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Ten-Color Supplement Map of Europe

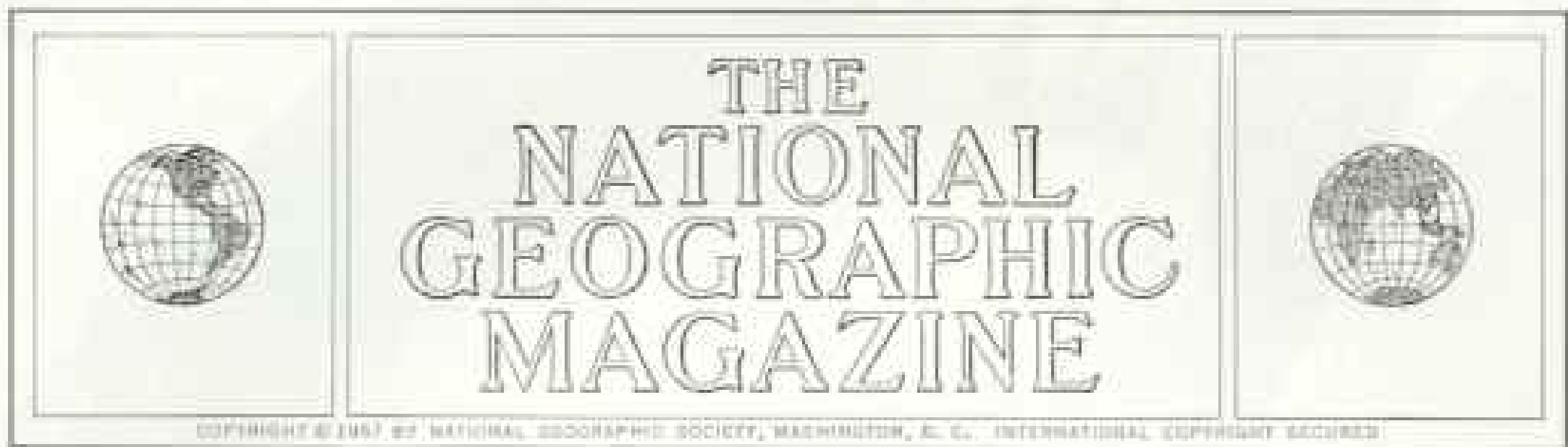
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Our War Memorials Abroad: A Faith Kept

BY GENERAL OF THE ARMY GEORGE C. MARSHALL

Chairman, American Battle Monuments Commission

TWICE since World War II my heart has led me on long pilgrimages overseas. I went as an old soldier seeking fallen comrades.

The hours I walked among our lost legions were among the most poignant of my life. Each site evoked old memories of decisions made, of battles waged and won, and, above all, of the young Americans who paid the highest price that war can exact. Yet the tribute I gave these men in my thoughts must remain an unwritten one, for words cannot capture or convey gratitude held so deeply.

In the course of my pilgrimages there grew a very great, if melancholy, satisfaction in the work of the American Battle Monuments Commission, entrusted with the care of our war dead in foreign lands. We were keeping faith with the fallen. We were taking to them all that we could of home, of beauty, and of remembrance.

An Obligation to the Living

The Commission's high task involves also a most solemn obligation to the living. I have corresponded personally with many Gold Star families concerning our work, but to write words of comfort and assurance to all is beyond my powers. Therefore, I would like to share with the bereaved, and with all other Americans, this brief account of a loving stewardship.

When World War II ended, 15,000,000 American men and women had answered the call to arms; of these, 360,810 died overseas. Most of them were buried near where they fell, in temporary graves on alien soil.

In the years that followed, more than half were brought back to their homeland at the request of relatives. The Commission has labored unceasingly through the past decade in behalf of those left in our care, and today they all lie in permanent memorial cemeteries.

We have established 14 of these World War II memorials abroad—at Manila, near Bataan and Corregidor; in the green of the English countryside; on hills above the pastoral valleys of France and Belgium; in the fields of Luxembourg, the Netherlands, Italy, and North Africa.

