in the breeze. The daydreaming Wood Thrush was brooding her young six feet from the ground in a grove on the campus of Cornell University.

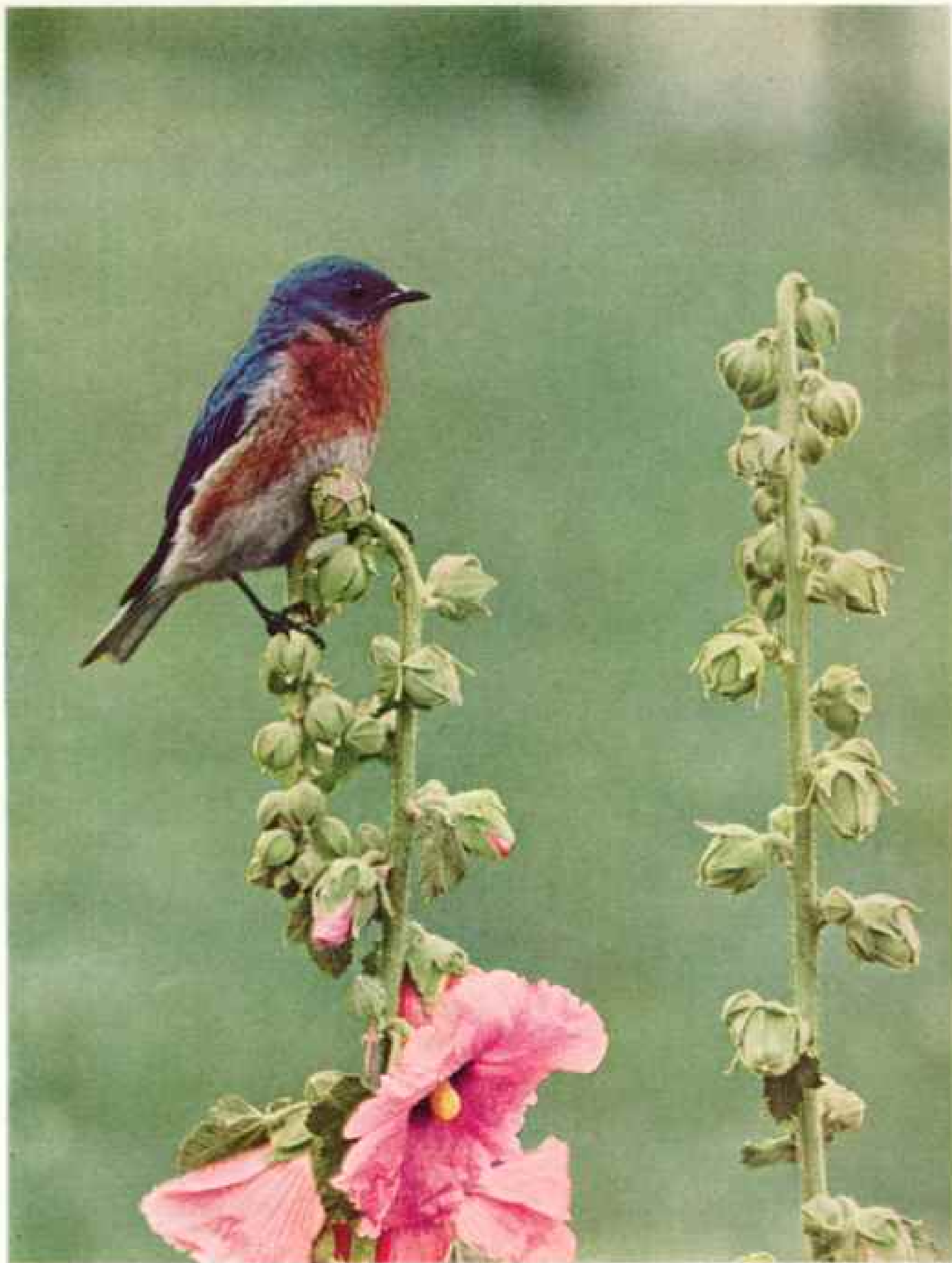


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Kodachromes by Arthur A. Allen

THIS CHIPPING SPARROW'S HOME IS A BED OF ROSES

She built it in a rambler vine, safe from cats and other pouncing foes. The Chipping Sparrow, sometimes called the "hairbird," always lines her nest with horsehair. But the automobile age has left its mark; the lining is thin and the straws show through.



© National Geographic Society

Kodachrome by Arthur A. Allen

A MIDSUMMER IDYL

An appropriate "front porch" for this favorite garden dweller is the tall pink hollyhock near his home. An early harbinger of returning spring is the **Eastern Bluebird**, whistling its wistful refrain, "Dear, dear, think of it, think of it." Knowing the fondness of this bird for cutworms and caterpillars of many destructive insects, wise orchardists attract it by placing boxes on fruit trees.

little attention to the fearsome camera and tripod fastened conspicuously to the top of a tall stepladder.

Some of the other nests in the rose garden were even more colorful, such as a chipping sparrow's nest in a rambler vine and a song sparrow's nest in a General Washington rosebush. The nests, for the most part, were beneath the plane of the flowers, so that in parting the branches to expose the nest for the camera I had to be careful not to move all the flowers out of the picture.

"HAPPINESS" ON HOLLYHOCKS

The desire for colorful combinations often required ingenuity and days of careful watching in order to be on hand when the birds and flowers were both at their best or to arrange a setting appropriate to the species concerned.

Years ago I saw a bluebird perched on a pink hollyhock in a neighbor's garden and, ever since, I carried that picture in my mind hoping that I could some day reproduce it with a camera.

Finally the opportunity arrived when some young bluebirds were about to leave their nest box on one of the University buildings, and the hollyhocks, not too far away, were in their prime. Both the box and the flowers had to be moved to get the birds to perch on the hollyhocks when returning with food for their youngsters, but the resulting pictures seemed worth the effort and no harm came to the birds when the box was returned to its former position (Color Plate VIII).

NESTLINGS GUARDED AGAINST SUNSTROKE

In working with birds' nests in the bright sunlight required for action pictures on color film, one has to be extremely careful not to leave young birds exposed to the direct rays for many minutes at a time.

Ordinarily a nest is well concealed and shaded by the surrounding foliage, which must be carefully bent aside when a photograph of the parents feeding the young is desired. Naturally one cannot run out of the blind and part the leaves every time one hears the bird coming with food. Indeed, the parents will usually not return at all so long as they know one is anywhere around.

After bending aside the obstructing leaves, one must devise some convenient method of shading the young while waiting

for the parents to return. An indigo bunting's nest, for example, I covered with a large piece of bark. To one end of the bark I tied a thread with which, from my position in the blind, I could pull away the covering. I don't know which surprised the mother bird the more, to find her nest concealed or to see the bark slide off the nest and her youngsters' heads pop up like a jack-in-the-box (page 788).

The female indigo bunting is a plain brown sparrowlike bird with just a tinge of blue on her shoulders, and, for the sake of the color, I particularly wanted her brilliant blue mate to come to the nest. This, unfortunately, he refused to do, spending all of his time singing and challenging another equally vociferous male to invade his territory.

Though the male scarlet tanager seldom visits the nest while his mate is incubating, and never broods the youngsters, he busily brings them food. I caught him as he left for the second course of an all-day meal, but since the sky was somewhat overcast the picture was rather dark (Plate II).

GOLDFINCH PROVES CAMERA SHY

The male goldfinch persisted in coming to the back of the nest to feed the female instead of to the branch at the side, which was in sharp focus. More annoying, however, was the fact that after once seeing the lens and hearing the shutter click, he would not return to the nest at all, but persisted in calling her off and feeding her on the fence hard by. Indeed I had to move my blind to another nest even to get a picture of a male goldfinch feeding its young (Plate III).

There are so many things that can go wrong that it is remarkable that one ever gets exactly the picture planned.

Of course, if one can be satisfied with pictures of incubating or brooding birds, time exposures are feasible. The brooding wood thrush, for example, was given an exposure of six seconds. She kept perfectly still, but I had to brace the tree to keep it from swaying in the slight breeze (Plate VII).

The branch on which the hummingbird's nest was built had to be anchored securely in two places with ropes tied to pegs in the ground, for the day was both windy and cloudy (page 776).

Many persons have difficulty in finding the nests of meadowlarks, but knowing



Photograph by Arthur A. Allen

"HEY! WHAT'S BEEN GOING ON HERE?"

A mother indigo bunting registers astonishment as she returns to find a large piece of bark hiding her home and family. Her amazement was redoubled a moment later when the bark, pulled by a thread from the blind, mysteriously slid away and her youngsters' heads popped up like a jack-in-the-box. Dr. Allen used the lid to keep the nestlings from getting sunstroke (p. 787).

what a colorful addition this species would make to my collection of color portraits, I drove my car to the edge of a field where I had heard the larks calling and watched from the driver's seat.

Birds are not afraid of cars and in less than half an hour one of the larks appeared on a small tree at the far side of the field. I could see with my binoculars that it had something in its bill. Within a few minutes it flew down into the meadow and a quick rush on my part flushed the bird directly from its nest of four young.

It was more difficult to get the picture I had conceived, of a meadowlark standing on a rock with its brilliant yellow breast toward the camera, because neither of the parents seemed to like the boulder which I set up back of the nest. They accepted the blind all right; sometimes they even alighted on top of it; but they walked all around the boulder.

Even when I covered the nest with my hat they crawled under the brim to feed the youngsters instead of getting up on the rock to inspect the hat. Not until I placed

the young birds in my hat right beside it did I succeed in getting one of the parents to pose on top of the stone (Plates IV-V).

After feeding their young the parents have the habit of cleaning the nest, the excrement being contained in a mucous sac so that it can be carried away without difficulty. I was interested to see, now that the youngsters were in my hat, whether the parents would be as careful in cleaning it as they were in protecting the nest.

They apparently believed in returning good for evil and were just as scrupulous about my hat as if it had been their own home. Such is instinctive behavior.

A BITTERN SOUNDS LIKE A MAN DRIVING
A STAKE

One Friday evening I set my blind in a marsh near the nest of an American bittern and returned the following morning with Mrs. Allen as a "go-awayster." The young were about a third grown, but I had been working with small birds so long that I did not realize the size of the adult bittern and placed my blind too close.

When the bird came sneaking back through the cattails to its platform nest, I had to content myself with photographing its head and shoulders; I could not get the whole bird on the film (Plate VI).

About the size of a domestic fowl, the American bittern stalks frogs, tadpoles, and fish which it spears with its javelinlike bill. Its streaked brown plumage makes it inconspicuous in its marsh environment and it "freezes" in stiff, awkward positions when alarmed, so that its general appearance becomes far from birdlike.

This marsh dweller, found in suitable places throughout most of the United States and Canada, is sometimes called "thunder pumper" or "stake driver" in reference to its strange *boom-ka* note, suggestive of the sound of a hammer hitting a stake. It is really a species of heron.

HOW BABY BITTERNS ARE FED

I had hoped to take some pictures of its curious feeding performance, but the youngsters all crept off into the cattails and the old bird fed them away from the nest where there were too many obstructions to the view of the lens.

However, there was a least bittern nesting about fifty feet away in the same marsh, and we next set up the blind some six feet from this nest (page 776). The least bittern is much smaller and we had little difficulty in recording the whole feeding operation in both stills and motion.

With a gulping action the mother bird lowered her bill to the expectant youngsters, two or three of which grabbed hold of it from the side. Then, as she opened her mandibles and one tadpole after another slid down the incline, each dropped into the extended maw of a youngster.

Although the young were little larger than sparrows, they would eventually become nearly the size of pigeons, but with much longer necks and bills, while their long down would be replaced by a neat plumage of tans and dark browns.

PICKING GOODIES OUT OF THE AIR

It was nearly the middle of August when David discovered a cedar waxwing's nest in an apple tree. Leaning a ladder against the branch, I climbed until I could look into the nest.

The horrible apparition was too much for the young waxwings and they fluttered from the nest to the ground. We tried

putting them back in the nest, but they would not stay, so we put them in a box deep enough to prevent their jumping out and fastened it in the tree. It was a satisfaction to see the old birds within half an hour feeding them in the box as if nothing had happened.

The next day I returned with the color camera and on the way I picked a spray of wineberries, thinking perhaps the old birds would like a local supply of food. Perching the youngsters above the berries and in front of the grass-mat blind, I awaited the return of the parents, imagining how pleased they would be to find all the nice ripe fruit at their doorstep.

As long as I was visible, the youngsters pointed their heads toward the sky and tried to look like dead leaves, but they lost a little of their dignity when one of the parents arrived.

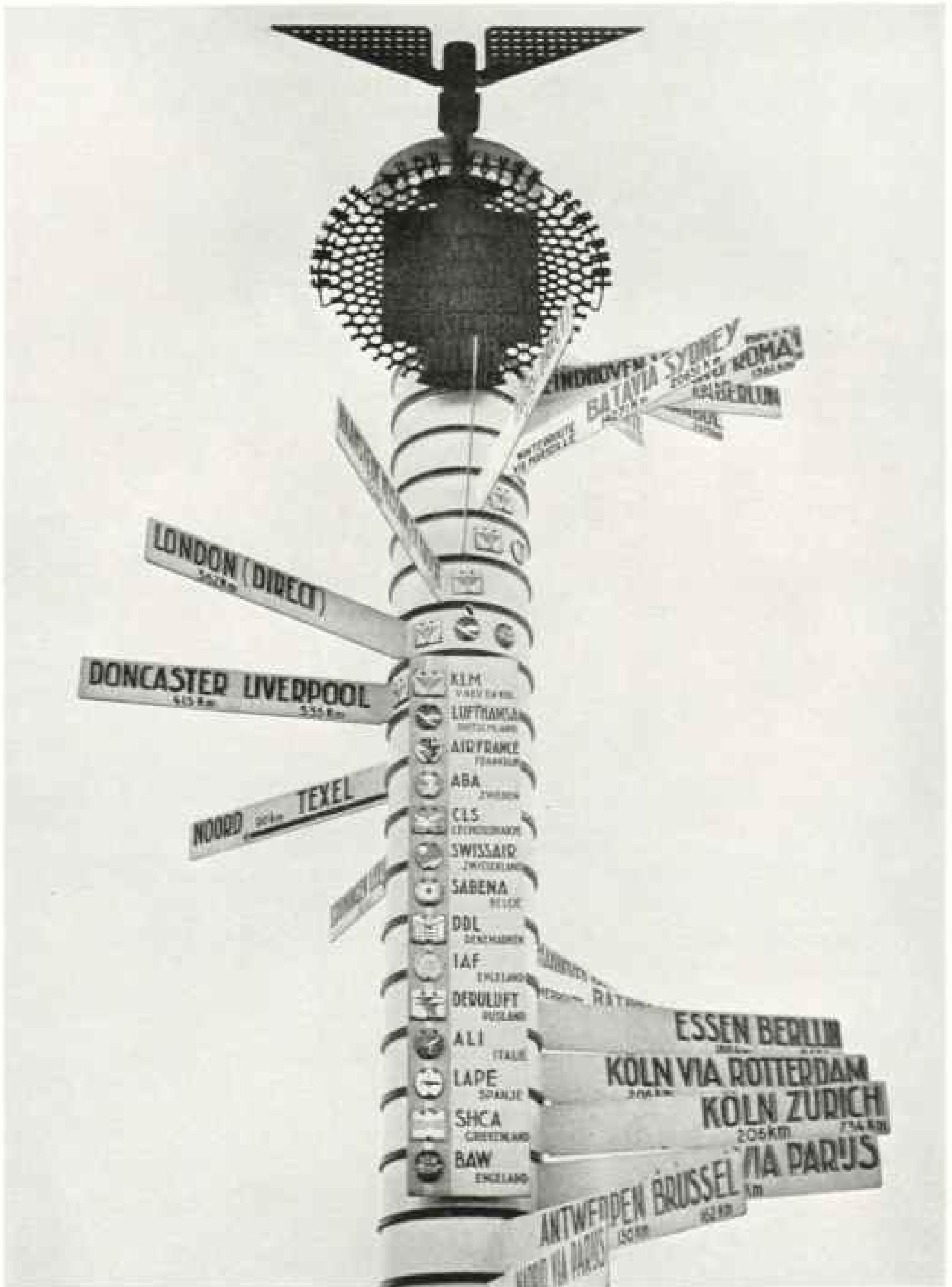
At first it looked as if the old bird had brought no food and would welcome my offering. But the waxwing is an expert prestidigitator and carries quite a bag of tricks in his throat, for, presto, up came a cherry and down it went into the gullet of a youngster.

For a moment the old bird watched the berry go down and then with another gulp brought up a large insect with wings, like a fly. I was reminded of the old gag about the "alternating currant pie"—"first a currant, then a fly." Well, these youngsters were having their pie brought to them from a distance and not once during the whole morning did any of them notice the wineberries (Plate I).

BIRD BEHAVIOR AT ARM'S LENGTH

Thus the photographic season closed. With camera and film supplied by my good friend Albert Brand, I had taken, in natural color, satisfactory still and motion pictures of some twenty-five species of birds. Best of all, I had renewed that intimacy of observation which one gains from a photographic blind and which is so essential to correct interpretation of bird behavior.

One who observes birds at a distance through binoculars as they flit through the trees has many a thrill as he makes new acquaintances or hears new songs, but the one who watches them for hours at arm's length, at the nest or even at a feeding station, acquires a fund of understanding of bird life and bird instincts that can be gained in no other way.



Photograph by Acme

AN AERIAL SIGNPOST POINTS TO PORTS OF CALL IN FOUR CONTINENTS

It stands at Schiphol Airport, Amsterdam, where planes of 14 airlines, serving Europe, Africa, Asia, and Australia, make several hundred landings every day. Here is the home of the Royal Dutch Air Lines (K.L.M.) whose fleet is made up chiefly of American-built aircraft.

LOOKING DOWN ON EUROPE AGAIN

Crisscrossing Air Tracks Reveal Nature's Scenic Masterpieces and Man's Swift-changing Boundaries and Structures

BY J. PARKER VAN ZANDT

IT WAS a little after daybreak when we taxied out of the tiny harbor of Rhodes in an Ala Littoria seaplane, bound for Athens.

The head wind which had held us back the afternoon before had died completely away and the sea at that early hour was glassy smooth, making take-off difficult. With motors roaring, the twin floats in which we were seated raced along in a smother of spray, bouncing several times before finally breaking the surface suction.

We had left our steamer at Suez. As we plowed slowly up the Red Sea en route from the Orient, the urge to savor once more the bracing freedom of the air had swept over us irresistibly (map, page 794).

Some 14 years before, I had made a comprehensive survey of European airlines. At that time, however, no air route existed across the Mediterranean.*

Today one can choose between half a dozen services connecting the Near East with Europe. We selected Ala Littoria in order to visit both Rhodes and Athens.

GREEN ISLES OF THE AEGEAN

Flying at a low altitude, we watched the green isles of the Italian Dodecanese slip by beneath our wings, their rocky shore lines a riot of pastel colors under the transparent water.

Directly on our course the slender island of Amorgos lay dreaming shoulder-deep in the Aegean Sea. On its southern shore a thousand-foot cliff dropped sheer to the water's edge and a white-walled monastery, like an eagle's eyrie, clung to its face with a tiny footpath zigzagging down.

We zoomed just over it, skimmed gaily across a glen where a blue-capped village clustered around the ruins of an old fort, and so out to sea again.

As we neared the Grecian mainland, the weather grew unfavorable. The en-

chanting profiles of the Cyclades faded out in rain. Hugging the waves, we scudded past Piraeus to land twenty miles farther on in the more sheltered bay of Megalopefko.

It poured as we drove back to Athens through dripping olive groves and we wondered if we should not have stayed with the plane, flying directly on to Brindisi. But when the sun came out that afternoon and we stood on the Acropolis under the shadow of the Parthenon, we knew we had made no mistake.

MODERN ATHENS AN AERIAL CROSSROAD

Modern Athens is a veritable crossroad of international airlines. From Durban, South Africa, and the Netherlands Indies; from Tehran, Hanoi, or Helsinki, almost half a score of services maintain direct schedules to the Grecian capital.

Here Imperial Airways starts its African and Far Eastern networks, crossing the Mediterranean where the island of Crete affords an emergency refueling base. Air France stops on its six-day run from Paris to Indo-China; and K.L.M. (Royal Dutch Air Lines), en route from Amsterdam to the Antipodes.

Deutsche Lufthansa calls on the way to Kabul; and L.O.T., the Polish line between Warsaw and Palestine. There is even a local Greek service to Salonika. Had we not been booked with Ala Littoria for Italy, we should have liked to sample them all!

Eleven passengers joined us at Tatoi terminal, the combined military and civil airport on the plains north of Athens. While we fretted in the customs room, waiting for officials to clear our baggage, a big trimotored Savoia-Marchetti, which was to carry us to Rome, rolled up to the loading tarmac.

A half-hour later we were at 13,000 feet above a billowy white sea. Occasional rifts in the cloud floor gave us fleeting glimpses of the Gulf of Corinth, a gigantic cleft between massive mountain ranges.

* See "Looking Down on Europe," by J. Parker Van Zandt, NATIONAL GEOGRAPHIC MAGAZINE, March, 1925.



Photograph courtesy Imperial Airways

STRAIGHT AS AN ARROW RUNS THE MAN-MADE DITCH WHICH MAKES AN ISLAND OF SOUTHERN GREECE

A curving thread of road roughly follows the ribbonlike Corinth Canal. Bound from the Adriatic Sea to Piræus, seaport of Athens, ships save 202 miles by steaming through this four-mile canal, rather than taking the old southward route around the Peloponnesus.

For a minute Mount Parnassus, legendary dwelling place of Apollo, appeared directly beneath us, its upland meadows deep in snow.

PLANES MUST KEEP IN AERIAL CORRIDORS

As we approached the Adriatic, the clouds melted away and we dropped lower to pass over the island of Corfu, signaling our departure from Grecian territory. Practically every country in Europe has carefully delimited aerial corridors by which it is obligatory for foreign aircraft to enter or depart.

On our right the hills of Albania withdrew behind the noonday haze. The steamers inching toward Venice through the Adriatic's azure bowl fell far astern and we made a landfall on Italy's marshy coast,

dropping in for customs inspection at Brindisi.

We took time out to snatch a hurried lunch that saved us, fortuitously, a disagreeable half-hour later. Normally the plane stops only a few minutes at Brindisi.

The unprecedented weather of the past few days, however, had thrown the services out of gear. A double section was scheduled and the hungry passengers, including a dapper Japanese and ourselves, were relegated to the second plane. We were still at the luncheon bar when the first section cleared.

STORM OVER THE APENNINES

The police held us up still further over passport inspection. It was twenty minutes after the first plane's departure before we



© Helge H. Finson

GAILY CLAD EVZONES GUARD THE TOMB OF GREECE'S UNKNOWN SOLDIER

To right and left of the shrine in Athens, umbrellas protect the soldiers from the Mediterranean sun. They wear the Greek national costume, consisting of a tasseled cap, embroidered sleeveless jacket and vest, white shirt with full sleeves, white skitlike *justanella*, red garters, and red leather shoes with pompons on turned-up toes.



Photograph by Fox Photos

RAIN AT LONDON--BUT THE CROSS-CHANNEL SERVICES CARRY ON

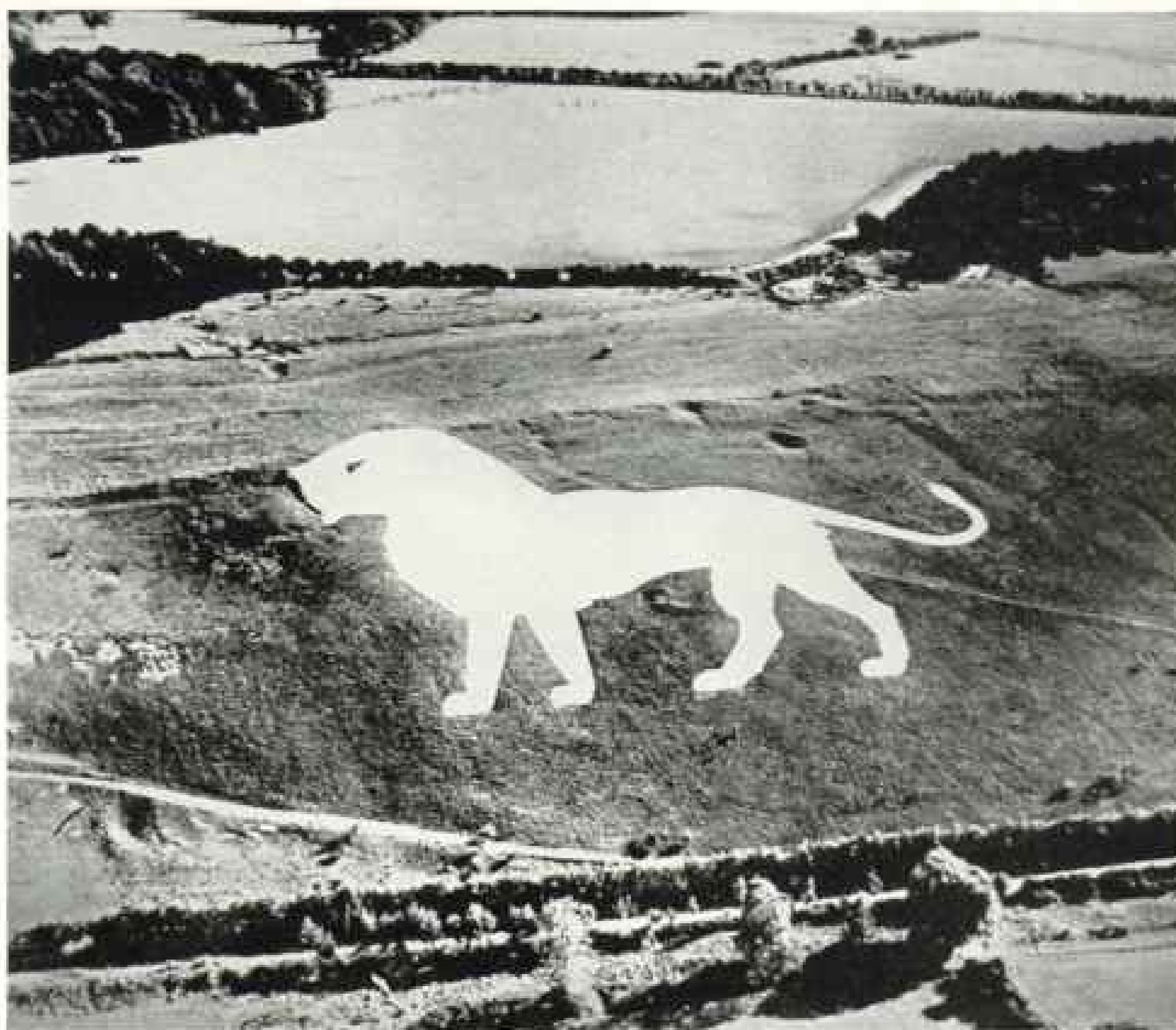
Mail is loaded into the nose of a plane at Croydon, Britain's busiest airport. At no extra charge, first-class letter mail from the United Kingdom is routed to any place in the Empire by the fastest means--air, rail, ship, or camel (page 863).



Drawn by Newman Barnstead and Ralph E. McAfee

THE AUTHOR'S AERIAL ODYSSEY SCRATCHED VAST BIRD TRACKS ACROSS THE MAP OF EUROPE

Flying only in the airplanes of commercial airlines, Mr. Van Zandt cruised more than 15,000 miles across 18 countries. Arrows show his routes and direction of flight from Egypt and the Bible Lands to Greece, Italy, France, and England. A side trip to Scotland was followed by a journey to Ireland. After extensive flights in all the Scandinavian countries, the sky tour was continued in the lands of central and eastern Europe. The final leg took the travelers from Switzerland to Marseille in southern France, whence they sailed, this time by boat, home to the United States.



Photograph from *Wide World*

THE KING OF BEASTS IN CHALK WARNS PILOTS NOT TO ROAR TOO CLOSE

At Whipnade, about 30 miles northwest of London, an area of 500 acres has been set aside for the breeding and exhibition of wild animals in natural surroundings. It is the country branch of the Zoological Society of London. Aircraft flying too low terrify the four-footed residents.

took off—a delay for which we were to be thankful!

As far as Bari all went well, but when we started across the Italian "boot" it became increasingly evident that we were entering a storm of major proportions. Between the snow-streaked Apennines, dark under cloud shadows, we serpented through the valleys to emerge near Capua on the Tyrrhenian plain.

The climax, however, was still to come. An ominous black cloud, like a pall curtain, stretched directly across our course near the Gulf of Gaeta, blotting out the landscape. As we headed toward it, I warned my wife to fasten her seat belt tightly, while I did the same.

To our relief, the plane swung suddenly off to one side just before entering the cloud and headed out to sea. Later we learned that the captain had received a radio warn-

ing, in the nick of time, from the pilot of the first section, who had undertaken to fly blind through the storm, following the regular route, and had found the going exceedingly rough.

On out to sea we went, past the island of Ponza, skirting the face of the seething curtain. Then where the cloud wall appeared less opaque we turned abruptly into it.

I called to Lydia to hold tight to her chair. As the swirling gray mist closed around us, a violent down-current caught us and the plane dropped like a plummet, throwing us up against the safety belts.

The incident found our Japanese friend totally unprepared. He had been lounging in the rear of the plane, relaxed and half-dozing, entirely unaware of impending excitement.

When the gust struck us, I watched him



Photograph from *Three-Liners*

BECAUSE THE TIBER SOMETIMES FLOODS ROME'S LITTORIO AIRPORT,
HANGARS ARE ON THE "SECOND FLOOR"

Planes are taxied up ramps to be housed and serviced at a level well above the low-lying field. Attendants wheel away mail and a big piece of air express from a newly arrived skyship.

soar slowly into the air, midway to the roof of the cabin, an expression of utter astonishment and bewilderment on his face! Then the cloud currents as suddenly reversed and slapped him back in his seat again, strewing the aisle with hats and coats and all our travel paraphernalia.

OUT OF THE STORM

Rearward of the cloud curtain the wind blew out of a fresh quarter, whipping the sea into a frenzy of whitecaps. In twenty minutes we had crossed the ring and were poking our way out the other side. Long tentacles of rain-charged cloud hung in sheets to the water and clawed at the waves. But there were no crosscurrents as violent as at the leading section. Then we burst into brilliant sunshine again.

Beneath us the sea shimmered in silver light, all memory of the passing storm already effaced from its placid surface. But the Albano hills toward which we now headed still carried a memento of the tem-

pest in an unprecedented mantle of snow. Coasting down across the reclaimed Pontine Marshes,* we skirted the Foro Mussolini on the banks of the Tiber, to land at Littorio Airport.

THE THRILL OF ROME

Rome! What a thrill it gives one after years in the Tropics! Who would resist the appeal of symphony music played in the Roman Forum under a full moon—at popular prices? Or open-air opera enacted in an ancient Roman bath?

We wandered in delight through the former summer gardens of the great papal families and along the boulevards where Italian officers resplendent in uniform throng the walks at the *apéritif* hour.†

A knowledge of aviation is included in

* See "Redemption of the Pontine Marshes," by Gelasio Caetani, NATIONAL GEOGRAPHIC MAGAZINE, August, 1934.

† See "Imperial Rome Reborn," by John Patric, NATIONAL GEOGRAPHIC MAGAZINE, March, 1937.



Photograph from Keystone

DUBLIN'S LORD MAYOR ALIGHTS IN LONDON, INAUGURATING A NEW SERVICE
BETWEEN IRELAND AND ENGLAND

Wearing his chains of office, the Honorable Alfred Byrne steps down at Croydon Aerodrome after the initial flight. Behind him is Mr. Seán Ó hUadhaigh (pronounced "O'Hooy"), director of Ireland's new air line.

the Italian youth's training. Il Duce is an ardent pilot himself and intends that the rising generation shall share his enthusiasm. What Italian aviation has accomplished in the last few years is indeed remarkable.

None of the routes which today fan out from Rome in every direction was in operation when I made my first airline survey. Now fast planes daily connect the imperial capital with Addis Ababa, Ethiopia, almost 3,000 miles southeast. A transatlantic route to South America has been surveyed.

"LUNCHING ON HIGH"

London and Bucharest are only a half-day's flight from Milan, on Avio Linee's Fiats. Or, if you choose, you may fly to Spain, or to ancient Carthage in Tunisia, in a few hours.

We chose, however, while the opportunity was at hand, to sample Imperial Airways' empire-spanning service on the last leg

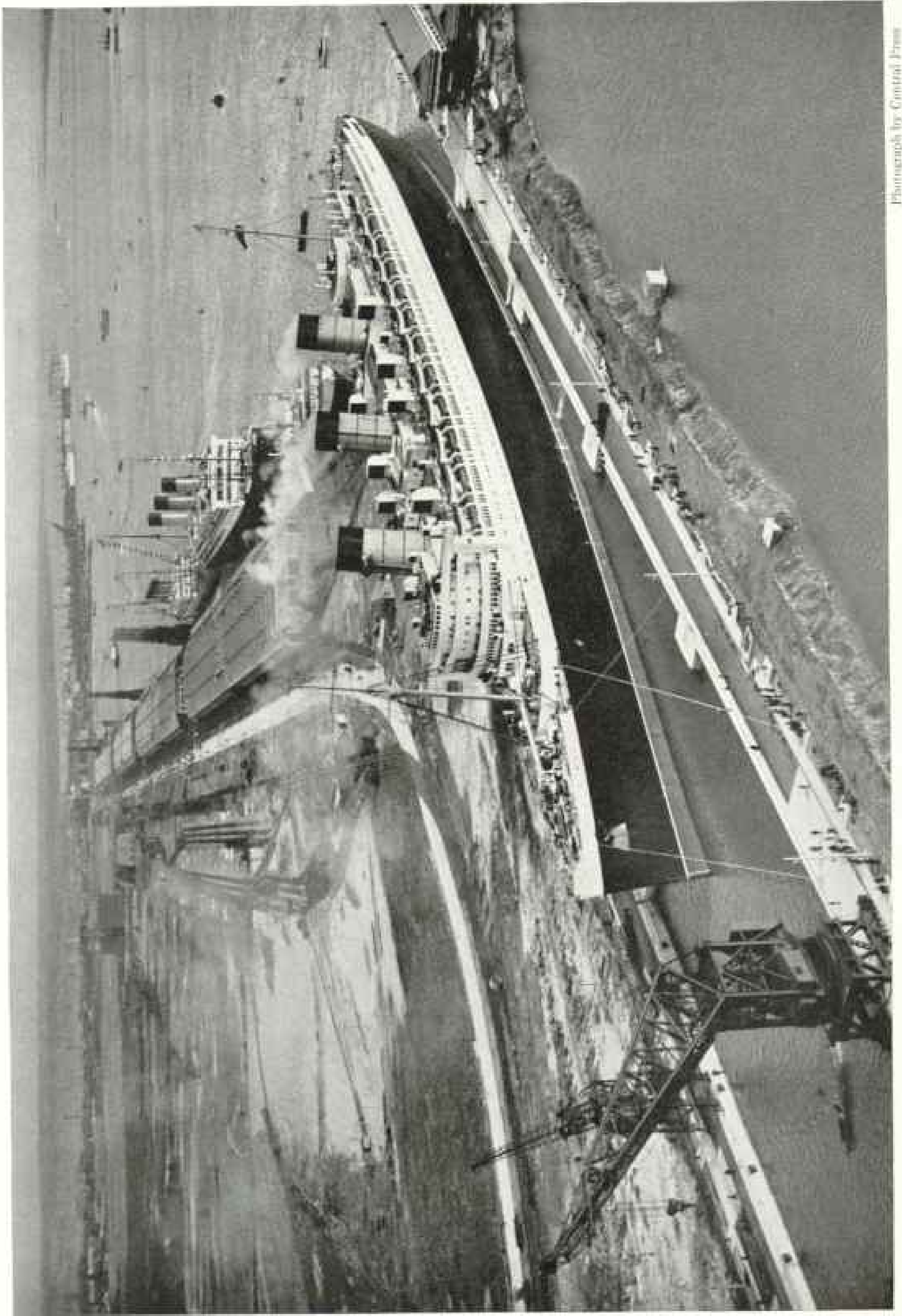
of the 13,000-mile run from Brisbane to London.*

"So you're lunching on high tomorrow!" exclaimed the pretty girl at our hotel. "Is this your first meal up?" On the journey from Rome to London you breakfast in one city and dine in the other!

Equestrians cantered by under stately pines as we drove out the Pinciano toward the British flying-boat base. Beyond the Tiber the rolling fields of wheat were splashed with the red and yellow of wild poppies, daisies, and mustard. Youngsters in neat blue smocks trudged past, their schoolbooks slung in a strap across a shoulder.

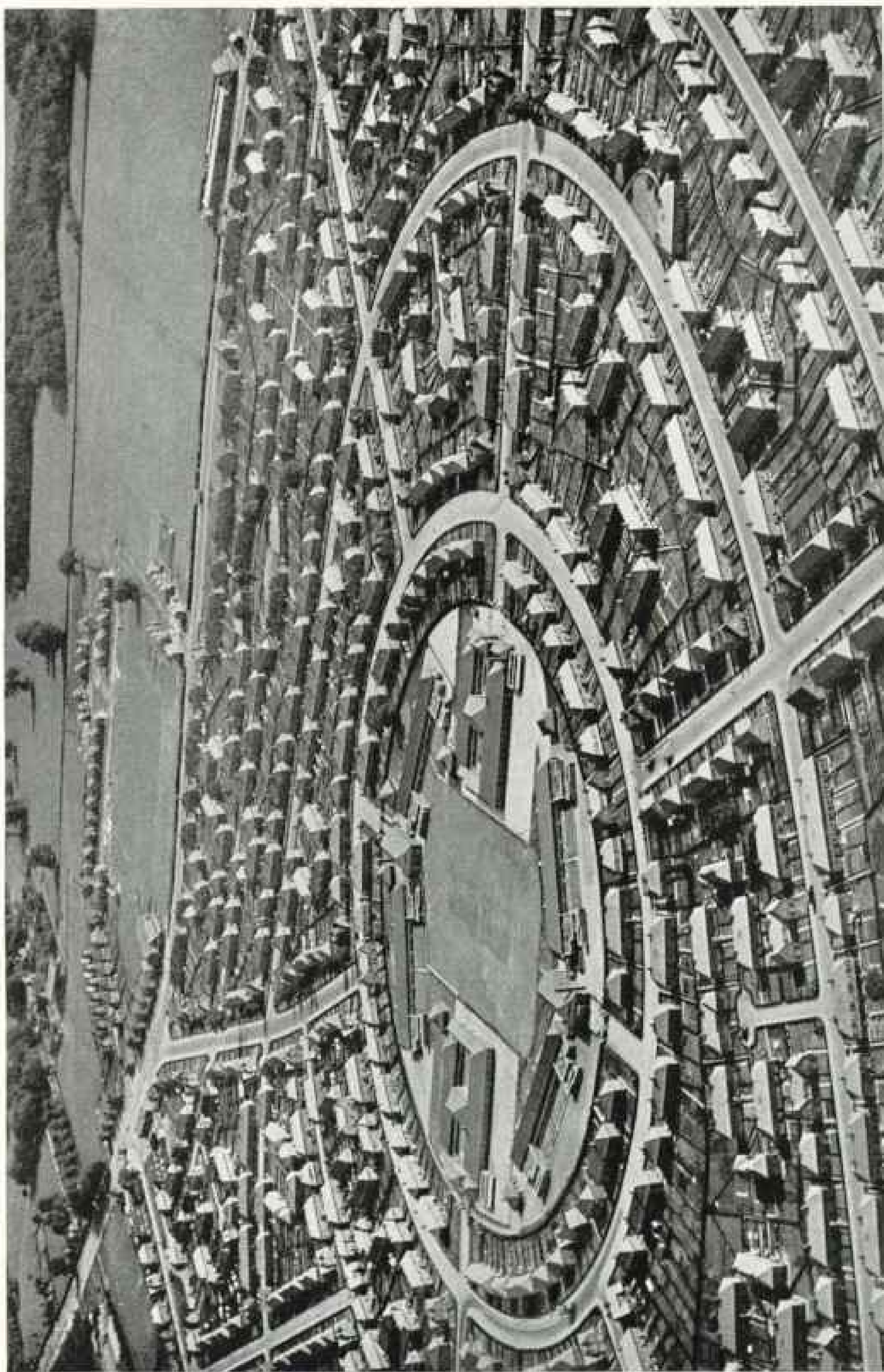
Then over the brow of a hill the vineyard-terraced basin of Lake Bracciano appeared. From its dominating height the gray battlement of Odiescalchi Castle frowns down on

* See "From London to Australia by Aeroplane," by Sir Ross Smith, NATIONAL GEOGRAPHIC MAGAZINE, March, 1921.



Photograph by Capital Press

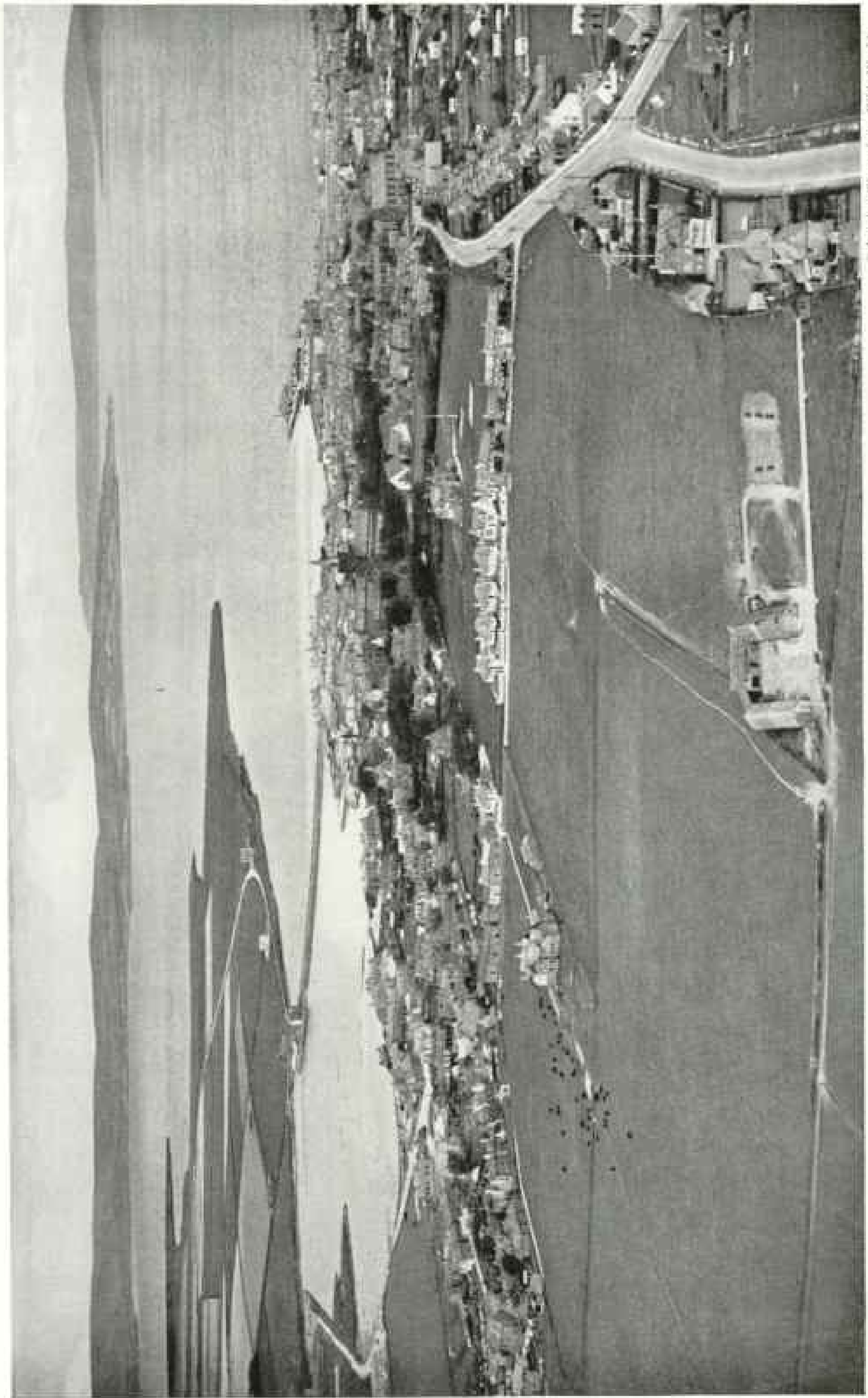
PASSENGERS FROM THE "QUEEN MARY" MAY BOARD A FLYING BOAT HERE IN SOUTHAMPTON WATER FOR INDIA OR AUSTRALIA



© Arthur W. Hobart from Central Acropolis

HOMES AND GARDEN PLOTS OF AN ENGLISH HOUSING DEVELOPMENT ARE LAID OUT LIKE A HUGE TARGET

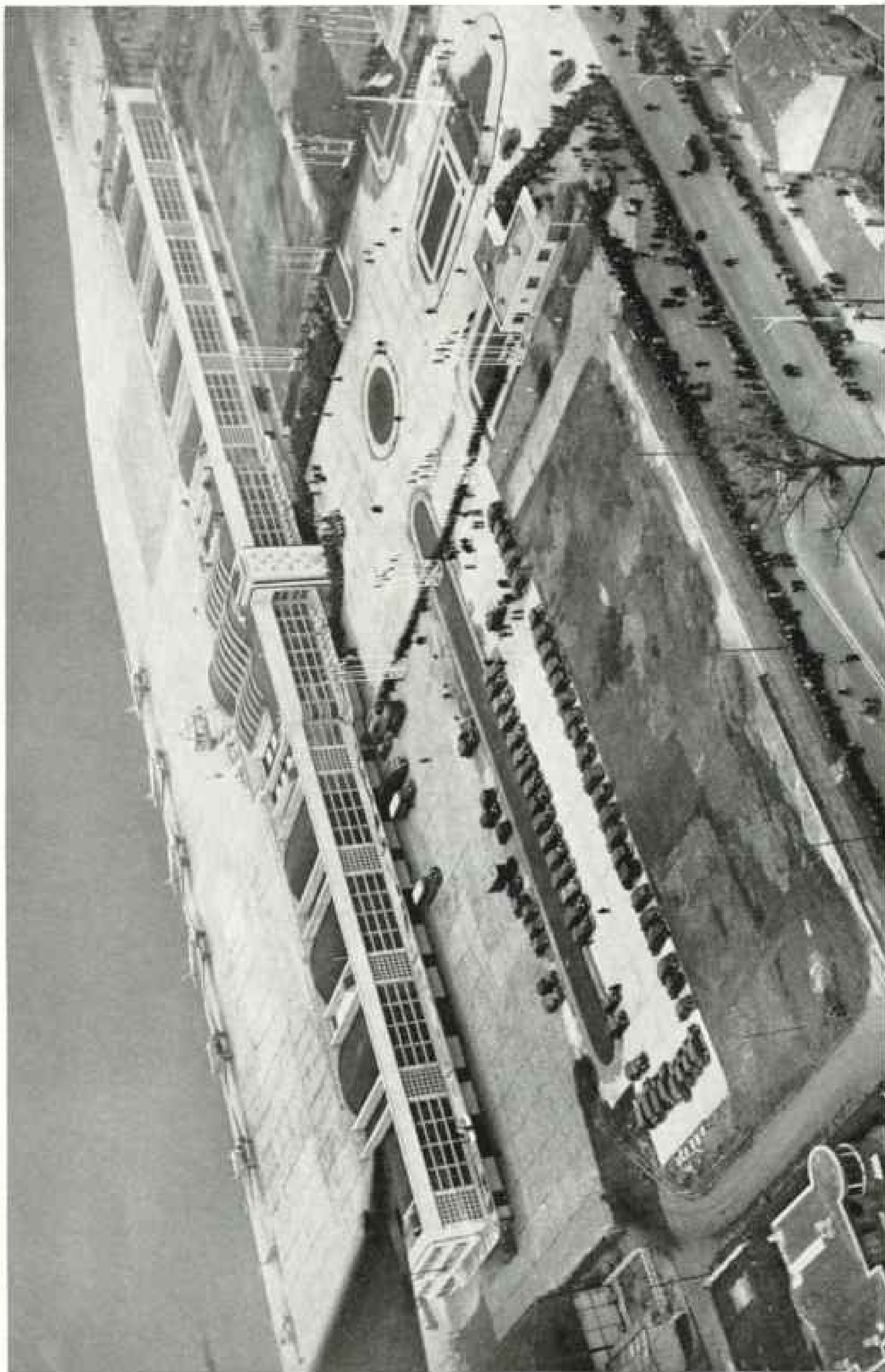
Comparable to re-settlement projects in the United States is this model community at Nottingham, with schools and playground clustered in the center (page 811).