Six Shrines Dedicated Last Summer

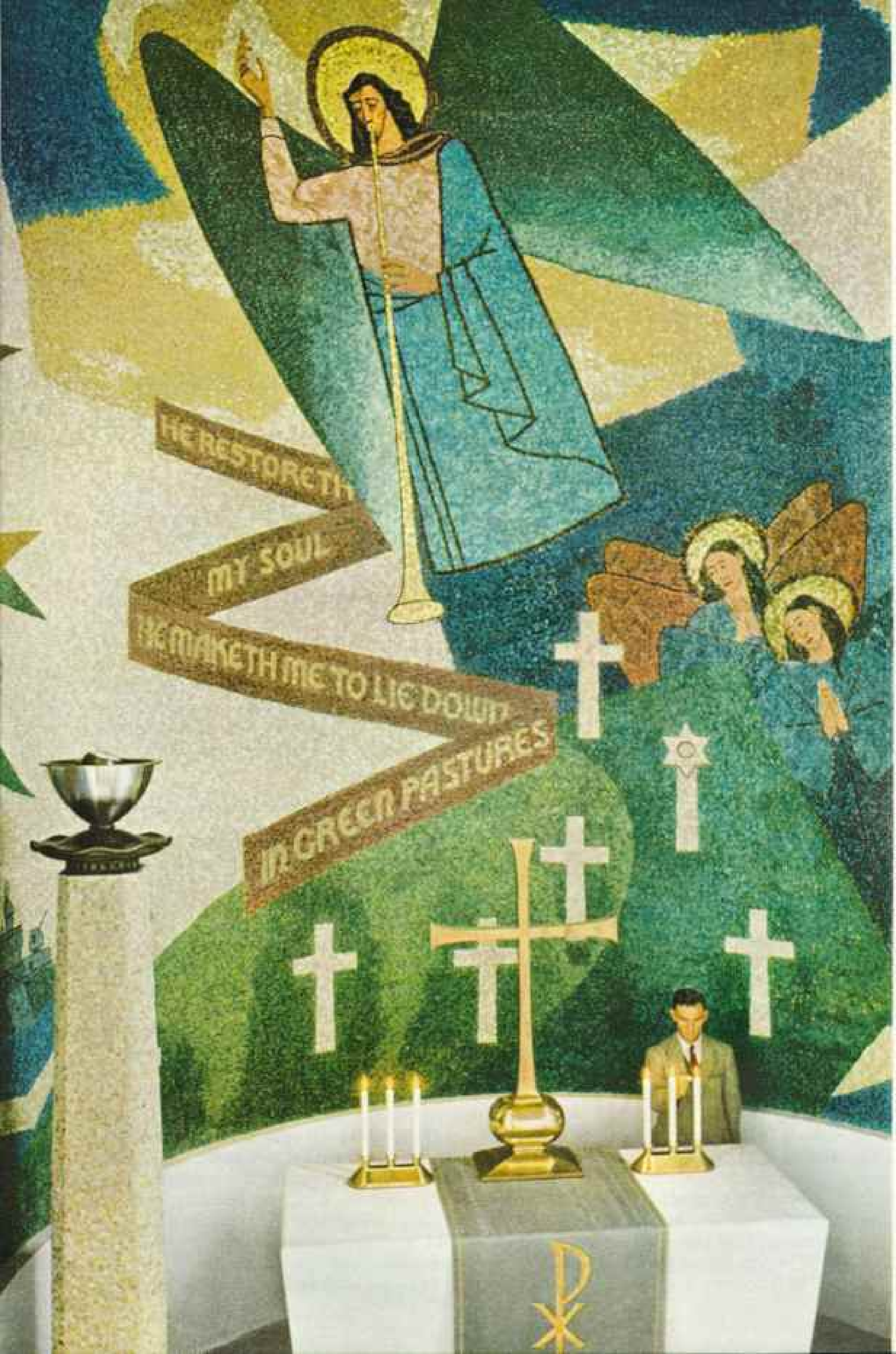
Last July, six of these shrines—all in Europe—were dedicated. The remainder will be ready by the end of 1958.

But statistics, however meaningful, are poor fare for a troubled heart. It is only natural that some who left a loved one overseas should have moments of doubt concerning their decision. I know the assurance many families would have me give.

Yes, he rests now in a serene and beautiful place, well planned, well built, well kept by dedicated men.

From our task's inception the Commission has tried, as far as work and patience and skill can do, to make the memorials worthy of the men and women they honor. We began by asking 14 outstanding United States architects each to design a cemetery with its chapel. With every architect a landscape expert, a sculptor, and a painter—all Americans—generally collaborated.

Once our plans had been formed, the Amer-



HE RESTORETH

MY SOUL

AND MAKETH ME TO LIE DOWN

IN GREEN PASTURES

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ican Graves Registration Service moved the dead from nearly 250 temporary cemeteries, and reverent hands gave them final interment. Then, step by step, the Commission transformed each permanent site into a place of beauty and dignity.

The memorial chapels, for example, are of great artistic merit and truly representative of the American people. Each displays illustrated battle maps, usually large murals, amplified by text to explain the campaigns. In no two instances have artists used the same methods—rarely even the same materials. Some maps are made of layered marble; others are in bronze relief, still others in fresco or in ceramics.

Remembrance Walls Honor the Missing

Visitors also will see long lists of Americans missing in action. These regional honor rolls are inscribed within the chapels or upon exterior walls of remembrance.

Though the buildings give one a pervasive feeling of reverence, for me the deepest communion is found outside among the graves. It seems to be the same for many visitors. Some pause long minutes with heads bowed in prayer. Around them others, in quiet meditation, or with voices respectfully hushed, stroll down the ordered columns of marble headstones—a Star of David for those of the Jewish faith, a Latin Cross for all others.

When known, the name of the individual, with other information, is cut upon the headstone. If the man could not be identified, the inscription says: "HERE RESTS IN HONORED GLORY A COMRADE IN ARMS KNOWN BUT TO GOD."

With all my heart I believe that no one who left a son overseas should doubt the fit-

tingness of his final resting place. That he should have, for time unending, a part of the ground he so dearly bought is supremely right and fitting.

Memorials Are Not Enough

Yet I feel, with equal conviction, that the excellent care given our cemeteries, and the distinguished memorials erected, are not enough. Something more is needed, and only the public can give it.

Let me introduce my explanation by telling you a true and very moving story.

One of the loveliest of the new cemeteries lies at Épinal in northeastern France. There the American superintendent recently received a call from a townsman whose mission was mercy. The caller said an elderly American woman, sick, alone, and virtually penniless, was stranded at an inn in Épinal. She did not speak French, and for some time she had been existing only on apples and cookies. Would the superintendent help her?