© Lintfort Turner from World World

NORSEMEN RULED THE ORKNEY ISLANDS WHEN KIRKWALL'S CATHEDRAL OF ST. MAGNUS (CENTER) WAS BUILT

Proud of their Scandinavian origin, inhabitants of the island group off the northern tip of Scotland refuse to call themselves Scots. Their English is still colored with Norse words. Near the Orkneys' capital is Scapa Flow, where many ships of the German Grand Fleet were scuttled in 1919 (page 808).



Photograph From Air France

FRANCE'S NUMBER ONE AIRPORT PUTS ON A FULL-DRESS SHOW FOR VISITING DIGNTARIES

At Le Bourget, near Paris, the long modern terminal building contains a restaurant and waiting rooms, shops, control tower, and offices of the airport and the various air lines. Here Colonel Charles A. Lindbergh landed with the *Spirit of St. Louis* after his epic solo flight across the Atlantic on May 21, 1927.



Photograph by Bernd Lohse from *Three Lions*
 "HOURS UNCERTAIN" READS THE COLLECTION NOTICE ON THIS
 SHETLAND POST BOX

Formerly, islanders living on such isolated groups as the Shetlands, Orkneys, and Hebrides were cut off from Scotland for long periods by storms and rough seas. Now islanders commute regularly by air to the mainland (page 808).

the upstart aviation activities at its feet. And the little airport terminal on the lake shore unblinkingly stares back through small round windows, under red-arched eyebrows.

The *Ceres* had arrived early from Brindisi. We were quickly ferried out in the company launch and put aboard at the rear hatch. The spaciousness of the interior at once impressed us. The deep hull, the several compartments, the bar and smoking room aft, the promenade where one may lounge against the rail, all combined to create an atmosphere of travel comfort.

Compared with the cramped quarters of the best planes a few years ago, here was a palatial yacht fit for a journey of indefinite length. Among the dozen or more passengers already aboard, most of whom had been with the plane for several days, one sensed a pleasant air of comradeship.

In spite of its huge size the boat rose easily, banking above the moss-grown tiles of Trevignano and scudding away over the treetops. We enjoyed the novel sensation of standing by the promenade rail watching the hill towns slide past, on the ridges almost at a level with our eyes. Then the hills ran down to the coastal plain and the Mediterranean opened ahead. Behind us, across the

eastern sky, the Apennines lay revealed like a bruised tibia in the pliant Italian soil.

CUTTING THE CORNER OF CORSICA

Soon we were cutting the corner of Corsica. The coloring was gorgeous along the beaches, where the black sea growth edged toward the dazzling sand. From sheltered bays white roads spiraled up, tracing the contours of the green hills until lost in the snow-covered central ranges.

Around the corner, a wind of gale proportions caught us quarter-beam. It was the sirocco, dread hot wind out of Africa.

The sea, which had been a polished indigo to the lee of Corsica, was now marred by myriad fresh white scratches.

Past Cannes and Toulon the gale paced us the length of the Ligurian Sea and piled up a mountainous welcome at the lake of Marignane, the seaplane base for Marseille. The combination of wind and waves seemed alarming at first, but the captain set the big flying boat down skillfully and then drifted and "sailed" backward to safe anchorage in the lee of the breakwater.

While French mechanics in blue berets pumped out the bilges, the steward went ashore in the launch, returning considerably wind-blown with a promising convoy of thermos jugs. The appetizing contents of those jugs became our first order of business as soon as we were in the air once more. Following a five-course lunch, we were handed the latest London papers brought down by the southbound plane out of England that morning.

In what journal in the world can one find such concentrated drama and pathos as on the front page of an English newspaper! While some of the passengers dozed or played cards in the forward compartment, and others gathered in the smoking room, we reveled in the first-page personals.

ALICE, WHERE ART THOU?—Jim.

OLD FRENCH FAMILY would cede historical coat-of-arms. Count, dating from Crusades, 1088, illustrious members and superb connexions.—Write Saren, Hays, Bordeaux, France.

ANNE.—I am not so foolish to entertain any hope of forgiveness, but please do sometimes think of E. G.

UNWANTED artificial Teeth gratefully received.—Ivory Cross Dental Aid Fund, 97a, Welbeck Street, W. 1.

TOPS—Darling, always thinking of you. All my love. Please write again.—R.

PLEASE remember ST. DUNSTAN'S in your will. New cases of blindness due to delayed action of mustard gas are still arriving.—ST. DUNSTAN'S, Regent's Park, N. W. 1.

Long before we were ready, the scalloped cliffs of the English Channel showed below and we were gliding up the long inlet to Southampton, our final mooring. A quick transfer to the restaurant car waiting on the boat pier, a pleasant early dinner while rolling up to town, and we were in ample time that evening to watch the curtain rise in a Haymarket theater on Noel Coward's latest play.

The Island Kingdom's strictly internal airlines to the many outlying isles have grown amazingly in recent years. Even on overland routes, in spite of excellent rail

service and relatively short distances, airlines have made steady progress.

We first tried the network of internal lines on a flight from London to Glasgow, dropping down at Liverpool to change planes. Here the transport which had brought us from London continued on with the mails to the Isle of Man and Belfast.

BRITISH AIR MAIL—AT NO EXTRA CHARGE

In Great Britain all letter mail is now forwarded by plane whenever air service offers quicker delivery. No extra postage is required.

Leaving Liverpool across a forest of wet chimneys and docks, we skirted an angry gray-green sea beating against the coast. Then the sky cleared to reveal the Cumbrian silhouette of the English Lake District, the muddy shallows of Solway Firth leading to Carlisle, and the Ayrshire hills where Robert Burns once sang.

Less than three hours out of London we were strolling through Bellahouston Park, Glasgow, with a fantastic "Tower of Empire," feature of last year's Empire Exhibition, crowning the central hill.

Radiating from Glasgow is a series of fascinating lines to the very fringes of the British Isles—the Shetlands, the Orkneys, and the Outer Hebrides. The Laird of North Uist and his Lady were fellow passengers with us the day we flew to the Hebrides, helping us identify the many islands visible from above the Minch, where the full swell of the Atlantic meets the current between Skye and the Outer Hebrides.

At Barra we landed on a tiny crescent strip of sand covered with air bubbles from a million burrowing bivalves. The "airport," really only a foreshore lease, is the finest cockle-bed beach in Great Britain, according to the Coddie (postmaster) of Barra. A full tide will flood it. But the canny Scots must have the moon on their payroll, for it is said that in two years their schedules have not once been interrupted!

AN ANGLER'S PRAYER

The fairway of a sand-dune golf course serves as South Uist's airport. The runway is a field of daisies and buttercups. We spent an entertaining evening at the Lochboisdale Inn with the hearty, ruddy-faced anglers, some of whom have been



Photograph courtesy Deutsche Lufthansa

A FLOCK OF 22 SLEEK GERMAN SKYLINERS ROOSTS AT BERLIN'S TEMPELHOF AIRDRÔME

Only non-German ship is an American-built plane of Poland, identified by the letters "SP" on the left wing. "D" is the mark of aircraft of the Reich; just as "G" is the letter that identifies planes of Great Britain. "F" those of France, while Italy's bear an "I." Vast new buildings now under construction will make Tempelhof Airport Europe's largest. It will be possible for all of these planes to load and discharge at one time under a broad, crescent-shaped, overhanging roof. Grandstand seats on top will be able to seat the population of a good-sized city (page 813).



Photograph from Norsk Luftfoto

BODØ, 50 MILES NORTH OF THE ARCTIC CIRCLE, IS A WAY STATION ON NORWAY'S AIR ROUTE OVER THE NORTH CAPE.

A seaplant float in the harbor of the capital and commercial center of Nordland Province. Hemmed in by bare rocky reefs, islands, and peninsulas, the town is an important shipping point for the cod catch of the Lofoten and Finnmark fisheries.



Photograph courtesy Scottish Airways, Ltd.

ALTHOUGH THE MAILBOAT WAS DISABLED AND STORMBOUND, THIS PLANE TOOK THE MAILS THROUGH.

Wind and sea interrupted the schedule of the *Pioneer*, plying between Renfrew, Campbeltown, and the island of Islay, Scotland. Northern and Scottish Airways co-operated with the General Post Office by carrying the forty-three sacks of mail in four trips.



Photograph by Hugo Edlund

LAPP CHILDREN FROM THE FAR NORTH TAKE HAPPILY TO THE AIR.

Wearing the costumes of their native district, the youngsters enjoyed a flight over Stockholm during a visit to the "big city." A school class at Bromma Airport (page 808).



© Ilmavalmar

"HELSINKI" IN WHITE LETTERS MARKS THE NEW AIRPORT OF FINLAND'S CAPITAL.

Automobiles jammed parking spaces on May 15, 1938, when the air terminal was officially opened. Control tower, waiting rooms, and ticket offices are located in the round building with wings (center). Features of the airport are two runways for blind landing, one adapted for use in summer fogs and the other to receive ships in winter blizzards (page 813).

coming back to fish these same fresh-water lochs for thirty-five summers.

If one may believe what one is told, sea trout over five pounds are not uncommon. It is said of anglers, however, that "they go out in the morning full of hope and they return in the evening full of Scotch; and the truth is not in them."

"Ye dinna ken the angler's prayer?" inquired our genial, tartan-clad host. "Lord, help me catch a fish so large that even I, when I'm talkin' about it, will have no cause to lie!"

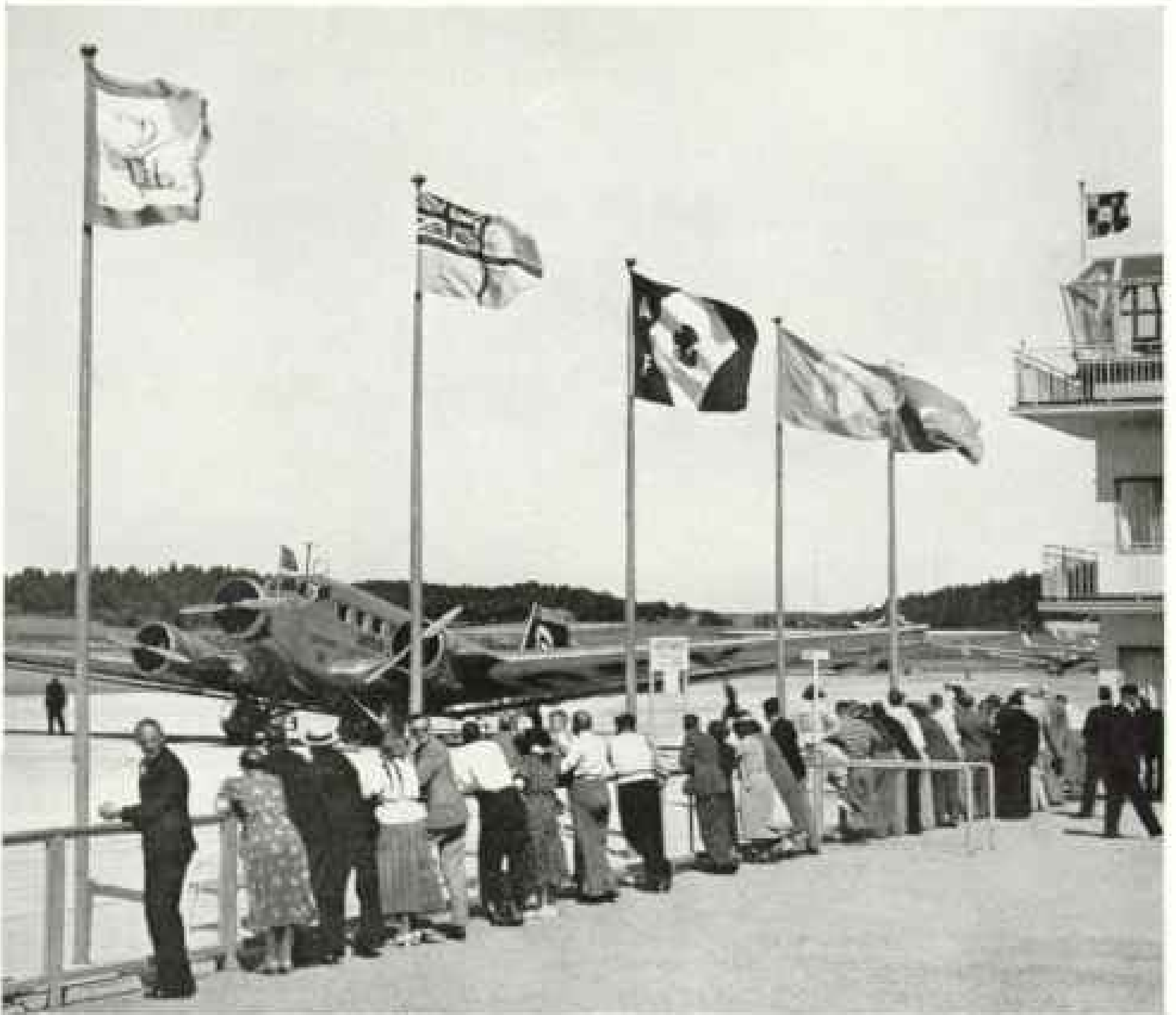
The return flight by way of Islay is one of entrancing loveliness. Along these sea-invaded shores the shifting colors are an endless delight. Here, in a secluded sound, the drifting cloud rack overhead is mirrored in burnished pewter; or a breeze

etches the surface with tiny scratches of steel gray and stirs the languid lugsails. At the beaches the green of the open moors spills across sandy borders and colors the shore water with emerald.

By the Kyles of Bute the crags of Argyllshire crowd closer, with the bluest of blue lochs running far into their dark defiles. Holiday steamers from Rothesay churn the wide Firth of Clyde. Then one views red roof clusters, spires, overhead cranes, and twinkling factory windows.

The following day we flew to Kirkwall for lunch. The Deacon Convener of the Trades of Glasgow rode with us as far as Inverness. He had come down by plane the afternoon before to attend a board meeting and was hurrying back to his fishing.

Among the passengers was a ginger-



Photograph from J. Parker Van Zandt

CONVENIENT FOR ONLOOKERS' ELBOWS IS THE RAIL AT STOCKHOLM'S AIRPORT
 Object of attention is a big German Junkers skyliner on the loading apron at Bromma (page 815).

haired Highlander dressed in traditional tartan, bonnet and burberry, a pipe between his teeth, a dog and landing net in his lap.

"The Spey's an early river," he advised the Deacon; "there's too much water in't this year. Better fly up with me to Shetland."

Meanwhile Perth dropped astern and we sped over the Grampian Hills in alternate rain-squall and sunshine.

The black moors and brown furze of the deer forests gave way to bracken on the lower slopes. Then the slender blue shaft of Loch Ness sparkled in the distance, with Inverness near its head.

CHILDREN AND GRANDMOTHER COME ABOARD

As we neared the northern tip of Scotland, along the coast of Sutherland, the radio called us down at Wick. Here a

couple clambered aboard with two small children and their 80-year-old grandmother. The whole family was commuting to Kirkwall for lunch! We appreciated why they chose a 20-minute flight in preference to the three-hour boat ferry, when we looked down on Pentland Firth (page 800).

This turbulent stretch of water off the headlands of Scotland is one of the worst tideways in the world, matched only, in these parts, by "The Roost," between the Orkneys and Shetlands, where two oceans meet. The Blue Men on their white horses were in full gallop along the vicious tide-rips as we slipped by above their reach.

The airplane already has made itself indispensable to the residents on these outlying islands. Gillies and crofters now fly across intervening water gaps as unconcernedly as the average city worker boards a streetcar. Fish buyers, plumbers, and even housewives shuttle back and forth



© Karl Werner Guller

OVER THE HORIZON LIES VACATION LAND, REACHED ON WINGS OF THE WIND

The tag on this Swedish girl's suitcase says "London," which is only six hours away by plane. Frequent air schedules connect Sweden with almost every European country. An exception last summer was Norway, next-door neighbor. To reach it by air, the Swede had to fly to Copenhagen, Denmark, and transfer there to an Oslo-bound plane (page 815).

on the "overhead trolley." At the Kirkwall airport it is no uncommon sight to see country folk disembarking with their arms full of fowls and market produce!

The air ambulance, particularly, has proved a godsend to the islanders. Many an otherwise hopeless case has been saved by the prompt use of aircraft (page 820). Twins have been born in Scottish Airways' planes—and weddings celebrated in them, too!

The captain told us of meeting in Glasgow a shepherd and his son who had flown with him to the mainland several times. Thinking that they must have come over with one of the other pilots, he inquired politely, "How was your flight this time?"

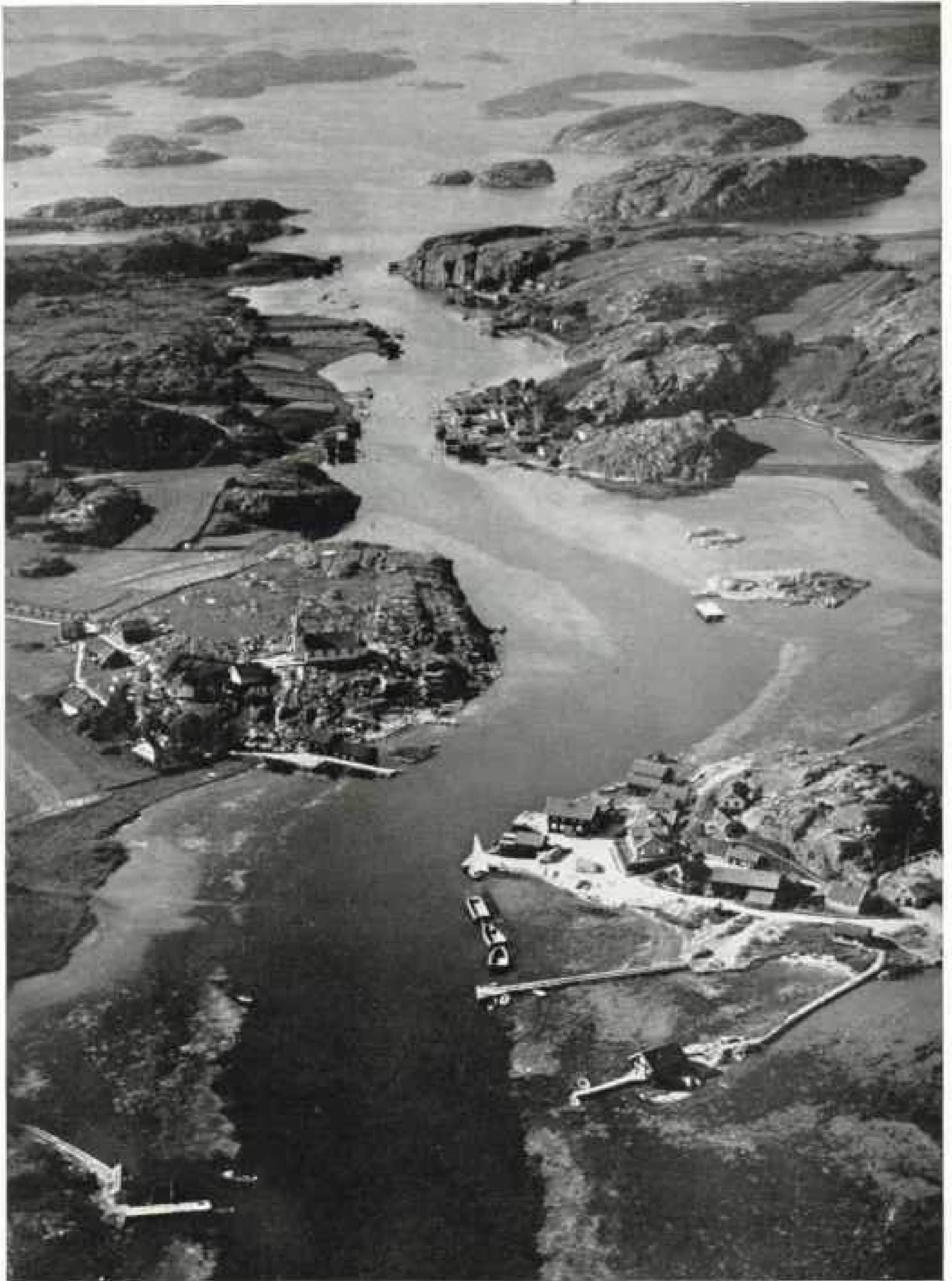
"Oh," they replied, "we thought we'd

try the steamer and railroad for once, to see what it was like."

Every seat was taken from Perth south, on the flight back to London. Leaving Newcastle, the pilot set his course for a quick nonstop hop, but the radio at Doncaster ordered him down.

LONDON FROM ALOFT

Upon landing it developed that, through some error in traffic clearance, a local passenger with a pressing engagement on the Continent had been booked on the plane, to make an air connection at Croydon. Someone obviously would have to give up his place if the gentleman was to keep his appointment. It was then the thought occurred to us to sample a train ride, "to see what it was like."



© Aero Material A. B. from Fairchild

SHIPS "RUN THE GAUNTLET" THROUGH NARROW ROCK-RIBBED CHANNELS
BETWEEN STRÖMSTAD AND GÖTEBORG

Fishing hamlets cling to bare points and thickly clustered islets of southwest Sweden's coast. Bohuslän Province has abundant relics from early periods of settlement: burial vaults 5,000 years old, and inscriptions and "rock drawings" of human figures, weapons, ships, and animals dating from 1,000 B.C.

One has to fly over London to comprehend where and how its millions of residents live. Such an astonishing city, with a population greater than that of the whole continent of Australia! We had our best "airscape" of the Empire's capital from an Irish airliner, leaving Croydon (page 793) for Dublin.

The airport was a busy place when we took off: a big Junkers had just glided in over our heads; a Czech plane bound for Prague (Prahá) taxied out ahead of us, and a bimotored Bloch of Air France trailed us to the take-off strip.

Once in the air, we climbed steadily across the folds of the Thames, skirting the suburbs of London. The generous proportion of green shrubbery, the many parks and open playgrounds, formed a pleasing ensemble. But there were also endless chains of houses in concentric rows, paralleling the arterial highways.

Set back from the walks a fixed distance, built to a uniform scale, with precisely the same number of chimneys in identical positions on the same red-peaked roofs, they were alike as peas in a pod, even to the tiny gardens cheek-by-jowl in the plots between the rows! (Page 799.)

The houses soon cease to dominate, however, and the characteristic English countryside reasserts itself: a vast greensward, gently rolling, cut into friendly patterns by hedgerows of darker green.

RACING GREYHOUNDS RIDE, TOO

Less than two hours from London we were skimming the waters of Dublin's wide bay by the little mailport now renamed Dun Laoghaire, after the Irish king who reigned in the time of St. Patrick. Skirting Phoenix Park with its star-shaped fort, we circled over the moss-grown ruins of an abbey and settled to rest at Baldonnel Airport. A brace of racing greyhounds had ridden over with us, we discovered, when attendants opened the baggage compartment.

Wherever one wanders in Ireland one finds the record of its saints and scholars. The very place names—Killarney, Shannon, Limerick—have sung themselves into our folklore. Everywhere one finds, too, the hospitality for which Ireland is famed.

We sampled it one Sunday near the port of Dun Laoghaire in a hundred-year-old house of Dalkey granite, sheltered by horse chestnuts and holly.

"Health and life to you," said our host, giving the Gaelic toast when we were seated at the table. "A child every year to you, and land without rent!"

"The trouble," remarked our hostess whimsically, as we rose from luncheon, "with letting so many folk come to Ireland is that they grow to like us so much they want to stay."