He went immediately to the woman and recognized her as a Gold Star mother who had been to the cemetery several times. A proud and reticent person, she had given no indication of her plight.

The superintendent and his wife took this mother into their home and nursed her back to health. As they gained her confidence, they glimpsed the true measure of her loneliness and her purpose.

She was a widow with few friends and without close relatives. Her only son had been killed in the war. At his death the woman had vowed that someday she would visit his grave, and for years she had scrimped and saved to make the journey. Then at Épinal, the vow kept, her funds ran out.

Fortunately the mother held a return ticket for passage home, but from their own pockets the American couple gave her money for food and railroad fare to a French port.

What Gethsemane of spirit this lonely woman endured we can only imagine, but there is a clear lesson for everyone in her inflexible resolve to pay tribute to her son.

All of us are so greatly indebted to that boy and the thousands like him. In a higher sense, they are the sons of every free man. Therefore I ask each reader who can, not just the war-bereaved, to visit the cemeteries and pay similar tribute.

That is the "something more" needed.

If you believe in a life of the spirit, as

← Gabriel in Mosaic Spreads His Wings over Memorials to U. S. Heroes

Last year the United States dedicated the first six of fourteen overseas cemeteries and monuments to Americans who died for their country in World War II. Besides honoring the valorous fallen, most of these hallowed places mark the sites of critical campaigns. Each memorial contains a nondenominational chapel.

Here an attendant lights altar candles at Cambridge American Cemetery and Memorial, England, the last resting place of 3,811 Americans.

Francis Scott Bradford of New York City created the mosaic, which portrays seraphim, Latin Crosses, the Star of David, and quotations from the 23d Psalm. The altar cloth bears the first two Greek letters in the name of Christ.

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Reproduction Illustrations by Edward Walker, National Geographic Staff

most Americans devoutly do, then you must believe these men want visitation. Without it theirs would be a lonely vigil, one lacking the best evidence we could give of gratitude and steadfast memory.

Congress Studies Aid for Visits

There is no need, of course, to urge such journeys upon next of kin. Many have already been to the cemeteries. But trips abroad are difficult, if not impossible, for those living on pensions, modest investments, and small salaries.

Unfortunately, the episode of the woman at Epinal, though not common, has been repeated at other memorials. The superin-

tendents, all American war veterans, give what aid and comfort they can, but there are no funds to reimburse them.

After World War I, when General of the Armies John J. Pershing headed our Commission, Congress appropriated money for visits to overseas cemeteries by Gold Star mothers and wives.* At this writing, two bills are pending in Congress that would authorize similar help for World War II next of kin.

Of necessity, consideration of Government-sponsored visits has had to await completion

* See "Our National War Memorials in Europe," by John J. Pershing, NATIONAL GEOGRAPHIC MAGAZINE, January, 1934.

General Marshall Lays a Wreath at a Flyer's Cross in England

Second Lt. Robert L. Shelden (USAAF), who flew with the 2d Antisubmarine Squadron (Heavy) operating in Atlantic waters, was killed in action on January 22, 1943. His cross stands at Cambridge.

Courtesy of American Battle Monuments Commission



of the cemeteries, a long and difficult job. My regret is that Government help, as after World War I, would come too late for the many who have died or are ill.

For thousands of other Americans, a memorial pilgrimage requires little effort or sacrifice. These are the tourists who cross the seas in increasing numbers each year to travel through foreign lands.

But the right to tour, like other rights, is often denied a subject people. Americans traveling abroad might ponder this deeper significance behind their blithe holiday, remembering to whom they owe the good things of travel—the freedom of movement, the gaiety of a liberated Paris, the peacefulness of a quaint village.

Many would then, I am sure, take time to visit one or more cemeteries. The World War II memorials are all easily accessible by railroad or highway.

The six dedicated last summer serve not only to commemorate our armed forces but also to mark the general positions where Americans waged some of the war's most critical campaigns (map, page 738). Those near our landing places in Normandy and at Anzio are of particular historic interest.

Pacific Memorials Not Yet Dedicated

Though eight cemeteries remain to be dedicated, all are open to the public. Their locations: St. Avold, France; Henri Chapelle and Neuville en Condroz, Belgium; Margraten, the Netherlands; Hamm, Luxembourg; Florence, Italy; Tunis, in North Africa, and Manila, in the Philippines.

The only sites in the Pacific islands or the Far East are the cemetery at Manila—largest of all—and National Memorial Cemetery of the Pacific, maintained by the Army, at Punchbowl Crater, Honolulu. At both sites the Commission is preparing appropriate memorials. In the Hawaii cemetery rest many who gave their lives in Korea as well as thousands of heroes of the fighting over the vast Pacific in World War II.

Some of our Unknowns of the second World War were moved to the United States World War I memorial at Suresnes, on the outskirts of Paris. Its chapel has been enlarged by adding two loggias, or wings, one for each great war. This site epitomizes all our military cemeteries and memorials. For 30 years representatives of the United States and French Governments have visited Suresnes

on ceremonial occasions to honor the dead.

Many private citizens of France, as of other countries, also journey to our shrines. Often they bring fresh flowers for graves and make solemn family outings of their visits. At times superintendents overhear parents telling youngsters the story of the dead strangers; how they came from across the sea to fight freedom's battle.

Such incidents bring to mind a tribute Pericles paid the dead of ancient Athens: "...In foreign lands there dwells also an unwritten memorial of them, graven not on stone but in the hearts of men."

I have always felt that the establishment of American war cemeteries abroad was of great international importance. Each was built on ground donated by the host country, and each stands as a perpetual reminder of the sacrifices the United States made in the common cause.

Though many foreign friends have visited the sites, we hope many more of good heart and memory will be moved to do likewise.

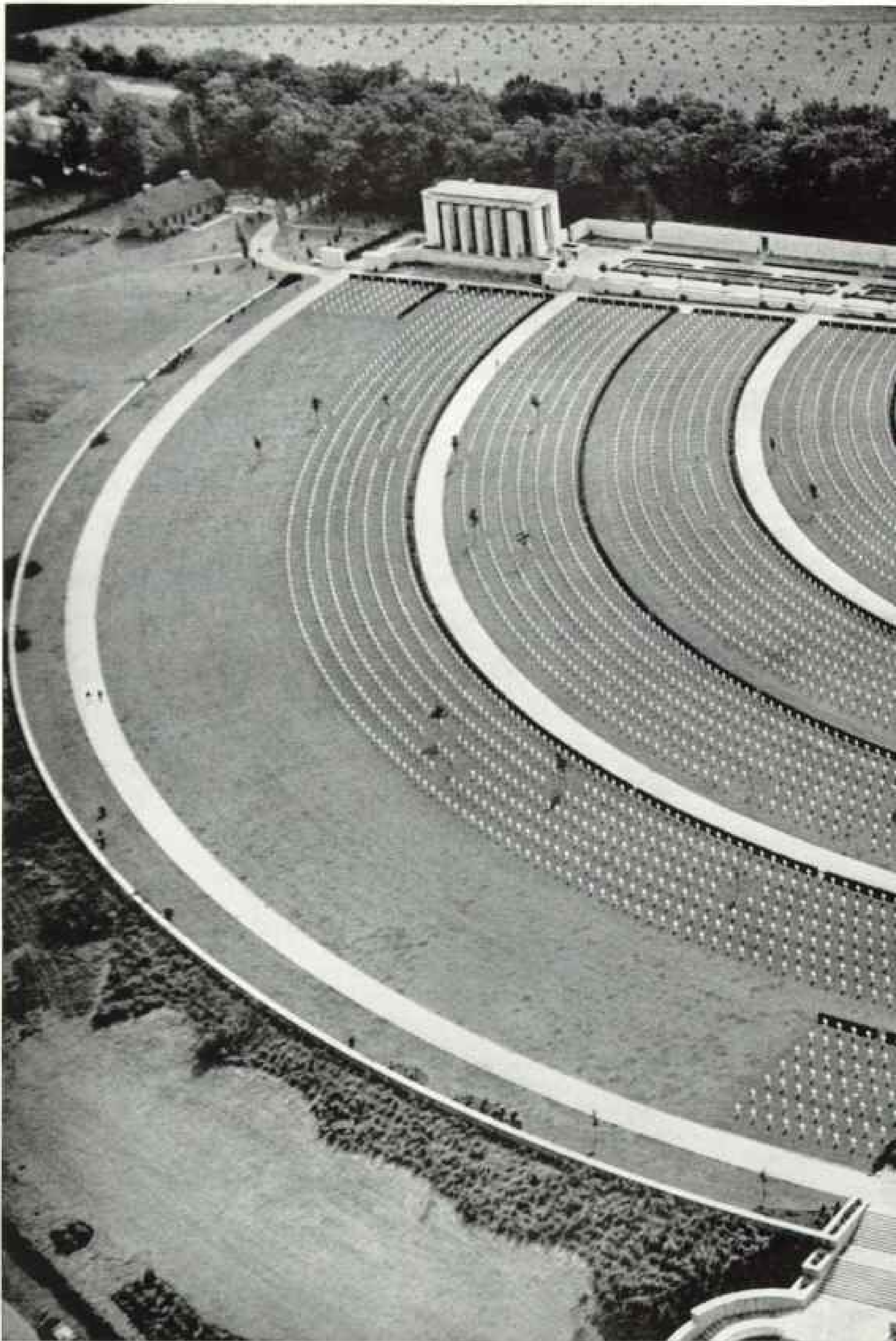
Prominent Citizens Fulfill a Trust

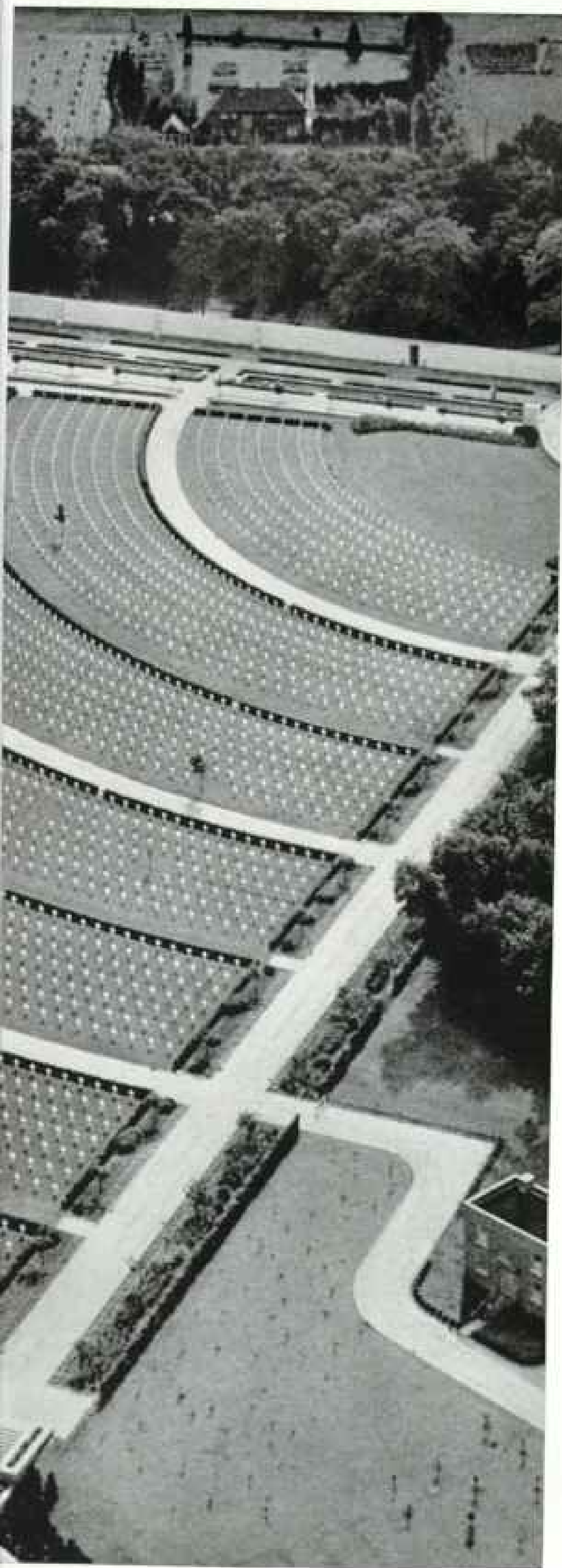
Assurance that the Commission's work lies in good hands is implicit in the names of the distinguished men and women who serve with me as members: Adm. Thomas C. Kinkaid, Vice Chairman; Mrs. Theodore Roosevelt, Jr., Mrs. Wendell L. Willkie, Leslie L. Biffle, Gen. Alexander A. Vandegrift, Senator Charles E. Potter, former Representative John Phillips, Gen. Carl Spaatz, Brig. Gen. Benjamin O. Davis, Forest A. Harness, and Brig. Gen. Thomas North, Secretary.

On the following pages Howell Walker of the NATIONAL GEOGRAPHIC MAGAZINE staff tells with feeling and perception the story of last summer's dedications. His illustrations speak eloquently of the planning and care given each site.

To my own personal message I would add but one more thought, and again I quote from Pericles. What he said in ancient times of the defenders of Greek freedom is a fit epitaph for our sons:

"When the moment came they were minded to resist and suffer, rather than to fly and save their lives; they ran away from the word of dishonour, but on the battle-field their feet stood fast, and in an instant, at the height of their fortune, they passed away from the scene, not of their fear, but of their glory."





Marble Arcs Embrace the Resting Place of Americans at Cambridge. This Bit of England Is American Soil

The American Battle Monuments Commission is responsible to the people of the United States for construction and maintenance of military cemeteries and memorials on foreign soil. Like other overseas sites entrusted to the Commission, this ground is now reserved for those who have fallen in battle.