We could well believe it! But we had no choice, and so bade reluctant leave, scudding back the following morning with Aer Lingus Teoranta (Irish Sea Airways), landing en route at Bristol.

The Irish airline, which has placed Dublin within a day's flight of practically every other European capital, now ranks of course as a foreign company in England. Hence the principle of cabotage applies—that is, the prohibition against foreigners engaging in coastwise trade. So while Aer Lingus may land en route to discharge passengers, it cannot accept them for internal, or local, transport in Britain.

This complexity of international airline operations abroad is hard for Americans to appreciate. With twoscore intensely nationalistic companies operating more than 100,000 miles of crisscrossing air routes, diplomatic problems are continually arising that call for a high degree of skill to untangle. On the London-Paris route alone, for example, there are some 17 services daily. Every fifteen minutes in the busy season, a plane leaves England for some foreign port.

THE "LEAP-FROG" ROUTES

The recent rebirth of "leap-frog" routes serves to emphasize the complication: the first "leap-frog" airline developed during the French occupation of the Ruhr, some 15 years ago, when merchants in Cologne were practically shut off from outside markets except as they could be reached by air. Today conditions on other parts of the Continent have caused their reappearance.

It was at Geneva that we first encountered this surprising anachronism of modern Europe. Fortunately we had booked our places for Berlin on the Salamanca Air Express some two weeks before, or we would never have made it. For the daily service from Franco Spain, via Switzerland, to Germany, was usually filled to capacity.

As it was, my wife was shuffled out of



Photograph from J. Parker Van Zandt.

THEY LUNCH IN COMFORT, ABOVE STEAMERS TOSSING ON THE ENGLISH CHANNEL.

On one flight, the author and his wife were served a five-course meal (page 803).

two seats in succession by irate through-passengers who had stepped off for a moment to stretch their legs while the plane was being refueled. We had to call in the station agent to assign each one a place. I hung on to a folding bench by the drafty rear door all the way to Stuttgart.

It was pouring when we landed at Stuttgart in the failing light. The big Junkers skidded and splashed through deep puddles as it rolled up to the passenger station. Customs control was very strict, every piece of baggage being removed and inspected. By the time we were all loaded back on, it was pitch dark, and the rain had turned into an old-fashioned downpour.

A LUNCH CARTON PAR AFIELD

Lydia was quite apprehensive, as this was her first night flight. But the crew appeared wholly unperturbed. Taxiing slowly across the slippery field into take-off position, the throttled murmur of the engines changed to a full-throated roar, and we hurtled into the night across a low line of red warning lights marking the boundary of the airport.

The brightly lighted cabin made it impossible at first to distinguish anything through the rain-streaked windows. Our

companions, most of them evidently seasoned air travelers, sat reading the latest German papers from Stuttgart or smoking in the forward compartment. A Spanish couple on the rear bench poked hopefully about in a lunch carton marked "Grand Hotel, Salamanca." We peered vainly through the panes, putting our faith in the crew behind closed doors ahead.

Later, when most of the passengers had settled back for a nap and the cabin lights were extinguished, we discovered, in spite of the rain, how much there really was to see. Towns and villages drifted by, each with its identifying cluster of lights; revolving beacons, like little illuminated pools, appeared at regular intervals swinging their silver shafts in circles across the dark face of the earth.

Broken strings of tiny auto headlights crawled in single file along the main highways. Then Halle and Leipzig sprawled across the course in an unmistakable, characteristic pattern.

The somber sky ahead glowed like a false dawn under the myriad colored flashing signs and lights of Berlin. Dropping down the slanting rain-beams, we landed almost in the heart of the city, at Tempelhof Air-



Photograph from Československé Státní Aerolinie

MOUNTAIN LADS STRETCH THEIR LEGS ON THEIR WAY TO PRAGUE

They made a stopover at the Kasau (Kolíče) airport when they were flying from their homes in the High Tatra Mountains to a national celebration in the former capital of Czechoslovakia.

port. We cleared through the old station, considered big enough a few years ago for airline requirements for a long time to come, but now already outmoded.*

AN IMPRESSIVE TERMINAL

The new terminal at Tempelhof, which should be completed this year, is the most impressive I saw in Europe. A suburb has been partly razed to make room for the enlarged runways. The installation, when finished, will enable 22 large passenger planes to be loaded and discharged simultaneously, under cover! (Page 804.)

A subway at the door will take passengers in a few minutes to Unter den Linden. But they will not find the linden trees that once lined Berlin's best-known avenue: those famous trees have been removed to make room for a triumphal double colonnade of pillars beneath which the tiny slips subsequently planted look pathetically dwarfed.

A succession of cold rainy days will cool the most fervid sight-seeing ardor. It was not until we reached Finland that we found good weather. The change was fortunate, for the north Baltic countries have much to offer the air traveler.†

For many years Helsinki lacked an airport, and flights to or from that city were all by seaplane, on skis or floats. For two months every autumn and spring, however, it was found impossible to operate while waiting for the ice to thicken or go out.

Now Finland's capital has one of the finest airports in Europe (page 807), a symbol of the truly remarkable progress made by the young Republic in two decades of freedom.‡ Daily service to Stockholm is now maintained all year round, cutting a 16-hour boat-train journey to two delightful hours overhead.

Like an emblem of Finnish aspiration, the white shaft of the stadium tower rose up out of the city as we took off on a Finnish airliner for Sweden. An afternoon haze blended the landscape into the soft colors of a Corot painting. Everywhere the forest dominated.

* See "Changing Berlin," by Douglas Chandler, NATIONAL GEOGRAPHIC MAGAZINE, February, 1937.

† See "Flying Around the Baltic," by Douglas Chandler, NATIONAL GEOGRAPHIC MAGAZINE, June, 1938.

‡ See "The Farthest-North Republic," by Alma Luise Olson, NATIONAL GEOGRAPHIC MAGAZINE, October, 1938.



Photograph by J. O. Schneider from Black Star.

LEADER OF THE PARADE OF THE 1,000 PRAMS IS THE BIGGEST BABY OF ALL

On Denmark's annual National Baby Day, a giant model infant—rattle, bonnet, and all—is pulled through the principal streets of Copenhagen.

On the vast rocky plain shelving gently into the sea, lanes of cultivated fields, like colored adhesive strips, made a vivid grid between pine battalions massed on every outcropping, while the pattern was continually enlivened by lakes of limitless variety.

FORESTS WIN WHERE GLACIERS FAILED

Where Sweden has thousands, Finland has tens of thousands of islands along its indented coast, isolated boulders which retreating glaciers were unable to subdue. But where the glaciers failed, the forest is winning, widening cracks with its roots and covering the rocky shoulders with a soft mantle of needles.

On a map of Europe, Finland looks like the silhouette of a Finnish girl in a folk dance—arms flung out toward Norway and the Arctic, feet toward Leningrad. Near the hem of the full-blown skirt that billows

over the Gulf of Bothnia, we landed at Turku (Åbo) to disembark a German radio technician who was testing the blind-landing equipment, and to take on a wedding party returning from Åbo beach.

While the plane was refueled, we tried the refreshments laid out temptingly on the glassed-in porch of the control building—thick slices of rye bread liberally coated with liverwurst and cheese, hot coffee, and cake.

All the way to Mariehamn and Åland, those far-famed Finnish outposts in the Gulf of Bothnia,* little islands lay scattered along the course like salt sprinkled from a giant shaker on an immense blue tablecloth. Then the last solitary deep-ribbed rocks, too barren for trees, too tough for the frothy sea to swallow, yielded briefly to

* See "Where the Sailing Ship Survives," by A. J. Villiers, NATIONAL GEOGRAPHIC MAGAZINE, January, 1935.



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STAR-SHAPED FORT CARRÉ IS AN AERIAL GUIDEPPOST ON THE FRENCH RIVIERA

Vauban, the illustrious seventeenth-century French military engineer, designed the strong fortifications that included this sharp-prowed citadel at Antibes. The stadium (left) and reproduction of a Roman theater (right background) are new.

open water before we were coasting down the marvelous Swedish archipelago.

Inland the fields abruptly changed in character. Open furrows and individual hay cones gave way to trim lines of hayracks standing in parallel rows like dominoes. Skimming over Saltsjöbaden with its gay cluster of sailboats, we swept noisily upon Stockholm spraddling a network of waterways, its magenta houses with windows pertly trimmed in white peering out from the forest's edge like a flock of startled deer.

As we boarded the airport bus at Bromma, (page 808), a Soviet all-metal, twin-engined transport glided in to land. Stockholm is now the western aerial gateway to Russia, Swedish and Soviet planes operating the route to Moscow in pool, via Latvia. One may leave Moscow at eight in the morning and be in London the same evening.

Eschewing war for more than a century, Sweden stands as a striking monument to the advantages of peace, "a country of the triumph of common sense." From its unique Town Hall to the Skansen, the renowned open-air museum on Djurgården Island overlooking the harbor, the capital rarely fails to captivate the visitor.

THREE CAPITALS IN A DAY

Frequent air services connect Stockholm with almost every country in Europe—except Norway, its western neighbor, at the time of our visit. To reach Oslo, only 260 air miles, by plane, one had to fly both sides of a deep triangle far south to Denmark. So, faithful to the airlines, we breakfasted one memorable morning in Stockholm, lunched in Copenhagen, and dined in Oslo—three capitals in a single day!



Photograph from Ceskoslovenské Státní Aeroline

PRAGUE'S AIRPORT CAFÉ PROVIDES A GRANDSTAND FOR LANDINGS AND TAKE-OFFS

Refugees fleeing from former Czechoslovakia last September so crowded departing planes that the author was unable to leave the capital by air. Here onlookers gaze at two American-built airliners (right and farthest rear) and two of Italian make (one in foreground and tail of another).

The loud-speaker at Bromma Airport, Stockholm, blared out as we waited to board the Copenhagen plane, announcing departures in German, French, and English.

"Which is the plane for Paris?" demanded a young lady breathlessly, brushing by us at the passport window.

Indeed, with four big transports all loading at the same moment, the crowded station had the aspect of a small Grand Central terminal.

The British Airways' Lockheed got off first on its six-hour run to London; then a Swedish plane due in Berlin in two and a half hours. We followed in a DC-3 manned by four stocky Netherlanders.

Our captain proved to be an old acquaintance, whom we had met some months be-

fore at Jodhpur Airport, in India. It is astonishing the way these K.L.M. crews get about the world. The steward during the past week, it developed, had been in Paris, London, Amsterdam, and Rome, as well as Stockholm and Copenhagen; five days later he would be in Singapore!

BE A STEWARD AND SEE THE WORLD!

"Do you happen to know a friend of mine in Bangkok, Siam?" I asked, naming a prominent traffic agent.

"But, yes!" beamed the steward. "To him I always bring fresh strawberries from Bandoeng; and he gives me that nice yellow fruit—what do you call it?—mangoes." A meal aloft on a K.L.M. airliner is a true example of international amity!



Photograph by Guggenbühl

YOUNG MAN HESITATES—TO FLY OR NOT TO FLY?

An attendant of the Swissair Company seems to be urging him up the ladder to make way for other passengers from Zürich to London.



© Weekly Illustrated

THROUGH AIR TRAVELERS IN EUROPE AVOID MUCH ANNOYING CUSTOMS INSPECTION
A single day's flight may take one across as many as six or seven borders. Until the final destination is reached, baggage usually remains on the plane, untouched.



Photograph courtesy Scottish Airways, Ltd.

WITHIN THE "BIG BIRD," FALCONS FLY TO THE FIELD

The hooded hawks were carried as air freight from Glasgow to the Hebrides, where they were used to hunt grouse, ducks, and other game birds. Canaries and greyhounds were fellow passengers with the author on other European routes.

Among our passengers was a blind man traveling with a secretary. The guide did the best he could to relay a sense of the vivid panorama passing beneath our windows, trying to make one pair of eyes do for two. It was thrilling to watch the eagerness with which his companion drank in every word.

White sails on a blue background drifted rapidly astern as we glided down over the corrugated green shallows of Öresund to land at Copenhagen.* The consul met us at the airport and together we walked over to the old powder house, now a restaurant, behind a moat at one corner of the field.

"You'll want to stretch your legs," he suggested, "after being cooped up in a plane so long." Never having flown, he could scarcely credit our claim that the 21-passenger transport in which we had

just spent two comfortable hours was as roomy as a railway observation car.

Topping off a delicious lunch with Danish pastry, we sauntered back to the terminal building, transferred to a Junkers plane just in from Hamburg, and soared away for Göteborg and Oslo.

At Elsinore (Helsingør) a pale blanket of clouds, like a reincarnate ghost of Hamlet's father, drifted across the course, cutting off our enchanting vista of Denmark's gay beaches, her neatly curried golden-jade fields, and of Sweden almost awash across the narrow sound.

At brief snatches the sun returned to reveal the shadow of the plane skipping grotesquely along beneath us from near-by to more distant cloud—blown up at one

* See "Royal Copenhagen, Capital of a Farming Kingdom," by J. R. Hildebrand, NATIONAL GEOGRAPHIC MAGAZINE, February, 1932.

instant to almost full size, then shrinking the next moment into a diminutive Maltese cross set in a delicate dull-rose frame.

Upon landing at Oslo, we found to our surprise that a total of 60 passengers had flown with us from Copenhagen. Forty-five were singing canaries from the Netherlands that had ridden "steerage" in the baggage compartment. On the drive down, the canaries competed, in entertaining us, with the radio in the airport bus relaying dance music from Paris.

MOVING MOUNTAINS TO MAKE AN AIRPORT

Oslo's new terminal at Fornebo, where three mountains have been dragged into the intervening valleys to create a more central airport, will eliminate the present long drive. But from a visitor's point of view, the relative inaccessibility of earlier airports required no apology.

Trains too frequently drop you into a maze of streets, without a guiding sense of direction. Ships often leave you stranded in unfamiliar surroundings which are not typical. But arrival by plane, with its bird's-eye perspective, first helps you orient the city like a jewel in its most favorable setting; while the leisurely drive in from the airport supplies significant details.

"Little" Norway actually is a land of enormous distances.* Pivot it on Lindesnes, the southernmost point, and fold it across the map—North Cape extends to Rome! Although with fewer than 3,000,000 inhabitants, Norway has the longest internal airline in Europe.

To me the flight by seaplane from Oslo to Tromsø, far above the Arctic Circle, is the world's premier scenic air route. It is an incomparable motion picture in color, 1,300 miles of breath-taking, ever-changing beauty.

Imagine sailing at ease the length of this world-renowned coast line, a hundred yards or so offshore, lounging in a glass-enclosed crow's-nest a few hundred feet above the sea!

"Not even the commuters," the captain observed, "spend much time reading their papers. There's too much to see."

As far as Bergen the scale is not as grand as farther north, but it is more livable. Hopping in and out of harbors along the Norwegian Riviera where the colors are as fresh as only a brief but in-

tense summer can paint them, and dropping down on protected waterways in the heart of the coastal cities, one is often reminded of Scotland, save that the lochs and waterfalls are extended and multiplied a hundredfold.

But in the region of the Arctic Circle comparisons are inadequate. No artist but the world's Master could conceive such effects. There is an awesome majesty, a supernatural quality that defies description. It is the playground of trolls. Mankind is here by courage and courtesy only. The mountains rule.

Yet at the most unexpected places, clinging to the base of snow-ribbed, surf-bound cliffs, or sheltered in some tiny cove under the thunder of waterfalls cascading down from frozen lakes far above, undaunted man has built his house and cultivates his patch of soil.

The wind which had dogged us all afternoon approached gale proportions as we neared the circle. The pilot dropped down a bare hundred feet above the flying whitecaps. Seaward the low-lying skerries were awash in foam. Fantastic boulders, half buried in surf, framed fleeting vistas of distant snow fields and jagged peaks under purple clouds, with the vast Svartisen Glacier dominating the stage.

OVER THE ARCTIC CIRCLE

The thought that we were about to fly over the Arctic Circle fascinated one of our fellow passengers. All afternoon on the long flight up the coast he had plagued the pilot to tell him what it felt like when we crossed the line.

Finally the captain, with a wink toward us, solemnly assured him that a great current of cold air passed under the plane just at the moment of crossing. True to his promise, precisely on the line the captain pulled back abruptly on the controls and the plane bounded suddenly upward!

Almost at once we ran into a thick squall. The sinister shore line was blotted out and the rain came down in sheets, combing the whitecaps into silver ribbons interlaced with sinuous streams of fresh green water.

Nature's mood changes quickly north of the Arctic Circle. A few anxious moments, and we were flying in sunlight again with scattered evanescent fragments of rainbows rising out of the sea like pieces of a broken arch painted in.

* See "Country Life in Norway," by Axel H. Oxborn, NATIONAL GEOGRAPHIC MAGAZINE, April, 1939.



Photograph by W. Robert Moore

LUNCH TIME ON THE FISHING BOATS AT MARSEILLE

In addition to wine and hard rolls, one of the favorite dishes is *bouillabaisse*, a specialty of this French seaport on the Mediterranean. When the dish is prepared by an expert, several kinds of fish are used, and to this are added parsley, tomatoes, onions, garlic, leeks, celery, and olive oil; also a little salt, pepper, saffron, and bay leaves.



Photograph from J. Parker Van Zandt

AT RENFREW AIRPORT, GLASGOW, A PATIENT ARRIVES BY AIR FROM THE HEBRIDES. On the flight, Mrs. Van Zandt (left) and the author (holding hat) rode with a stricken Barra Islander (wearing cap). An ambulance met the plane and rushed the man to a hospital.



Photograph by W. Robert Moore

DUMAS ENDOWED THESE GRIM WALLS OF CHÂTEAU D'IF WITH ENDURING FAME

His classic hero, the Count of Monte Cristo, supposedly languished within its dark cells. The château was built as a fort in 1524 by Francis I as a protection for Marseille against the Spaniards. Later it became a state prison.

Above Harstad, clusters of red-roofed houses began to appear along the shores of the inland seas, clinging to the narrow shelf below the forest fringe. From vague, vaporous heights little ribbons of water came tumbling, their aerated creamy whiteness vivid against the dark granite.

STRAWBERRIES AND VIOLETS—NORTH
OF THE ARCTIC CIRCLE

Soon we were settling to rest midstream between green hills, by the low wooded island of Tromsø. The crews of the fishing fleet at anchor stopped swabbing the decks to wave a cheery welcome.

Everything grows night and day in this northland during the short summer season. On the launch that ferried us ashore the skipper let us sample some huge native strawberries. Men were busy cutting the long lush grass on the slope above the town. Before the schoolhouse great banks of snapdragons, violets, and marigolds were massed.

We saw few of the things one should see in Tromsø—the long light evening, the midnight sun, the Lapps in native costume. It rained almost all the time and in the streets we met only flaxen-haired, bare-

kneed children in rubber boots, and passengers off a cruise ship.

That evening in the cosy hotel living room we listened to fascinating tales told us by the crew of the mail plane that operates across North Cape to Kirkenes—of white whales in Barents Sea; of huge herds of reindeer sighted on snowfields far inland; of the haunts of the northern fox.

Flying south the next morning, one squall followed on the heels of another. Yet somehow the Unknown Arctic, which had seemed so overwhelming on the north-bound flight, was a Friendly Arctic now.

The weather cleared miraculously below the circle. Leaving Brønnøysund, we climbed higher, deserting the coast to follow the inland route to Trondheim. A paradise of blue bays, coves, and wooded lakes opened up, beaten with dry sunshine and sparkling in their hilly cradles.

Hay hung heavy on racks across the scattered fields. Anchored to seaward, the skerries lay like dark scrolls on a sheet of stippled gun metal.

By the landing ramp on the fir-clad shore of a little fresh-water lake near Trondheim, where we stopped for coffee and to change the crew, a group of naked

children splashed and shouted. We hastily shed overcoat, rubbers, hat, and borrowed parka, and reveled in the warm summer sun.

The flight, in good weather, from Trondheim to Bergen, dropping in briefly at Kristiansund, Romsdalsfjord, and Alesund, is a fitting climax to this world's wonder airway. The great snow crests of the Jotunheimen march along the distant horizon. Deep serpentine fjords reach their salty fingers far into the hills.

On landlocked seas under huge overhanging cliffs tiny steamers trailed wavy v's across the bluest of water. Dories and fishing boats scampered between outlying skerries; and the western sea, beneath the sun, was a field of molten gold.

That evening, reviving our jaded senses with fresh lobster from Hardangerfjord, at the hilltop restaurant overlooking Bergen, we agreed it was small wonder that Norwegians are nature lovers, with such lavish Nature to love! A hundred flights along this route would not suffice to absorb such a surfeit of beauty.

Weeks later found us once more in Switzerland. Gliding into Zürich airport on a Hungarian airliner from Munich, we felt we were almost home. Behind us the vision of enchanting air trails crisscrossing Central Europe was indelibly etched on our memory.

WHERE HISTORY IS BEING MADE

Over historic Sudeeten frontiers we had flown, down the winding Danube Basin and eastward across the Transylvanian Alps, to the shores of the Black Sea. Reluctantly turning back from lovely Mamaia Beach at Constanța, we had flown westward again with the picturesque Romanian service to Prague, by way of Cluj and Užhorod.

Then, at Prague, for the second time in our entire aerial survey, we were forced to descend to a train! The trouble, however, as at Doncaster the first time, was not the plane's but the surplus of passengers: for the Czech airline to Zürich, that "leap-frogged" nonstop across German territory, was booked to capacity for weeks in advance.

This problem of too many clients was the sole difficulty we encountered in more than 15,000 miles of air travel on some twenty different air services throughout Europe. Never once was a flight canceled, nor were we ever delayed by mechanical trouble, nor more than a few minutes late arriving at our

scheduled destination. Surely a record of which any form of transport could be proud!

On our first flight across Switzerland we had flown blind most of the way, groping through a clammy white fog with the near-by Alps invisible and menacing. This time the weather was ideal.

Occasional drifting, puff-ball clouds framed the majestic Alpine silhouette in a succession of soft vignettes. For three delightful hours, from Zürich to Marseille, our route paralleled the grandest mountain range on the Continent, combining a friendly, piquant countryside with a continuous horizon of ineffable beauty.

If the Midnight Sun Airway is the most spectacular in all Europe, surely the Riviera Air Express is one of the loveliest.

AIR TRACKS TO AFRICA

At Marseille our air trail ended. We were sailing for home in ten days. Reviewing at leisure our assortment of airline folders collected at the many airports, we were reluctantly forced to conclude that our survey was still far from complete.

The tantalizing possibilities unfolded by those air maps were by no means exhausted. Lydia was the first to call attention to the provocative tracks linking Europe with Africa.

"Look!" she exclaimed, holding up a Régie Air Afrique folder. "Here's a two-day service from Marseille to Timbuktu! Then we could fly right across Darkest Africa and come back by Khartoum, in plenty of time to catch our boat."

I had always thought of my wife, prior to this survey, as a girl of pronounced conservative tendencies. But a fascinating trip like the one we had just completed does something to you. It uproots the most ingrained habits and dissolves the stubbornest prejudice. You're never the same again.

For the spell of the skyways is in your blood and cannot be shaken. Far places, so long inaccessible, whose very names are like siren bells, suddenly are discovered to be only an easy, short air journey away.

Fresh beauty and design are revealed to you by looking down, like the patterns of a Persian rug that are forever hidden from a surface view.

A new earth opens within the old: a new intimacy made possible between diverse peoples. And you share in the modern magic of aircraft that is fashioning a neighborhood of nations, transforming the whole world into an island community.

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To carry out the purposes for which it was founded fifty-one years ago, the National Geographic Society publishes this Magazine monthly. All receipts are invested in The Magazine itself or expended directly to promote geographic knowledge.

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

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

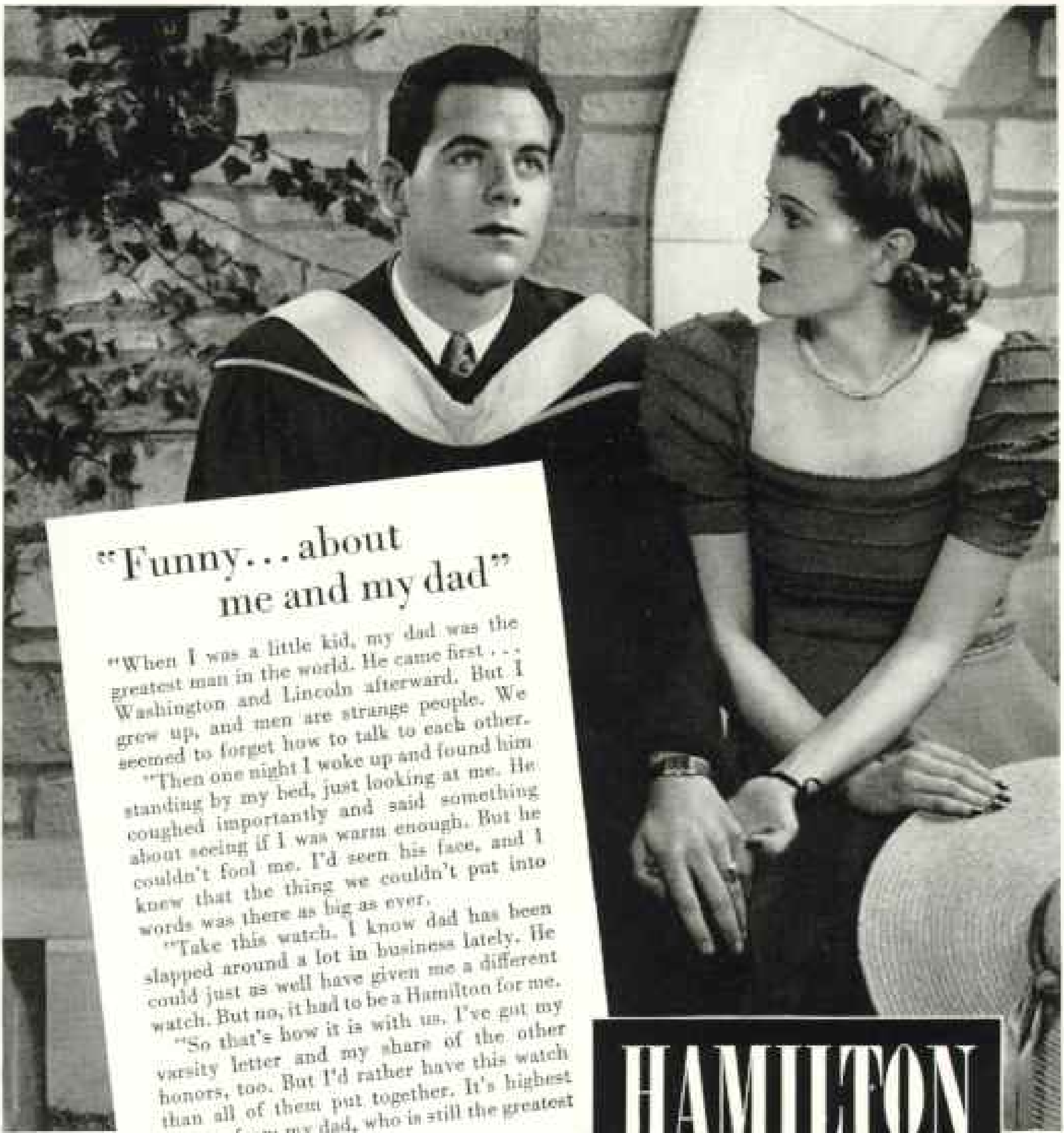
The Society cooperated with Dr. William Beebe in a deep-sea exploration of undersea life off Bermuda, during which a world record depth of 3,028 feet was attained August 15, 1934, enabling observations of hitherto unknown submarine creatures.

The Society also had the honor of subscribing a substantial sum to the expedition of Admiral Peary, who discovered the North Pole, and contributed \$100,000 to Admiral Byrd's Antarctic Expeditions.

The Society granted \$25,000, and in addition \$75,000 was given by individual members, to the Government when the congressional appropriation for the purpose was insufficient, and the finest of the giant sequoia trees in the Giant Forest of Sequoia National Park of California were thereby saved for the American people.

The Society's notable expeditions to New Mexico have pushed back the historic horizons of the southwestern United States to a period nearly eight centuries before Columbus crossed the Atlantic. By dating the ruins of the vast communal dwellings in that region, The Society's researchers have solved secrets that have puzzled historians for three hundred years. The Society is sponsoring an ornithological survey of Venezuela.

On November 11, 1933, in a flight sponsored jointly by the National Geographic Society and the U. S. Army Air Corps, the world's largest balloon, *Explorer II*, ascended to an officially recognized altitude record of 71,705 feet. Capt. Albert W. Stevens and Capt. Orvil A. Anderson took aloft in the gondola nearly a ton of scientific instruments, and obtained results of extraordinary value.



"Funny... about me and my dad"

"When I was a little kid, my dad was the greatest man in the world. He came first . . . Washington and Lincoln afterward. But I grew up, and men are strange people. We seemed to forget how to talk to each other.

"Then one night I woke up and found him standing by my bed, just looking at me. He coughed importantly and said something about seeing if I was warm enough. But he couldn't fool me. I'd seen his face, and I knew that the thing we couldn't put into words was there as big as ever.

"Take this watch. I know dad has been slapped around a lot in business lately. He could just as well have given me a different watch. But no, it had to be a Hamilton for me.

"So that's how it is with us. I've got my varsity letter and my share of the other honors, too. But I'd rather have this watch than all of them put together. It's highest honors from my dad, who is still the greatest man in the world."

HAMILTON

The Watch of Railroad Accuracy



LINWOOD. 17 jewels. 14K natural gold-filled. Cases with 10K applied gold numeral dial. \$52.50

LEILANI. 17 jewels. Solid 14K natural gold, with white relief. Applied gold numeral dial. \$55

DODSON. 17 jewels. 10K natural gold-filled. With black enamel numeral dial, only. \$37.50

VICTORIA (Lady Hamilton). 17 jewels. Solid 14K natural gold. Applied gold numeral dial. \$60

DUNKIRE. 19 jewels. Mirror backed solid 14K natural gold. 10K applied gold numerals. \$125

All Hamiltons have 17 or more jewels, precious metal cases. Write for illustrated folder. Hamilton Watch Company, 963 Columbia Avenue, Lancaster, Penna.

"Mention the Geographic—it identifies you."

Star example, this "G-100", of how

LESS MONEY
steadily buys
MORE MILES!

FEW things have been so continuously stepped up in quality—so steadily reduced in cost as tires. Now new engineering advances bring you still greater mileage—still lower cost per mile—in Goodyear's great Centennial tire, the new "G-100" All-Weather.*

To exemplify a century of progress in rubber we wanted a tire that would date anything built before—and we finally found the answer in an entirely new principle of tire design that enables us to employ materials far more efficiently.

In the "G-100" we use new stuff—a new carcass shape, a new cord-angle and more durable low stretch Supertwist® cords that combine to *contract* the tire as the air goes in. Instead of stretching, the tread *firms down* with inflation.

Under this compression the tread literally "makes a muscle"—becomes so much *denser, tougher and resistant to wear* that it averages *33% more tread mileage!*

You get this *plus* in a tire that weighs *less*—a smoother-rolling, easier-riding silent tire with 11% more rubber on the road for surefooted traction and safety.

Its trim "sculptured" beauty—in both black and white sidewalls—will dress up any man's car. If you're seeking more miles at less cost this indefatigable "G-100" All-Weather is your tire. All Goodyear dealers have it—now.

*Trade-marks of The Goodyear Tire & Rubber Company

GOODYEAR'S CENTENNIAL TIRE—
THE NEW STREAMLINED "G-100"

LOOK AT THE DIFFERENCE



PRESENT
TIRES

Expands



NEW
"G-100"

Contracts

Dotted outline shows shape of tires before inflation; solid section after. Note how the new "G-100" actually compacts in overall diameter—firms down—compressing the tread to make it more resistant to cuts and wear.



A Centennial product of
The Greatest Name
in Rubber

THE GREATEST NAME

IN RUBBER

GOODYEAR

MORE PEOPLE RIDE ON GOODYEAR TIRES THAN ON ANY OTHER KIND

"Mention the Geographic—It identifies you."

What this Country Needs is More SEE Power!

That's what we figured more than a year ago—and that's a need you'll find well met in the nimble Buick thirty-niner. Glass area has been increased as much as 412 square inches, in some models, which means not only *safer* driving but a better view and more light and sunshine as you travel. More life in your going, too, from that brilliant and thrifty Dynaflex straight-eight engine, and more comfort from soft *coiled* springing all around! And, with good looks as smooth as its performance, no wonder Buick's been tagged the car and the value of the year—at prices lower than a year ago, lower than you expect, lower even than on some sixes!



“Better buy Buick!”

EXEMPLAR OF GENERAL MOTORS VALUE



"Gee! A Nickel Left for Candy"

TOYS, lamp bulbs, or bathtubs—when-
 ever the cost of an article is lowered
 through economies in production, more
 people can buy it. And those who can buy
 the article anyway have money left to buy
 other things.

Take the case of the electric refrigerator.
 In 1927, when the average model cost about
 \$350, only 375,000 people bought refrig-
 erators. Ten years later, when improvements
 in manufacturing had brought the price
 down to \$170, *six times as many people* bought
 them. And thousands who, perhaps, could
 have paid the higher price, were able to
 use the difference to purchase other comforts
 and conveniences.

The same has been true of hundreds of
 other manufactured articles. Because the
 scientists, engineers, and workmen of indus-
 try have developed hundreds of new prod-
 ucts, have improved them, have learned
 how to make them less expensive, more
 millions of people have been able to buy
 them. And by this process, industry has been
 able to provide the American people with the
 highest standard of living in the world.

In this progress, General Electric, by
 applying electricity to the wheels of industry,
 has played an important part. By contin-
 uing these efforts, it is helping today to
 provide for America still **MORE GOODS
 FOR MORE PEOPLE AT LESS COST.**

*G-E research and engineering have saved the public from ten to one hundred dollars for every
 dollar they have earned for General Electric*

GENERAL  ELECTRIC

NEW YORK WORLD'S FAIR—SEE THE G-E "HOUSE OF MAGIC" AT THE FAIRS—SAN FRANCISCO EXPOSITION

"Mention the Geographic—It identifies you."



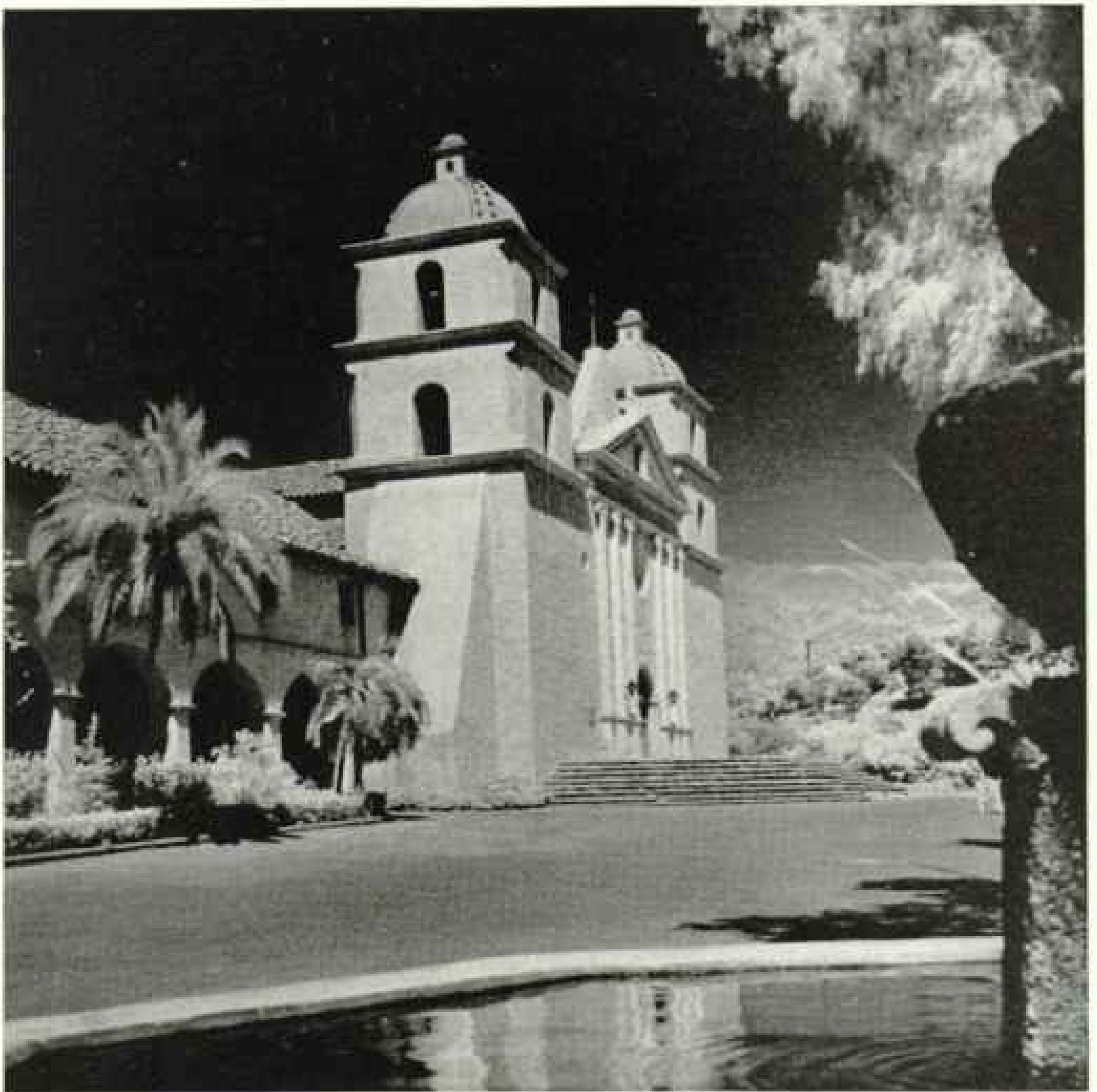
Light hearts make buoyant riding
over the surf at Waikiki

Details of *Matson Cruises to Hawaii and the South Seas*, also *hotel reservations at the Royal Hawaiian or the Moana* in Honolulu, from Travel Agents or MATSON LINE offices at New York, Chicago, San Francisco, Los Angeles, San Diego, Seattle and Portland.
This Year . . . SAN FRANCISCO'S WORLD'S FAIR . . . Then HAWAII



Matson Line
TO *Hawaii* • NEW ZEALAND • AUSTRALIA
RTS SAMOA FIJI

S. S. LURLINE • S. S. MARIPOSA • S. S. MONTEREY • S. S. MATSONIA



"SANTA BARBARA MISSION"

A hard picture to get — but Agfa Film got it!

THIS UNUSUAL NIGHT EFFECT was produced in broad daylight . . . by using Agfa Infra-Red Miniature-Camera Film...the film that lends such powerful and dramatic qualities to any picture.

Infra-Red is only one of a complete line of films for every purpose, produced by Agfa. Among these, Agfa Plenachrome Film is recommended for general, all-around use.

Plenachrome's "extra margin of quality" helps give you best results under ordinary conditions, and *surprisingly good* results even under unfavorable conditions. Its fine grain, high speed, wide latitude, color sensitivity, and accurate response to light values make it a film you can *always* depend on.

Get a roll of Agfa Plenachrome Film today . . .

and start getting better pictures! Every roll of Agfa Film is guaranteed: "Pictures that satisfy or a new roll free!" *Made by Agfa-Ansco Corporation in Binghamton, New York, U. S. A.*

Agfa Film



"Pictures that satisfy or a new roll free!"

"Mention the Geographic—It identifies you."



CAMP ANYWHERE! No "hunting up" places to sleep. The roomy rear converts into a full size, soft double bed in five minutes' time... saves \$25 to \$100 a year for tourists, salesmen.



NEAR AWAY PLACES are close in Nash. The new engine flashes you from 15 to 50 MPH, in 13 seconds flat, in high gear.

IT'LL LEAD YOU ASTRAY

—and You'll Like it!

IF YOU'RE RESIGNED to a dull summer on the back-porch swing—better stay away from a Nash.

For here's a car that's not content with just taxiing you to the office and fetching the groceries from town.

It demands a better fate—and so will you.

Look at its clean, windswept lines, and you'll feel it. This Nash is eager to take you to those unspoiled secret places of the world, where roads and hills keep lesser cars away.

There's a little "Weather Eye"[™] dial that you turn . . . and you stay spotless on the dustiest road...never know chilly drafts. There's a new kind of engine whose pick-up will match any scared jack-rabbit you meet.

There's a special gear—a Fourth Speed Forward*—that lets you breeze by the other cars . . .

saves up to 20% on gasoline.

Around and under you are special soundproofing and shock-absorbing features used by no other car-maker . . . so that an extra hundred miles won't jade you.

And there's even a Convertible Bed! So that you can sleep near your favorite trout stream.

We made the windshield wider . . . the gearshift quicker . . . the wheel spin easier . . . the brakes stop faster.

For you're going to drive a Nash like you never drove a car before!

But why waste your time reading this ad, when the real thing's down on the corner? Listen—ten models are priced next to the lowest! Phone your dealer now.

Four Series of Great Cars, 22 Models... 10 Priced Next to the Lowest... Delivered at Factory, as Low as **\$770**.
Stand. Equipment and Federal Taxes Incl.

(*Optional Equipment—Slight Extra Cost)



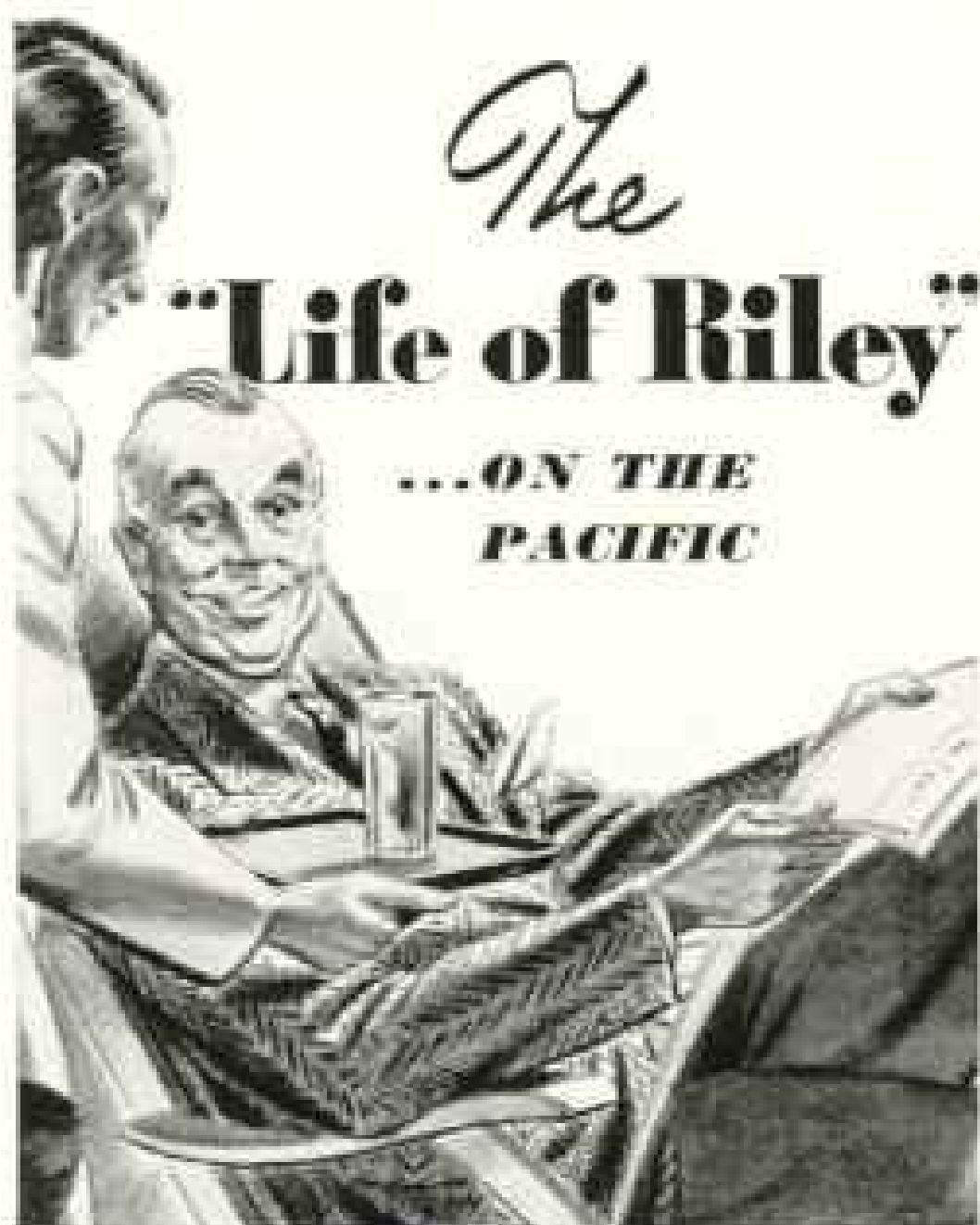
Make a change for the Better! This 4-Door Sedan, 27" wheelbase, is \$849 delivered at factory, with standard equipment and federal taxes included. (White sidewall tires optional at extra cost.) 1000 dealers from Maine to California to serve you. NASH MOTORS DIVISION, Nash-Kelvinator Corporation, Detroit, Michigan.



AHEAD OF TIME—in styling and in features like the "Weather Eye"[™], new Nash offers you higher resale value.

It's that New **NASH**

THE CAR EVERYBODY LIKES



The "Life of Riley"

...ON THE
PACIFIC

"Life begins...when I sail on an *Empress* line!"



"When I stride up the gangplank, it's like a visit home. Why, I just *wish* for something and it's done. My cabin 'boy' is certainly a genius...or a genie! I say *go Empress* across the Pacific. These great white ships certainly know their hospitality."



"Yes, sir! When they make that call at Hawaii, I get a holiday in Paradise!" Sail from Vancouver and Victoria...or connect at Honolulu from California. Details, reservations, from *your travel agent* or any Canadian Pacific office in the U. S. and Canada.

Canadian Pacific

Since 1886...SERVICE on the Pacific

HAWAII • JAPAN • CHINA • MANILA



Travel FUNDS

THAT KNOW NO FRONTIERS

Europe, South America, Africa, the Antipodes—they're all one to American Express Travelers Cheques. Safe anywhere, spendable everywhere, this "international" cheque is the supreme guardian against lost or stolen travel funds.

American Express Travelers Cheques are *personal* to you—instantly acceptable in shops, hotels, railway offices, restaurants everywhere.