Cambridge University donated this tree-bordered land to the United States. Surrounded by pleasant farming country, the site covers 30½ acres.

The memorial lies three miles west of Cambridge. Gravel walks give easy access to grassy plots.

Young Trees Grow Among the Markers

Distant mall parallels the Wall of the Missing (pages 740-41). One-story building at upper left houses the resident superintendent, an American veteran of World War II. An optical illusion makes the assistant superintendent's house at lower right appear roofless.

↓ The General Studies Pictures and Text

Working in his home, Liscombe Lodge, in Pinelawn, North Carolina, George C. Marshall reviews this article. The distinguished former Chief of Staff of the Army, Secretary of State, and Secretary of Defense is a Trustee of the National Geographic Society.

Blund Cooper, U. S. Army, and Gilbert M. Grosvenor,
National Geographic Staff (above)

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IRELAND

ENGLAND

DENMARK

North Sea

CAMBRIDGE CEMETERY

Commemorates the United States Navy's operations in the Atlantic and the Army Air Forces' strikes at continental Europe.

Cambridge

London

The Hague

Amsterdam

NETHERLANDS

Hamburg

English Channel

Cherbourg

St. Laurent sur Mer

Brest

St. James

Caen

NORMANDY CEMETERY

Men struck down in the D-Day landings and in later battles rest here above Omaha Beach.

Paris

Luxembourg

Strasbourg

Stuttgart

Danube

Munich

BRITTANY CEMETERY

Thousands lie here who died in the liberation of northwestern France.

Loire

EPINAL CEMETERY

Memorial to the heroes of the Vosges Mountains campaign and the assault on Germany

FRANCE

Bern

SWITZERLAND

Atlantic Ocean

Bordeaux

Garonne

Toulouse

Dijon

Lyon

RHONE CEMETERY

Honors those who gave their lives in southern France.

Avignon

Draguignan

Marseille

Toulon

Cannes

St. Tropez

SICILY - ROME CEMETERY

Dedicated to the men who took Sicily and secured southern Italy.