You merely sign each cheque when you buy them, and again when you wish to spend them. Should they be lost or stolen, uncountersigned, *your money will be refunded in full.*

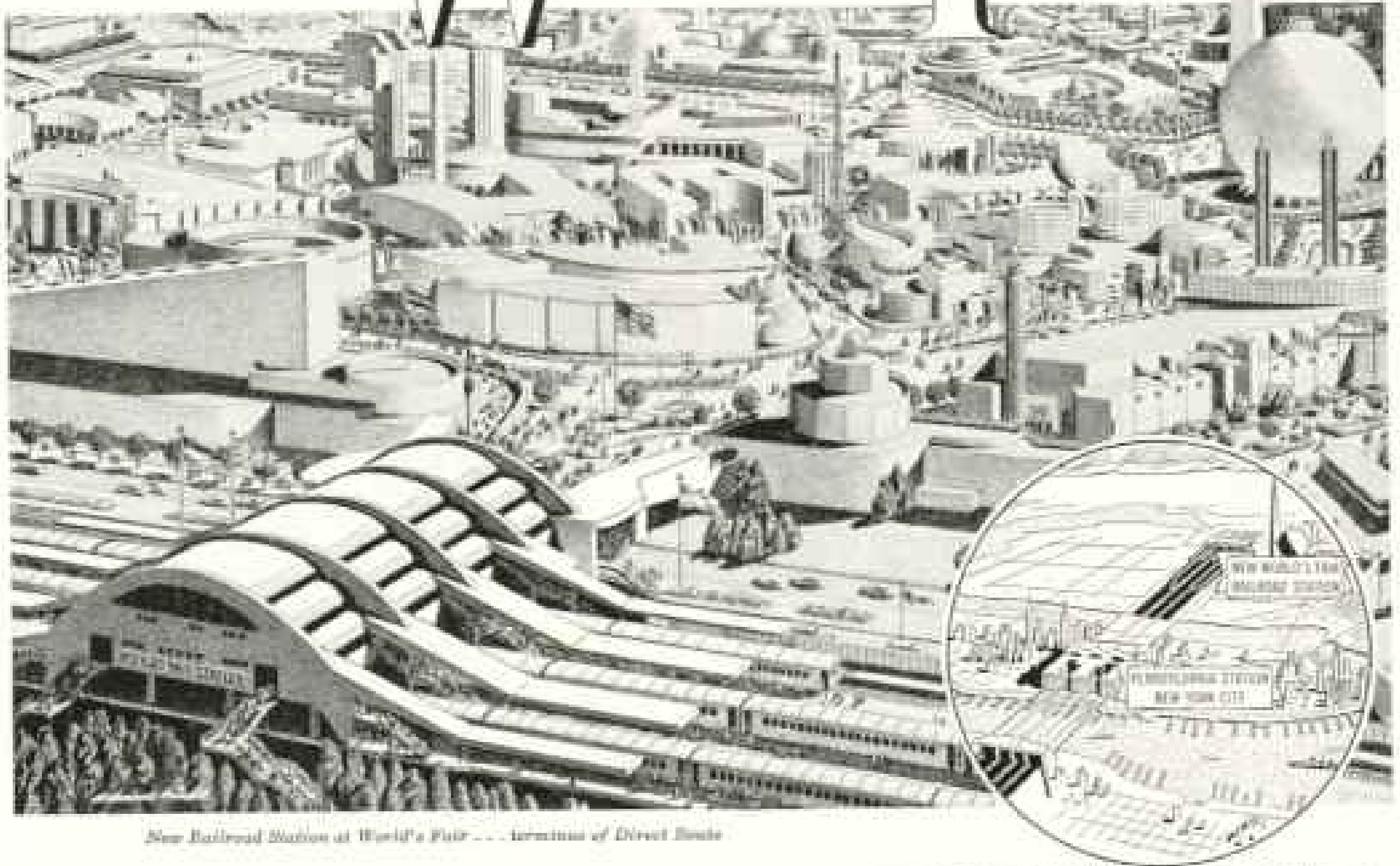
These famous "blue" travel funds also introduce you to the world-wide facilities of American Express Travel Service. Abroad, uniformed representatives assist you at piers, railway depots and frontier points—and American Express offices serve as your travel headquarters.

In denominations of \$10, \$20, \$50 and \$100. Cost 75c for each \$100. *For sale at Banks everywhere.*

AMERICAN EXPRESS TRAVELERS CHEQUES

"Mention the Geographic—It identifies you."

....How are you planning to go to the
NEW YORK WORLD'S FAIR ?



New Railroad Station at World's Fair... Terminus of Direct Route

Pennsylvania Railroad is the Direct Route

...STATION ON FAIR GROUNDS!

That news ought to settle one question—*quick*. How to go. For who'd dream now of driving the family car through New York's dense traffic—and hunting for a place to park among its skyscrapers?

Particularly when it costs so little to go by *The Direct Route*. So abandon all thought of the car. Befree of responsibility. Go direct... *right to the Grounds!*

For your travel comfort from west or south, the largest fleet of air-conditioned trains in the world, carrying both coaches and Pullmans. Go in the very

style of Tomorrow, if you wish—the *Fleet of Modernism*. *Broadway Limited* (all-room train) and *The General*, Chicago—New York; *"Spirit of St. Louis"*, St. Louis—New York (or Washington); *Liberty Limited*, Chicago—Washington. A trip climaxed by a smooth run over the greatest electrified mileage in America—Harrisburg east, Washington north.

So, no matter where you live, plan to go *Direct*. Your local Railroad Ticket Office will be glad to help you. Even hotel accommodations can be arranged!

SEE WASHINGTON AT NO EXTRA COST. Also historic Philadelphia with its Liberty Bell and nearby Valley Forge; Pittsburgh, Baltimore and other points on the Pennsylvania lines. Add gay Atlantic City to your itinerary, too—a grand side trip, only \$2 extra in coaches, \$3 in Pullmans. Generous stop-over privileges.

THE DIRECT ROUTE... Trains enter Pennsylvania Station, N. Y., where you board waiting trains to World's Fair on Long Island... 10 minutes, 10 cents.



DILETTANTE—most powerful steam passenger locomotive—see it at the World's Fair. And see trains of other paths and Pageant of Transportation.

LOOK HOW LOW FARES WILL BE!

Repayment of 20-Day Round Trip Coach Fares to New York for the Fair:

From	Round Trip	From	Round Trip
Chicago	.. \$24.00	St. Louis	.. \$21.75
Cleveland	.. \$21.75	Pittsburgh	.. \$18.00

1-Day and 2-Day Excursions from Philadelphia, Washington, Cincinnati, other points; 3-Day Exc. from Detroit, Boston, Cincinnati and intermediate points of various fares. Practical all-train cover coaches. Tickets are accepted via Washington at no extra cost from points west of the Pittsburgh area.

SPECIAL FARES IN PULLMANS, TOO!



SEE "TWO FAIRS FOR ONE FARE"

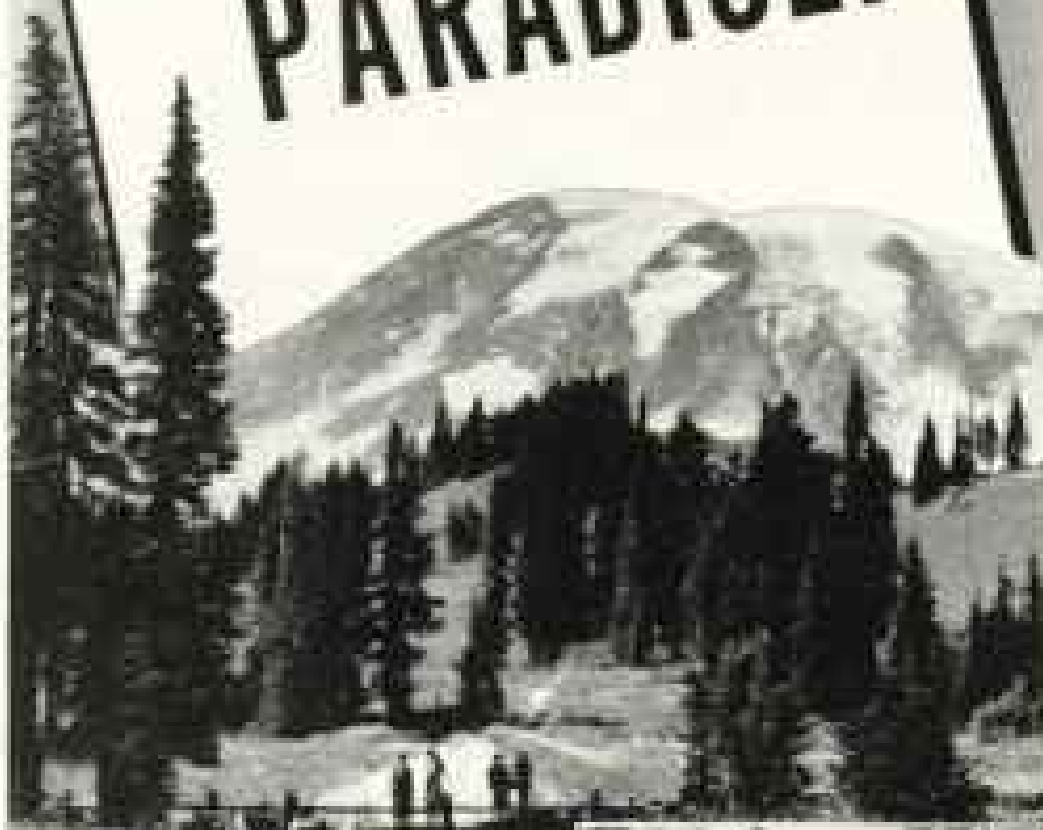
Grand Circle Tours. From any point in the United States you can go to both New York World's Fair and Golden Gate International Exposition, San Francisco, for \$80 coach fare, \$135 rail fare in Pullmans. Special Pullman fares, too; for example: lower berths (for 1 or 2) only \$45 for the round trip. Stop-overs permitted.

Pennsylvania Railroad

SHORTEST EAST-WEST ROUTE... DIRECT ROUTE TO NEW YORK WORLD'S FAIR

"Mention the Geographic—It identifies you."

YOUR INVITATION TO
PARADISE!



Mt. Rainier National Park

HERE is Nature unspoiled; forests that were old when Rome was young . . . sky-blue lakes and inland seas . . . white-capped peaks . . . the changing panoramas of a great River and a Dam that dwarfs the pyramids—all within a few miles of Metropolitan centers. Indian lore, pioneer mementos, inspiring industries and rich agricultural areas . . . it's America at her best! From sea-level to ski-level, every sport and relaxation under a cool sun. Come to our state-wide Golden Jubilee this year. Wide paved highways, and modern transportation, both to and throughout the State, excellent accommodations and low cost!



ABOVE: Giant Evergreens
BELOW: Grand Coulee Dam



Rhododendrons—State Flower

• You are invited to visit our exhibits at the New York and San Francisco World's Fairs.



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Please send me your new **FREE** illustrated booklet and guide.

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*Not one drop
of ACID*



Oil purity . . . an objective developed in Quaker State's laboratories and accomplished in its four great, modern refineries. All trace of impurities is removed from the finest Pennsylvania crude to produce an oil that is pure . . . so pure you need never worry about motor troubles due to faulty or insufficient lubrication. Make *Acid-Free Quaker State Motor Oil* your choice. Your car will run better, last longer. Quaker State Oil Refining Corporation, Oil City, Pennsylvania.





"CHEVROLET'S THE CHOICE"
—and, one of the most popular reasons,
usually, is its safer, smoother, more
luxurious FORD Body by Fisher.

thousands of this year's gay graduates, she's getting a new General Motors car along with her coveted sheepskin... And you certainly know what that means—a car with Body by Fisher... You know — from what your own eyes tell you—that here is the "Class of '39" in automotive

THE cap and gown are proof indeed of how smart this young lady has been in her studies. But wait and see how smartly she'll now be taking to the highways...

Like thousands of this year's gay graduates, she's getting a new General Motors car along with her coveted sheepskin... And you certainly know what that means—a car with Body by Fisher... You know — from what your own eyes tell you—that here is the "Class of '39" in automotive fashions... You discover—from the solidly silent way it rides—that here Fisher craftsmanship has again enhanced motor car body security... You find—in its new visibility, in its more spacious interiors and its improved Fisher No Draft Ventilation—new measures of safety, comfort and convenience... That's why it makes such good sense when someone tells you, "For '39, better pick the car with Body by Fisher"—which means a General Motors car, of course.

See the General Motors exhibits at the Fairs, Highways and Motions—New York World's Fair; Progress on Parade—Golden Gate International Exposition.



COLOR



Dufaycolor Film Fits All Popular Cameras

SNAP YOUR CHILDREN IN NATURAL COLOR

Dufaycolor Guarantees

That You Can Get

Good Color Pictures

YOU can easily take good color pictures with your own camera. Dufaycolor guarantees you satisfaction—or a new roll free.

Notice how many of the color photographs in recent issues of the National Geographic are marked "Dufaycolor" in the lower right hand corner. Over 187 have appeared in the last 17 issues.

See your dealer today. Try a roll of Dufaycolor film in your camera.

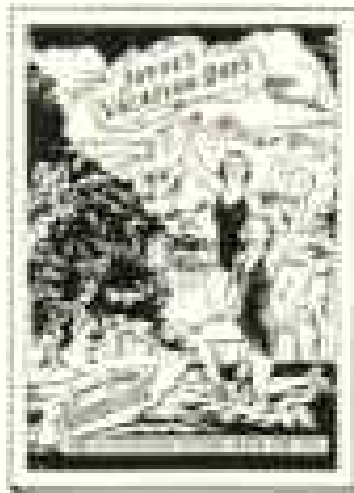


FITS ALL POPULAR CAMERAS



*Now see the State
you read about—
scenic Tennessee*

YOU read about Tennessee in last month's issue of National Geographic Magazine. You saw many of the scenic and historic high spots illustrated. Doubtless Tennessee is on your "must-see" list for this year. To assist in planning your visit, we have prepared a 40-page book filled with additional pictures, maps and description of scenic and historic Tennessee. Each of the three grand divisions of the State is



treated separately with texts and maps. Tells you what to see and how to see it. A complete preview of this vacation wonderland.

Send for your copy now. It's **FREE**, of course.

Room 201
DEPARTMENT OF CONSERVATION
Nashville, Tennessee

Scenic State of
TENNESSEE

LOWEST PRICED CAR IN AMERICA
 WITH
MODERN COIL SPRINGS
ALL AROUND!



OLDS 60 2-DOOR SEDAN 1838*

OLDS' REVOLUTIONARY NEW
Rhythmic Ride



Oldsmobile's exclusive Rhythmic Ride is based on Quadri-Coil Springing, 4-Way Stabilization and Knee-Action Wheels. Big, flexible coil springs cushion all four corners of the car. They never require lubrication or adjustment. All up-and-down, fore-and-aft and side-to-side motion is controlled—body-roll minimized. You enjoy a smooth, steady ride on any road.

NOW, for the first time, you can buy a car with modern coil springs all around at a price right down in the low-price field. And it's an Oldsmobile! With all the stamina, performance and beauty you would expect from this quality car. Just think—the big, 90 H. P. Olds Sixty Sedan, with wide-vision Body by Fisher and big, built-in trunk, is priced at \$106 less than last year's lowest-priced Olds trunk Sedan. Further, the 95 H. P. Seventy and the 110 H. P. Eighty have both been reduced in price. Come in. Drive an Oldsmobile and try the revolutionary Rhythmic Ride. There's literally nothing else like it!

\$777


AND UP

* Delivered price at Lansing, Mich., subject to change without notice. Price includes safety glass, bumpers, bumper guards, spare tire and tube. Trans-

portation, state and local taxes, if any, optional equipment and accessories—extra. General Motors Instalment Plan. A GENERAL MOTORS VALUE


OLDSMOBILE

THE CAR THAT HAS EVERYTHING!



HEAPS OF FUN
without
HEAPS OF FUNDS

Enjoy
YOUR VACATION
in Historic
MASSACHUSETTS



Your vacation budget will easily include the supreme joys of a Massachusetts holiday. This summer paradise, rich in historic background, offers reasonable accommodations.



THE MASSACHUSETTS DEVELOPMENT AND INDUSTRIAL COMMISSION
State House, Boston, Mass.

Send **FREE** booklet and information about

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Address _____

HC-24



Next TO THE N. Y. WORLD'S FAIR
IN GRANDEUR AND LOCATION

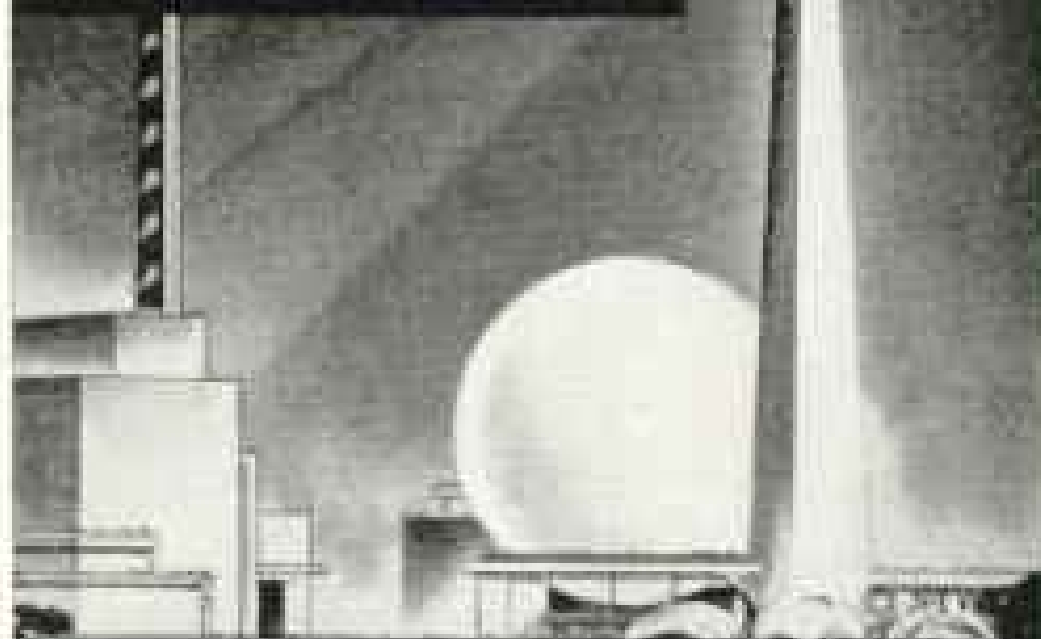
Romantic Isle of glamour and gaiety . . . Eight miles of fascinating Boardwalk and vivid bathing beaches of the cool blue Atlantic. Magnificent hotels, ocean piers, theatres, supper clubs. Endless entertainment . . . all sports. Usual inexpensive rates. 3 hours from New York, 1 hour from Philadelphia . . . an ideal summer vacation opportunity for N. Y. World's Fair visitors. Reduced railroad fares. Concrete Highways.

ATLANTIC CITY

Write for illustrated booklet, Room 203
Convention Hall, Atlantic City, N. J.

GOING TO THE WORLD'S FAIR?

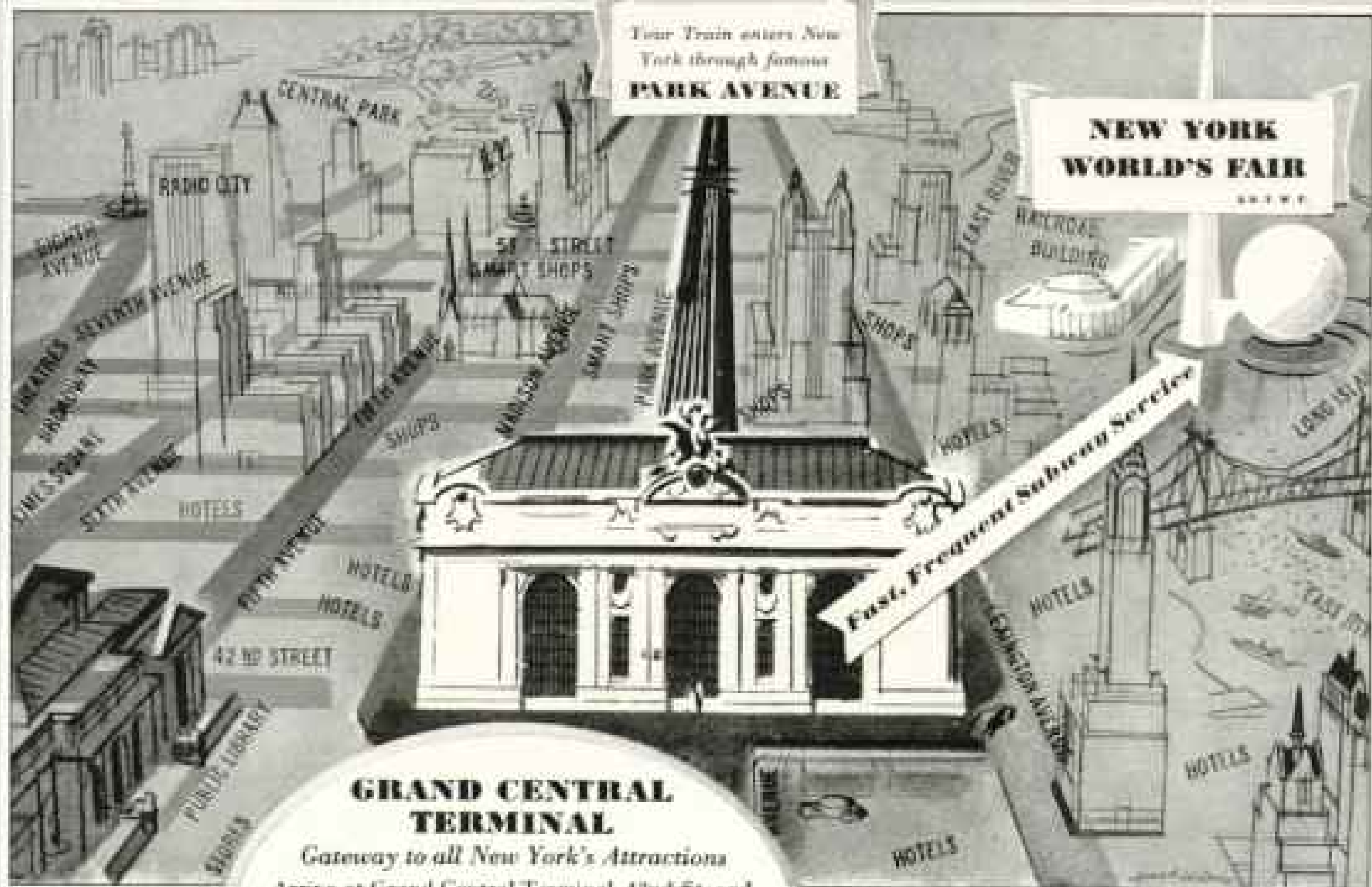
CARRY YOUR TRAVEL FUNDS
IN
MELLON
TRAVELERS CHEQUES



You will find them a safe, convenient and acceptable medium for the payment of various items of travel expense such as railroad, steamship and bus fares, hotel, restaurant and garage bills. Ask for Mellon Travelers Cheques at your bank.

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PITTSBURGH

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



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Gateway to all New York's Attractions
 Arrive at Grand Central Terminal, 42nd St. and Park Ave. — in the midst of New York's finest hotels. Fast, frequent subway trains to the Fair Grounds; close to Radio City; two blocks to Fifth Avenue shops...nearby are theatres, night-clubs, restaurants...the finest of the city's attractions.

If you *know* your New York

You'll take the New York Central and Arrive in the Heart of the City



HUDSON PALISADES

IF you're a seasoned traveler — you know that the Water Level Route is the way to go. If you know New York — you know that Grand Central Terminal is the place to arrive.

"The Train of Tomorrow" — the new 20th Century Limited — and her famous sisters, the Commodore Vanderbilt, the Southwestern Limited, and many others — follow America's scenic route and deliver you in mid-Manhattan. You see Niagara Falls (a free stopover), the Hudson, West Point, the Mohawk Valley! It pays to ride New York Central's "Great Steel Fleet!"

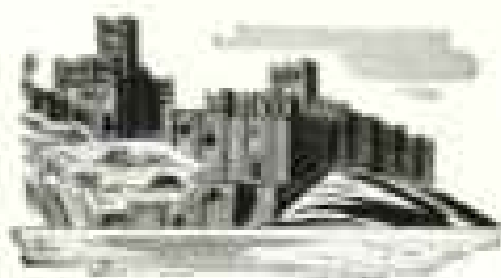
GREATLY REDUCED FARES in Pullmans and Modern Day Coaches bring New York World's Fair within the reach of

modest purses. You may return via Washington without extra cost.

SEE BOTH FAIRS — round trip, \$90 in Coaches . . . \$135 in Pullmans (plus space charge). Start from your home town...visit New York World's Fair and the Golden Gate International Exposition, San Francisco. Get full facts about this bargain from any New York Central Agent.



NIAGARA FALLS



WEST POINT

WRITE FOR MAP OF THE HEART OF NEW YORK and local transit lines to New York World's Fair. Address J. W. Switzer, New York Central System, Room 1264, 466 Lexington Avenue, New York.

Be sure to visit the Railroads' Building at the World's Fair, and see the great spectacle, "Railroads on Parade."

NEW YORK CENTRAL

THE WATER LEVEL ROUTE . . . YOU CAN SLEEP



**Sail over Lake Erie on
the way to the
WORLD'S FAIRS**



So you're going to New York or San Francisco to see the World's Fairs? Then make your trip as gay and interesting as possible! Sail over the Great Lakes on big, luxurious D&C ships. These mighty lakes lie right on your route across country.

Larger than many ocean steamers, D&C ships offer every type of accommodation. World-travelers comment on the excellence of D & C food and service.