SARDINIA

Tyrrh S



- American Forces
- British Commonwealth Forces
- French Forces
- Air Operations

NORTH AFRICA

Tunis

MEDITERRANEAN SEA



HERE REST IN HONORED GLORY...

THE UNITED STATES DEDICATES SIX NEW
BATTLE MONUMENTS IN EUROPE TO AMERICANS
WHO GAVE THEIR LIVES DURING WORLD WAR II

THE colonel had come all the way from Topeka, Kansas, to Cambridge, England, to keep a promise. He came to visit the grave of his wartime copilot.

On this solemn mission Lt. Col. William R. Lawley walked slowly through the American cemetery, looking for his friend's headstone. But a single marker was hard to locate among the army of white crosses marching precisely as West Pointers into the mist of the English countryside. The colonel could not find it, and neither could I when I joined in the search.

As the mist turned to drizzle, we entered the office of the superintendent for a clue, something we should have done in the first place. For there Lawley had only to give his copilot's name, and a card was produced to pinpoint the burial place: "Plot D, Row 1, Grave 9."

With these directions we easily found the cross of 2d Lt. Paul W. Murphy. I photographed it as Lawley stood by, bareheaded in the rain.

Over Germany, Murphy was killed by enemy fire which also knocked out an engine of their Flying Fortress. Flak silenced a second engine and left it burning. But Law-



Article and photographs by Howell Walker,
National Geographic Foreign Editorial Staff.

ley flew the stricken plane back to England. "After that flight," he said, "they put our plane in Class 26—scrap-pile material."

He neglected to say that this mission won him the Congressional Medal of Honor.

The World War II monument at Cambridge is one of six I saw dedicated in 1956. All their headstones stand above Americans who gave to their country "the last full

↓ "All Who Shall Hereafter Live
in Freedom Will Be Here Reminded..."

The inscription along the Wall of the Missing at the Cambridge Memorial affirms that "Americans, whose names here appear, were part of the price that free men for the second time in this century have been forced to pay to defend human liberty and rights." This United States Air Force captain looks for names of cherished friends. A sculptured airman stands at right, Coast Guard man at left.

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measure of devotion." Now, though far from home, they rest in what has become American soil.

Here at Cambridge the Stars and Stripes flies above pasture land donated by Cambridge University. The hallowed ground holds 3,811 fallen, and an honor roll of 5,125 missing in action consecrates a long wall of remembrance. A large number of these men belonged to the Army Air Forces. Others were lost in the Battle of the Atlantic, in training areas of the United Kingdom, in the invasions of North Africa and Normandy.

Americans and Britons Dedicate →
Cambridge Memorial to U. S. Brave

Tranquil water reflects the chapel, designed by architects Perry, Shaw, and Hephurn, Kehoe and Dean, of Boston, Massachusetts.

Lower: RAF officers and guests, escorted by USAF ushers, walk beside the Wall of the Missing. These words of Dwight D. Eisenhower remind us "... that to these men and their comrades we owe a debt to be paid with grateful remembrance of their sacrifice..."







"Here Are Recorded the Names of Americans... Who Sleep in Unknown Graves"

French engravers chisel the honor roll of 498 United States servicemen. This Wall of the Missing stands in the Brittany Cemetery at St. James, France (pages 750 and 768).

The names of most have been inscribed on their headstones; some are known but to God. All alike lie here in honored glory.

Over this bit of America in Britain the Royal Air Force sends an aircraft each Memorial Day. The crew scatters 3,811 flowers, one for each hero resting below.

Men have always sought to record military deeds and to care for their fallen warriors. Accordingly, the United States, through the American Battle Monuments Commission, has taken reverent pride in erecting memorials to those who have laid down their lives on foreign fields in two world wars.

The Commission deserves infinite credit for the painstaking task of constructing and maintaining our overseas memorials entrusted to its care. As a long-time member and now Secretary of the organization, Brig. Gen. Thomas North has devoted his life to this work. He joined the Commission when it was headed by Gen. John J. Pershing after World War I.

"Brave Men, Living and Dead..."

Last summer General North invited me to attend all the dedications of United States memorials and cemeteries in England, France, and Italy. In making this pilgrimage, I was

able to gain a closer than average view of the organization, its personnel, and its achievements.

On the gray afternoon of July 16, 1956, some 2,000 persons, most of them English, thronged the mall leading to the memorial to be dedicated at the American shrine near Cambridge (page 741). Besides Colonel Lawley, I met among the guests several other World War II veterans who had traveled from their homes in the United States to pay homage to fallen comrades.

"It is altogether fitting and proper that we should do this," said Abraham Lincoln at Gettysburg nearly a century ago. "But, in a larger sense, we can not dedicate—we can not consecrate—we can not hallow—this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract."

We can only try, as at Cambridge. To commemorate the achievements of our countrymen and their units, a wall map 30 feet wide and 18 feet high occupies a permanent place in the memorial. Marble, bronze, and aluminum have gone into outlining the Navy's Atlantic operations, the convoying of supplies to the U. S. S. R., and the Air Forces' strategic bombardment of German-held northwest Europe.

From this busy pattern of war one may turn to the peaceful apse where the Archangel Gabriel in colored mosaic hovers above Latin Cross, Star of David, and the words from the 23d Psalm: "He maketh me to lie down in green pastures . . . He restoreth my soul . . ." (page 732).

An exterior wall displays an enormous map in stone relief. It shows all the sites in the United Kingdom where U. S. forces were stationed and rigorously trained for the campaigns in North Africa and Europe. Thousands upon thousands of these Americans, together with British, Canadian, French, and Polish divi-

sions, carried the war across the English Channel in a massive move toward the liberation of France and the Continent.

Twelve years after that momentous invasion I stood on a Normandy bluff overlooking the English Channel. The same sweep of water had floated another history-making invasion force nine centuries earlier. From the Norman coast, William, Duke of Normandy, sailed to conquer England.*

Stillness at Omaha Beach

I walked to the edge of the bluff and gazed down. Sunlight turned the sandy shore to gold. Blue waves gently washed it clean. In the breeze, fresh as a spring morning, a white butterfly glided quietly as time.

Directly below me stretched Omaha Beach where on June 6, 1944, U. S. forces stormed ashore in the face of fearful fire. Of the many who never reached the top alive, hundreds rest here today, amid the peace of rural Normandy.

* See "The Coasts of Normandy and Brittany," by W. Robert Moore, NATIONAL GEOGRAPHIC MAGAZINE, August, 1943.

A Frenchman Signs the Guest Book at Brittany Cemetery

Many Europeans visit United States monuments in their countries. Some bring fresh flowers. This man came with his wife and son.



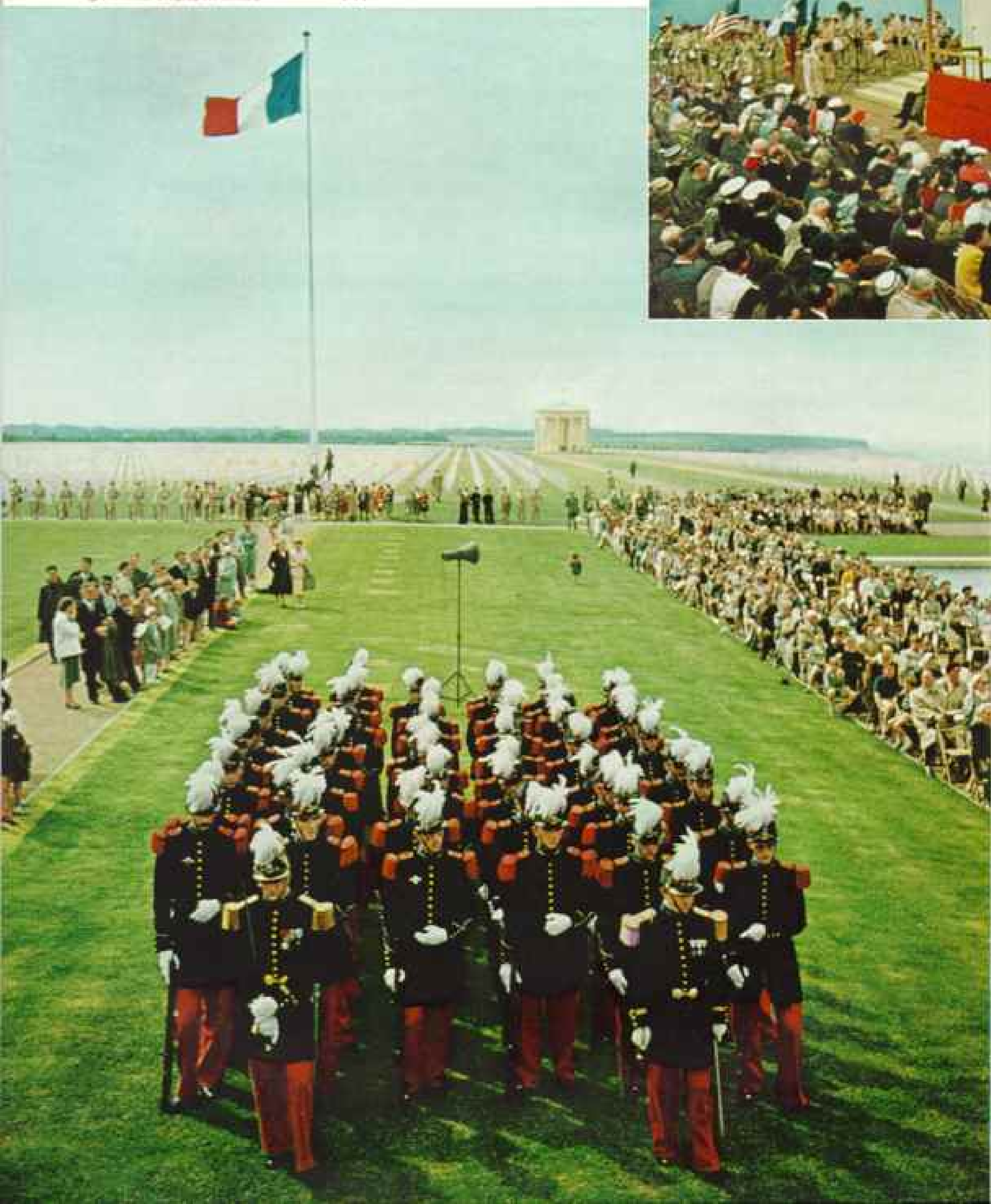
Americans and French Consecrate Normandy Memorial →