If you're going to New York or San Francisco by rail—take part of your trip on the lakes; Round-trip railroad tickets are honored by the D & C Lines. If you're motoring, put your car on the boat, and relieve the strain of constant driving. D & C fares are low. See your local travel agent.

D & C steamers sail daily between Detroit and Cleveland and Detroit and Buffalo.

Passenger Department G-4
D & C NAVIGATION COMPANY, Detroit, Michigan
Please send me illustrated folder, containing fares and schedules.

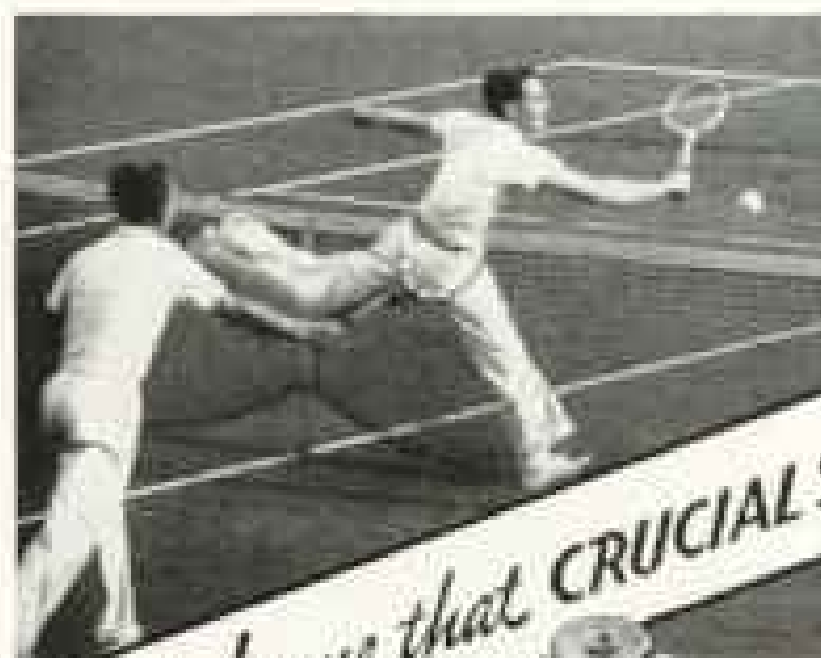
Name _____

Address _____



The Great Lakes Route
to the World's Fair

**DETROIT AND CLEVELAND
NAVIGATION COMPANY**
DETROIT, MICHIGAN



Take home that **CRUCIAL SECOND**

CONTAX



Photographic quality is what lifts an action picture out of the ordinary. Contax, with Zeiss Lenses, gets fast action details sharp and clear. Has 11 speeds up to 1/1250 sec.

This ultra-modern camera also takes pictures indoors in ordinary light. Makes it easy to get striking, unusual shots in all fields of photography—telephotos, close-ups, photo-micro pictures, etc. Range-Finder focusing ensures needle-sharp negatives.

At leading dealers. Write for Booklet.

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Always **TAKES A WESTON...**



... Always **BRINGS BACK
PERFECT PICTURES LIKE THIS!**

No, he's not a professional; just an occasional photographer like yourself. But he does get perfect pictures every time he uses his camera... thanks to his WESTON Exposure Meter. This compact, inexpensive meter quickly measures the light and gives the correct camera settings to use... any time, any place. And with camera settings correct, he's bound to get good pictures.

You, too, can get perfect pictures with your camera... movies or stills, with the easy-to-use WESTON. See one at your dealer's, or write for literature, Weston Electrical Instrument Corp., 584 Frelinghuysen Ave., Newark, N. J.



WESTON *Exposure Meter*



A new world lies ahead of you THE DAY YOU CHANGE TO *Hudson*

"Here are two features I think are wonderful! I shift gears right at the wheel; and I can lock my hood with a little lever inside the car!"

Car shown is new Hudson Six Touring Sedan, \$854*



OWNERS often write to tell us that driving a Hudson is one thrilling discovery after another. They find long roads shorter, steep hills flatter, every day of driving easier—in a Hudson. ☞ They wonder why they were ever satisfied with less than the beauty of Hudson's new Salon Interiors—the unusual two-tone designs, the smart combinations of rich fabrics and gleaming chrome. ☞ But more than all, they prize the peace of mind that comes from *safety* they never knew before, and can't get in any car but a Hudson. ☞ Discover all this for yourself. Drive a 1939 Hudson today.

Weather-Master Fresh Air and Heat Control available in all models at slight extra cost

NOW SHOWING... TWO NEW HUDSONS AT NEW LOW PRICES *Startling Among* AMERICA'S LOWEST

\$695

*Delivered in Detroit, equipped to date, including Federal taxes, not including state and local taxes, if any. Low time payment terms, with new Hudson-C.L.T. Plan. Prices subject to change without notice.

THESE GOOD THINGS CAN BE SAID ONLY ABOUT HUDSON

In Every Popular Price Class, Even the *Lowest*, Hudson Gives You:

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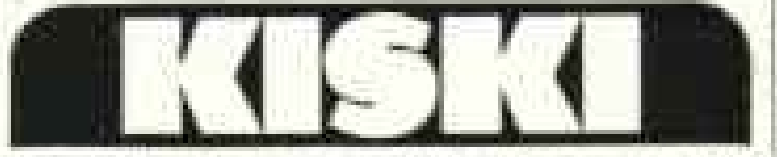
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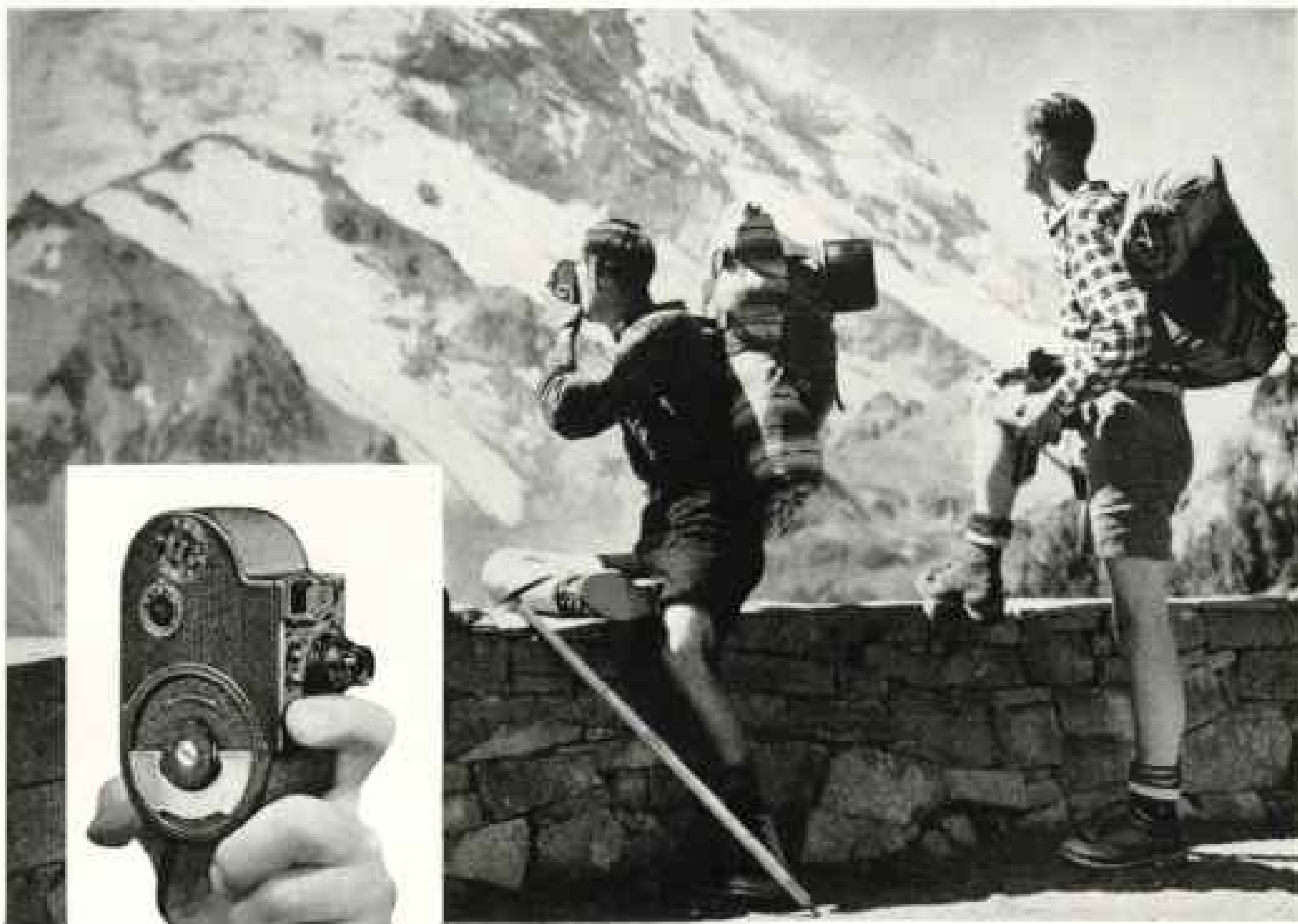
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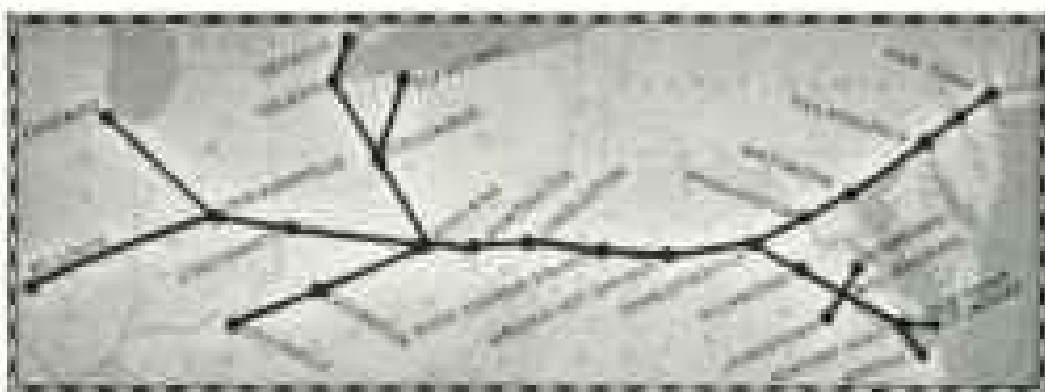
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Please send official illustrated booklet—Other information if requested.

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A BALANCED DIET - vital to your Family's Health

A well-balanced daily diet for healthy people should include a plentiful supply of "Protective Foods"—milk and other dairy products, fresh vegetables and fruits. These are necessary to maintain health and build resistance to disease—not simply "desirable extras."

Your diet should also include "Building Foods," particularly meat, fish, cheese and poultry—necessary to make sturdy muscles. It should in addition contain daily servings of "Energy Foods"—sugar, bread, cereals and fats—which create power for work, play and all other activities of the body.

All of the elements contained in such a diet are important to protect health. Milk is particularly valuable. Wherever possible every child should have a quart and every adult a pint a day—as a beverage or used in other food.

But a "balanced diet" is concerned with more than just "what" you eat. "How" and "when" must be considered. The eat-and-run habit is likely to take a heavy toll in stomach disorders. If you have only fifteen minutes, a light meal such as a bowl of crackers and milk followed by fruit, will do you more good than a heavier meal swallowed practically whole.

Eat at regular intervals and whenever possible take time to sit quietly at a table and enjoy a well-chosen meal. Regular eating habits are especially important for growing children.

Give real thought to your diet—whether you eat at home or in restaurants. You will find it decidedly worth-while, for remember this—keeping healthy begins with the eating of proper foods, in proper quantities, at proper times.

Your whole family may profit from reading the Metropolitan booklet "The Family Food Supply." It describes the values of various foods and the elements they contain. Homemakers, especially, will like the advice on how to plan appetizing, nourishing and inexpensive meals. A post card or the coupon will bring you a copy.

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INSURANCE CO.
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Dept. 429-N

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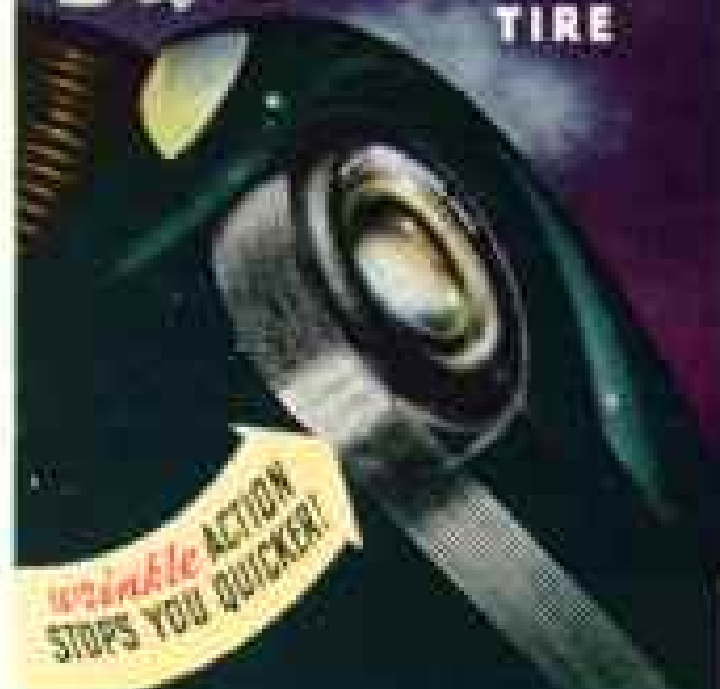
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THE ONE AND ONLY
SQUEEGEE
TIRE



wobble ACTION
STOPS YOU QUICKER!

TOUCH THE BRAKE—YOU STOP—QUICK!

Rolling along, General's tread is straight... but at the first touch of the pedal the flexible ribs wobble into squeeze-action... grip in every direction for the quickest, safest stop you've ever known.

IT'S EASY TO PUT THEM ON YOUR NEW CAR

General Tires never come as new car equipment but your General Tire dealer or your car dealer can give you complete information on how to have Generals from the start... at the lowest change-over cost in General's history. Even if your new car has run a few hundred miles you can still make the change-over. Get the details!

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Your pocketbook dictates Squeegie-Generals; your judgment tells you that you should have the tire that will carry you safely in any weather—without fear of dangerous skids or blowouts—in silent, restful comfort—over the long mileage for which Generals are famous.

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Proves Blowout Resistance!

In General's testing laboratories, Squeegie-Generals and ordinary tires were inflated to their specified air pressures... raised to the same height... then dropped onto a spike. The spike went completely through the ordinary tires. Squeegie-Generals resisted the blow—were not injured. They proved their extra strength—showed that the flexible tread and non-rigid carcass absorbed shocks that would blow out an ordinary tire.

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For Coca-Cola has made *the pause that
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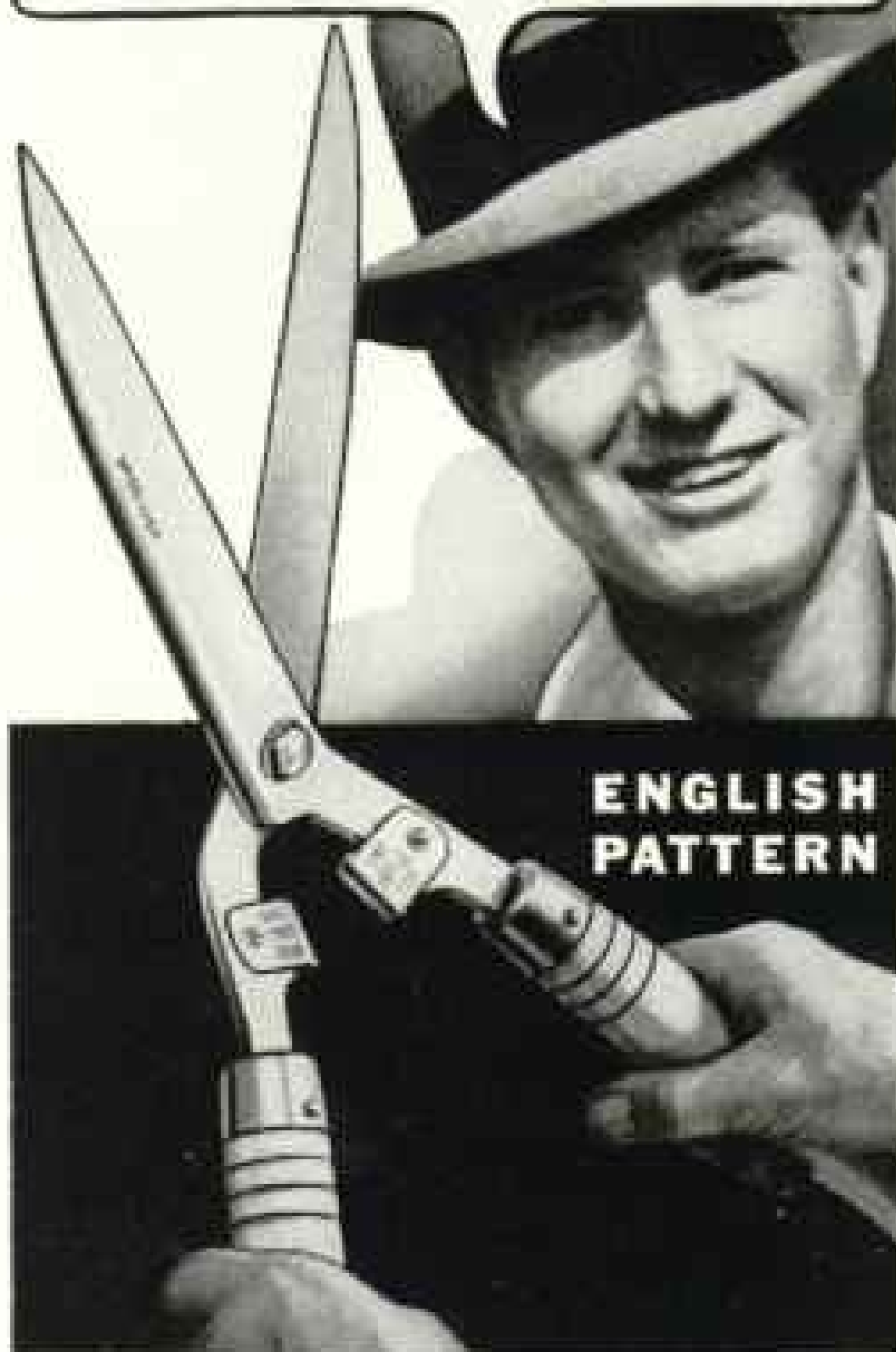


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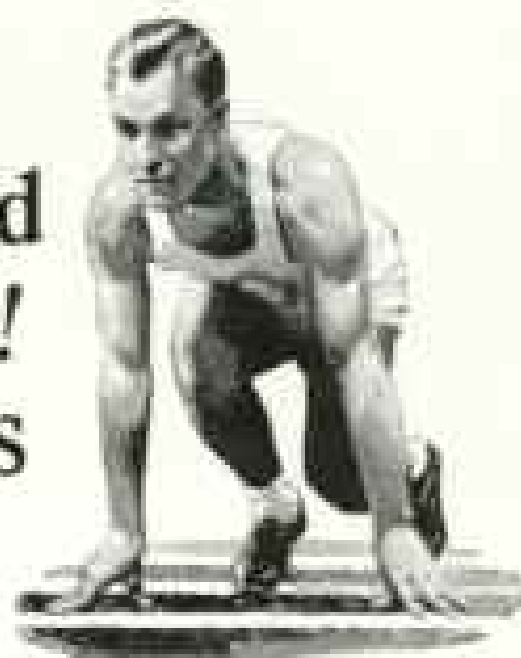
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DOG FOOD





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Get \$14.95 (list price) RCA Victor Record Player, \$7.50 in any Victor or Bluebird Records, other Victor Record Society benefits, for \$14.95. RCA Victor Record Player can be connected to any modern AC radio at little expense, plays records with full tone of set.



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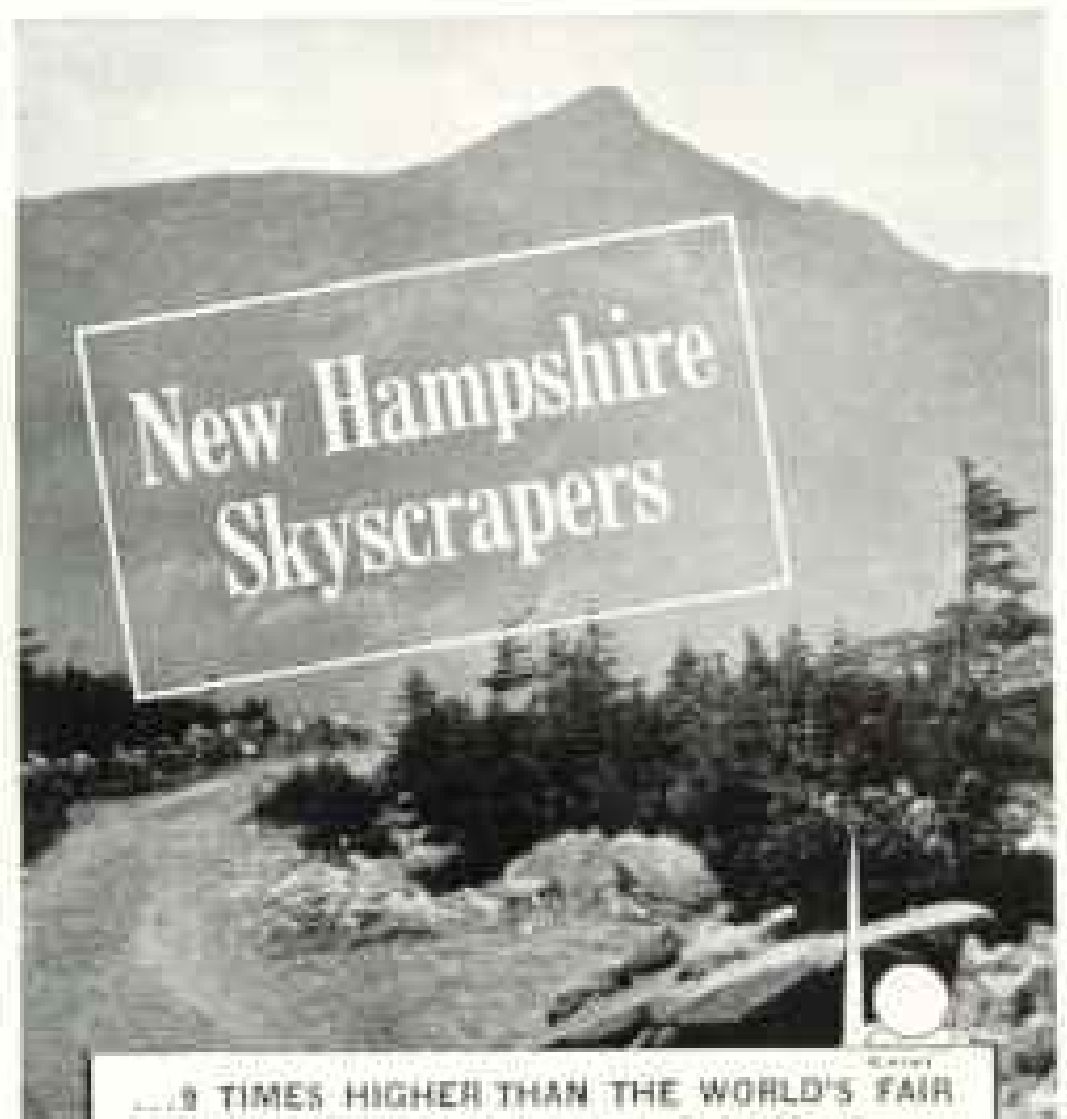
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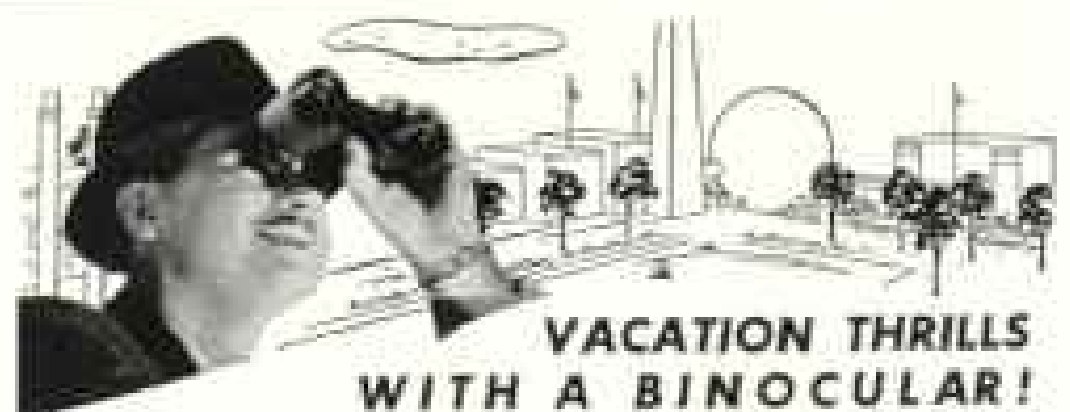
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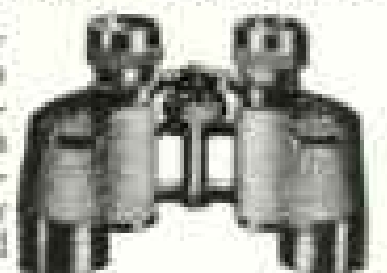
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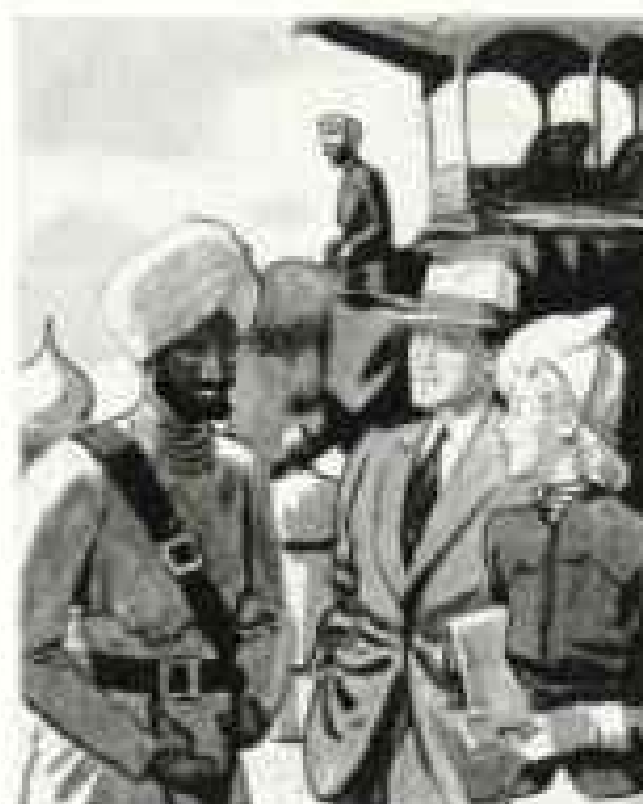
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Next land they'll see will be the palm-lined shore of Honolulu, warm in Hawaii's sun. Then they'll visit Yokohama, Tokyo and Kobe, in Japan. Then China's great-hilled Hong Kong; and Manila, in the gorgeous Philippines.



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They'll visit Port Said, Suez and Alexandria. And go on camel-back to Egypt's Pyramids. And walk in Naples' streets, and Genoa's; and see Marseilles—the twenty-first port in the fourteenth country along this Sunshine Route.



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Secretary, National Geographic Society, _____ 1939
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(1) Name _____ (Occupation) _____

Address _____

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A Letter of Interest to Executives Who Read
The National Geographic Magazine

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TUCSON
Sunshine-Climate Club
ARIZONA

February 14, 1939

Mr. Raymond W. Welch,
Director of Advertising,
National Geographic Magazine,
Sixteenth and M Streets,
Washington, D. C.

Dear Mr. Welch:

This Club started advertising Tucson in 1922. As far as my records show, National Geographic pulled the greatest returns of any magazine in its first issue, and has consistently done so up to the present date. Our first advertisement was numbered 153, and since then we have established, as you know, --04 as the Geographic key number; this season is 1804. With the exception of 1925, when for some reason or other we did not use Geographic, your magazine has been "tops", not only in inquiry pull but in quality and quantity of arrivals.

In the year just past I find on looking up our records, that this year we received inquiries without a break, from every back issue, with exception of course of 1925. This is true of all previous years. In 1934 we had 15 inquiries and one arrival from advertisement key 153, and 9 inquiries and 9 arrivals from advertisement key 204, printed in 1923. This sounds to me like an awful jumble of figures, but what I am trying to say is that as I look at our statistical page of accurately-kept records, I find that until the present day there has never been a single issue of the Geographic in which we advertised, that has not produced inquiries continuously through the years from 1922 to this year, 1938-1939.

Although this Club has maintained a policy of withholding actual returns by the magazines used as media, I personally feel that the National Geographic stands as a thing apart, and that no other representative of a magazine or group of magazines would resent my giving you this information.

Very sincerely yours,

Hamilton Keddie

Hamilton Keddie, Manager
TUCSON SUNSHINE CLIMATE CLUB

**BATHROOM
SLAVERY ENDED!**
—27 YEARS AGO!

No scrubbing —
No scouring

Just use Sani-Flush, the powdered chemical compound. It quickly, easily removes all discoloration from water-closet bowls.



Positively
Cannot
Hurt
the
Plumbing
Connections

Sani-Flush
Cleans Water-Closet Bowls

This is an old advertisement. But after 27 years Sani-Flush is still the easiest and best known way to keep toilets looking new. (Also cleans out auto radiators.) See directions on can. Sold by grocery, drug, hardware, and 5c-and-10c stores. 10c and 25c sizes. The Hygienic Products Co., Canton, O.

SWING AROUND



AMERICA

*this
Summer
by*
GREYHOUND

This may be the first and last chance in transportation history to travel *so many miles for so little money*—and in strictly modern, air-cushioned comfort. You can actually go from your home town to the New York World's Fair, then cross-continent to the Golden Gate Exposition, and back home, all for \$69.95! A friendly tip: go early to avoid the mid-season rush... purchase Greyhound expense-paid tours to assure hotel reservations and carefree enjoyment.

- Greyhound Information Offices:**
- New York City 240 W. 50th St.
 - San Francisco, Cal. Pine & Battery Sts.
 - Cleveland, O. East 9th & Superior
 - Philadelphia, Pa. Broad St. Station
 - Chicago, Ill. 32th & Wabash
 - Washington, D. C. 1400 New York Ave., N. W.
 - Detroit, Mich. Washington Blvd. at Grand River
 - Boston, Mass. 65 Park Square
 - Cincinnati, O. 670 Walnut St.
 - St. Louis, Mo. Broadway & Delmar Blvd.
 - Charleston, W. Va. 150 Summers St.
 - Richmond, Va. 411 E. Broad St.
 - Minneapolis, Minn. 509 6th Ave., N.
 - Memphis, Tenn. 427 N. Main St.
 - New Orleans, La. 400 N. Rampart St.
 - Lexington, Ky. 801 N. Limestone
 - Windsor, Ont. 400 Ouellette Ave.
 - London, England A. B. Reynolds, @ Lendenhall St.

**SEE BOTH FAIRS
FOR ONE FARE!**

\$69.95

To New York, to San Francisco and back home by your own choice of routes.

GREYHOUND
Lines

FREE: Bright Pictorial Booklets, Facts about Both Fairs
This coupon brings most attractive pictorial and informational folders, all about the NEW YORK WORLD'S FAIR ☐, or San Francisco's GOLDEN GATE EXPOSITION ☐. Check the one you want—no cost or obligation.

Name _____

Address _____

NG-6

Established 1868

Judd & Detweiler, Inc.
Printers

Eckington Place and Florida Avenue
Washington, D. C.

This Magazine is from our presses.

"Where shall we stay?"

NATIONAL GEOGRAPHIC MAGAZINE'S HOTEL SECTION

ARKANSAS

Hot Springs National Park

Arlington Hotel and Baths. Artistic, directory benefits. Waters tested and recommended by U. S. Govt. Golf, Fishing. Write for folder.

Majestic Hotel and Baths. Government authorized Bath House under same roof. All sports, all rooms and apartments—moderate prices.

CALIFORNIA

Lake Arrowhead

Lodge & Tavern. Beautiful mountain lake setting. Golf Course, Tennis, Riding, Boating. 2 1/2 hours from Los Angeles. Robert Foehl, Manager. Booklet.

Los Angeles

The Ambassador. Twenty-two acre Playground in heart of City. All Sports, Pinnac, Beach, Lawn, Coconut Grove for Dancing. European, \$5.00 up.

Santa Monica

Miramar Hotel. Mid beautiful gardens, atop the Palisades on the Pacific. Hotel rooms, bungalows and apartments with hotel service. A or B plan.

DISTRICT OF COLUMBIA

Washington

Continental Hotel. Facing the beautiful Capitol Plaza opp. Union Station. All outside rooms, some air-conditioned. Garage, Coffee Shop. From \$2.50.

The Dodge Hotel. On Capitol Hill opposite Union Station Plaza. Celebrated cuisine. No tipping. Single from \$2.50, double from \$4.50. Director K. P. Abbott.

Hay-Adams House, 15th at H. Opposite the White House. Completely air conditioned. Single with bath from \$3. Double from \$4.00. Superb Cuisine.

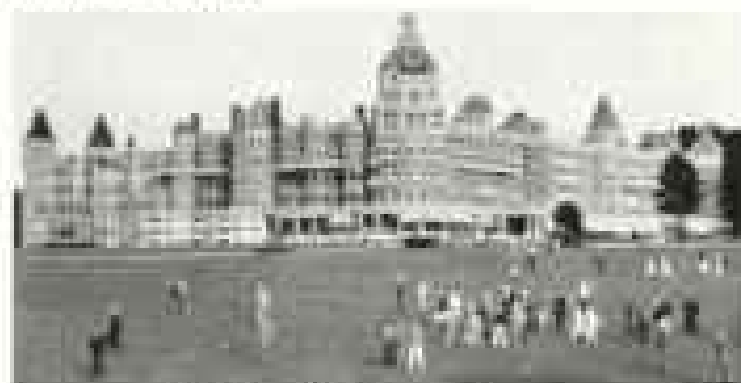
Wardman Park Hotel. Washington's largest. Surrounded by parks. Tennis, swimming, dancing nightly. Cool, quiet. Near everything. Rates from \$4.

MAINE

Moosehead Lake—Greenville Junction

Squaw Mountain Inn. Private, sports golf course, fishing, swimming, boating. Tennis, archery, hiking. Select clientele. No Hay Fever. Phil Sheridan, Mgr.

Poland Spring



Poland Spring House

New England's most famous hotel... a 500-acre playground... 18-hole golf course... fishing, riding, bathing, tennis. Also MANSTON HOUSE, delightful inn, famous since 1704. Season... to November. Special rates to families with children. Home of renowned Poland Water and Poland Club Soda... both served to guests without charge. Write for booklet. Box 56M, Poland Spring, Maine.

Rangeley Lakes

Rangeley Lake Hotel. Mountains, lake views. All sports. No hay fever. Bklt., C, D, Day, Inn F-3, Rangeley Lakes, Me.

MASSACHUSETTS

Cape Cod—Osterville

Oyster Harbors Club Hotel. 2 1/2 hours from Boston. Donald Ross Golf Course, tennis, riding, racing, bluebirding, bathing, CIP water. Polare.

Magnolia

Oceanside and Cottages. Most beautiful spot on Atlantic. Select clientele. Unsurpassed cuisine. All Sports. Theatre. Gen. C. Krawson, Jr., Pres.

Swampscott

New Ocean House on the picturesque North Shore. Seaside and country environment. Open May to October. Booklet. Clement Kennedy, Pres.

MARYLAND

Baltimore

The Belvedere. Baltimore's most luxurious hotel. Modern appointments, spacious rooms, superior food and service. Convenient location. Rates begin at \$1.50.

MINNESOTA

Gull Lake—Brainerd

Roberts' Fine Beach Hotel. Golf, Riding, Boats, Tennis Yacht, at door \$10 net. up, incl. meals. Children inn. Banglows. Fine Fishing. Booklets.

MISSISSIPPI

Pass Christian

Inn By The Sea and Cottages. Pass Christian, Miss. Always open. On private bathing beach. All sports. Paved roads. Climate ideal. Near New Orleans.

NEVADA

Lake Tahoe—Glenbrook

Glenbrook Inn and Ranch. On most famous lake in West. Excellent golf, motoring, lake and mountain sports. One hour west of Reno on Route 30.

NEW HAMPSHIRE

White Mountains—Crawford Notch

Crawford House. Famous for its atmosphere and charm so distinctly its own. Discriminating people return each summer. All sports. Write for rates.

White Mountains—Franconia Notch

Forest Hills Hotel. A delightful resort. Golf, tennis, riding, fishing. Relief from Hay Fever. Restricted clientele. Norman Farneset, Mgr.

White Mountains—Jefferson

Wombek Hotel. Am. Plan. 2,000-acre estate. Private 18-hole golf course. All sports. Orchestra. Select clientele. Booklet. N. L. Demps, Mgr.

White Mountains—Whitefield

Mountain View House. 300-acre private estate. All sports including golf. Highest standard distinguished clientele. W. E. Dodge & Son, Props.

NEW JERSEY

Princeton

The Princeton Inn. Facing golf course and Graduate College. Amer. plan. 100 rms. Fireproof. "Hospitality as in days of old." J. Howard Sloman, Mgr.

Atlantic City

Chalfonte-Haddon Hall. On the Atlantic City Boardwalk. 1000 rooms. Ocean Decks. Modern health baths. American and European plans.

Hotel Dennis. On boardwalk—facing sea. Open sun decks, solaria, health baths. Ocean bathing. American and European Plans. Walter J. Busby, Inc.

Atlantic City



Marlborough-Blenheim

Central park section of Boardwalk—ocean-front sun decks—sea water in all baths—tempting menus—game rooms—concerts and entertainment—exclusive beach and cabana colony—special features and facilities for children—superlative service assured by three generations of continuous ownership-management. Josiah White & Sons Co. (Only 3 hours from New York.)

Atlantic City



The Traymore

When you come to the New York World's Fair, stop off at the Traymore—on Atlantic City's boardwalk—and make your trip complete. Conveniently near—by bus, plane or railway. Sumptuous appointments and service. Golf and all seashore sports. Rates are moderately low. Bennett E. Tausley, General Manager.

Ocean City



The Flanders

Largest hotel in Ocean City, America's Greatest Family Resort. Located directly on the Boardwalk, with three outdoor swimming pools, 200 rooms. Excellent cuisine on American Plan. All sports. Selected clientele. Fireproof. June 25 to Sept. 30. Write for booklet. J. Howard Sloman, Manager. New York Office, 600 Fifth Ave. Circle 5-8466.

Sea Girt

The Stockton. Send for aerial view of superb location, extensive grounds and private ocean beach. Tennis, golf. Two hours to World's Fair.

Spring Lake Beach



The Essex and Sussex

Combine your summer holiday and visit to New York World's Fair—only two hours away. Enjoy the Cool of the Sea at a distinctive seashore resort—free from crowds. Private bathing beach for guests only. Carefully selected clientele. Golf—Tennis—Riding—Excellent Music. Famed for food and service. Write for booklet. C. S. Kroft, Mgr.—Tel. Spring Lake 90.—N. Y. Office—11 W. 42nd Street., Tel. BRyant 9-6348.

The Monmouth. Directly on Ocean. Private Beach Exclusively for Guests. Smartest Resort Hotel on North Jersey Coast. Hilt. J. J. Farrell, Mgr.

The Warren. On ocean front. Private beach, club house. Women make insure distinctive table. Two hours to World's Fair Grounds. Booklet.

"Where shall we stay?"

NATIONAL GEOGRAPHIC MAGAZINE'S HOTEL SECTION

NEW YORK

Albany

De Witt Clinton. A Knott Hotel. New, well appointed. Faces Capitol Park. Splendid meals; attentive service. Come, we'll make you happy.

Bronxville

The Gramatan. High, cool country setting; only 25 minutes from city and World's Fair. Near parkways; no traffic. Restricted clientele. \$1 up. Bath.

Fisher's Island

Mansion House and Cottages. Delightful climate. Seashore, country. Exclusive patronage. Swimming, golf, all sports. Booklet. N.Y. Office, 26 Park Ave.

Long Island—Montauk

Gurney's Inn. On the brink of the beach. Ocean-cooled. Rest and recreation just far enough from the Fair. Select clientele. Bath. W. J. Gurney, Host.

Long Island—Montauk Point



Montauk Manor

On Long Island's cool seaward tip, Montauk Manor offers quiet or complete rest for every member of the family. Fast, direct transportation to the World's Fair and New York City; ferry service from New England. Our own Club—surf, Calumet, Golf, Yacht, Tennis, Saddle and Drive Ranch—afford every vacation enjoyment. Attractive rates. Melton G. Waters, Manager.

New York City

The Plaza. Facing Central Park. Known throughout the World. Subway at Hotel direct to the New York World's Fair. Henry A. Ross, President.

Savoy-Plaza. Overlooking Central Park. Smart Shops and Theaters near by. Subway direct to World's Fair at the door—4th Ave. 58th to 64th Sts.

Hotel Seymour. 10 W. 45th St. Near Fifth Ave. theatres, shops, art galleries, Radio City. Quiet, refined surroundings. Rates \$1 and \$1.50 double, suites \$15.

Standish Hall Hotel. 45 West 54th St. 1, 2 or 3 room suites. Many with kitchenette. Moderate weekly or monthly rates. Convenient location.

The Vanderbilt Hotel on Park Ave. at 54th St. A distinctive address. An internationally famous hotel. Single from \$4, double from \$7, suites from \$15.

The Waldorf-Astoria. Park Avenue, 49th to 50th Streets. You will find its entertainment and hospitality as memorable as The Fair.

George Washington. 2nd St. & Lexington Ave. All rooms with bath, from \$1.00 single, \$1.50 double. Write for Bath, "G" and supervising map of New York.

Watkins Glen



The Glen Springs

The Nathaniel Baths are world famous. The cuisine . . . the golf . . . the magnificent setting high among the Finger Lakes . . . are alike memorable. All the advantages of European Spas—just overnight from New York. Illustrated booklets and rates from Wm. M. Laffingwell, Pres., Watkins Glen, N. Y., or phone our New York office, 60 Fifth Ave., (Circle 8-8139).

PENNSYLVANIA

Eagles Mere

Crestmont Inn, superbly situated on Lake of Eagles (230 ft. alt.), Golf, tennis, water sports. Distinguished clientele. Folder AG, Wm. Woods, Prop.

Hershey

Hotel Hershey. One of America's finest. Magnificent setting. Open year around. European and American plan. Four Golf Courses. All outdoor sports.

Philadelphia



The Bellevue-Stratford

In the Heart of Philadelphia at Broad and Walnut Streets. "One of the Few Famous Hotels in America." Near points of interest and Historic Shrines. Known the world over for its traditional hospitality; its cuisine; its modern comforts and unsurpassed service. Rates begin at \$9.55. Write for Booklet. Claude H. Bennett, General Manager.

Pocono Mountains—Buck Hill Falls

The Inn. Stop off here on your way to and from N. Y. World's Fair, 4 hrs. away, almost in sports. Write today for booklet, road map and rates.

Skytop

Skytop Club. Socially restricted. 100 miles from N. Y. Am. Plan. Nonmembers write Skytop Club, Skytop, Pa., or N. Y. office, Biltmore Hotel.

RHODE ISLAND

Watch Hill

Ocean House. 15th Season. Restricted Clientele. Cultured atmosphere. Golf, Riding, Tennis. Private Beach. American Plan. Folder. Louis D. Miller, Mgr.

VERMONT

Lake Morey—Fairlee

Bonnie Oaks Inn and Bungalows. Sports. 25 rooms with baths, fireplaces. Baby Oaks, supervised play. May-Dec. Folders. Dr. and Mrs. E. H. Page.

VIRGINIA

Virginia Beach

Cavalier Hotel and Beach Club. Open all year. Golf, tennis, riding, fishing, swimming pool. Edward Eaton, Managing Director. Write for Booklet "G."

Williamsburg

Williamsburg Lodge—New unit of Williamsburg Restoration, Inc., offers inexpensive accommodations in this historic city. John D. Green, Mgr.

BERMUDA

Inverurie. Directly on the water; bathing, sailing, fishing. Attractive rates. Consult travel agent for Bermuda Hotels, Inc., Dept. N, 600 5th Ave., N.Y.C.

CANADA QUEBEC

Montreal

The Ritz Carlton . . . Famed for its service, cuisine and distinctive clientele. Location unsurpassed.

Murray Bay



Manoir Richelieu

One of America's most distinguished hotels at smart Murray Bay, overlooking the St. Lawrence Sway. Championship golf, salt water pool, archery, tennis, social program. Luigi Romanelli's Orchestra. \$8 up per day, room with bath and meals. Open June to September. Apply to John O. Evans, Manager, Murray Bay, Quebec, or consult your local agent.

Minnewaska, Ulster County



Wildmere

Cliff House

Lake Minnewaska Mountain Houses, 80 miles from New York on Route 55. Modern conveniences. A Summer home for people of quiet and refined tastes who find rest and recreation on this 7000 acre estate on the crest of the mountain. Boating, swimming, riding, tennis. Golf nearby. 61st season May 20th to October. For folder and rates, please address George H. Stanley, P. O. Box 10.

New York City

The Barbizon. Lexington Ave. 37th St. New York's most exclusive hotel for young women. Cultural environment. Weekly \$12 up, daily \$2.50. Bath. "G"

Barbizon-Plaza. New skyscraper hotel overlooking Central Park at 67th Ave. Rooms from \$4 single, \$7 double. Continental breakfast included. Bath. W.

The Commodore—Right at Grand Central Terminal. Subway entrance in building direct to New York World's Fair. 200 outside rooms with bath from \$4.



He's *Carrying* Quite a Load

TAXES are necessary—you couldn't run a city, state or government without them. But they do mount up.

Fact is, a considerable part of the money you pay us for telephone service goes right out in taxes.

Bell System taxes for 1938 were \$147,400,000—an increase of 56% in three years. In 1938 taxes were:

Equal to about \$550 a year per employee

Equal to \$9.50 per telephone in the Bell System

Equal to \$7.54 per share of A. T. & T. common stock

BELL TELEPHONE SYSTEM

You are cordially invited to visit the Bell System exhibit at the Golden Gate International Exposition, San Francisco





WHY NOT VACATION IN THIS "TWELVE"?

A hot sun rises in the summer sky, but roads point to cooler places. Owners of the Lincoln-Zephyr, eager to test it on long journeys, will travel to mountain, seacoast, or the blue of a lake. They will not be disappointed in their car!

For a short ride promises, a long ride convinces, that the Lincoln-Zephyr is different. All driving now becomes smooth adventure. Miles go by with an ease you had not dreamed of.

The flexibility of the V-type 12-cylinder engine is a new joy. Power in reserve obeys your slightest bidding. And this is a thrifty "twelve"!

The construction of the Lincoln-Zephyr is different, also. Body and frame, in closed types, are one—an unyielding framework of steel trusses. Steel panels are welded to this unique structure, and the whole is gently cradled on transverse springs 136 inches apart.

Other outstanding features include spacious interiors . . . chair-high seats . . . passenger position "amidships" . . . high visibility through wide windshield . . . low center of gravity. These, too, say "Enjoy your vacation!" Lincoln Motor Company, Division of Ford Motor Company.

BENEATH ITS OUTWARD BEAUTY



Lincoln-Zephyr V-12

A combination of features that makes it the only car of its kind. 1. Unit-body-and-frame—steel panels welded to steel trusses. 2. V-type 12-cylinder engine—smooth, quiet power. 3. High power-to-weight ratio—low center of gravity. 4. Comfort for six, "amidships" in chair-high seats—gliding ride—direct entrance—high visibility. 5. Hydraulic brakes.

THE STYLE LEADER