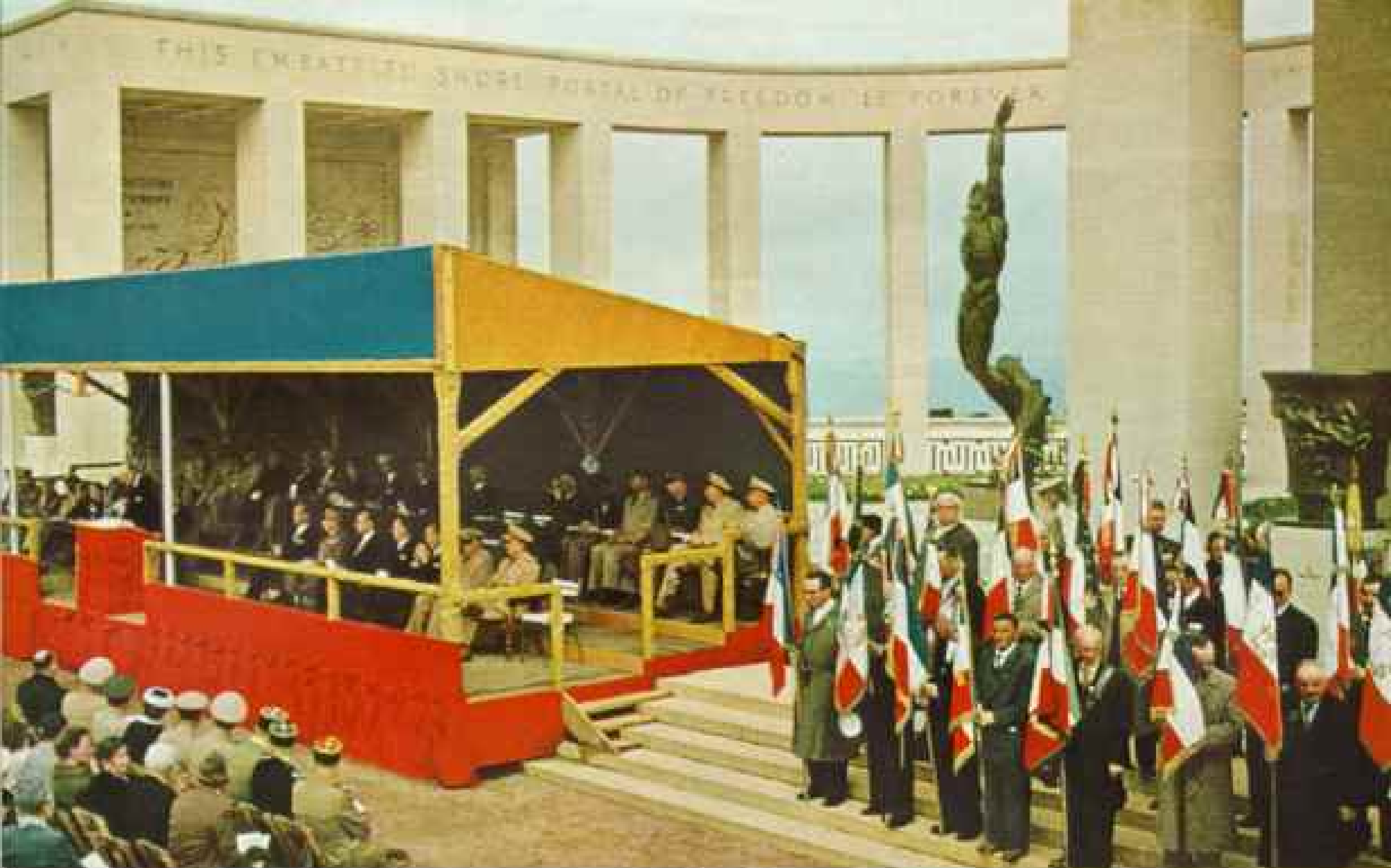
Here U. S. amphibious forces landed on D-Day, June 6, 1944. Thereafter the shore, close to St. Laurent sur Mer, was known by its code name, Omaha Beach. English Channel appears in the background.

↓ Plumed cadets from St. Cyr military school, the West Point of France, stand at rest on a mall of the Normandy Cemetery. Tricolor flag flies above a United States squad that fired three volleys above the graves of 9,385 Americans who fell in the Normandy campaign. Many of the latter died while trying to secure Omaha Beach on D-Day. Round chapel rises in the background. Architects were Harbeson, Hough, Livingston, and Larson, of Philadelphia.

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↓ Mrs. Theodore Roosevelt, Jr., Decorates Her Husband's Grave in Normandy

All four sons of President and Mrs. Theodore Roosevelt saw war service. Theodore Jr., the eldest, took part in both World Wars. As a brigadier general, he landed in Normandy with the first wave of infantry, succumbing to a heart attack some weeks later. For gallantry and leadership under fire, he received posthumously the Medal of Honor, highest U. S. military award. His brother Quentin, a flyer lost in action over France in 1918, lies at left. Kermit, another brother, gave his life on active duty in Alaska in 1943. The fourth and only surviving son, Archibald, served as a lieutenant colonel of infantry in the southwest Pacific.



More than 9,000 crosses stand in this green field near the village of St. Laurent sur Mer. The markers, general's or private's, are identical. Beside the heroes of the landing lie Americans who fell elsewhere in Normandy: farther west at Utah Beach; on the wind-combed hills of the Cotentin Peninsula; in the battles for Cherbourg, Saint Lô, Coutances, Avranches, Falaise.

The monument above Omaha Beach designates but one station along the costly road to victory. The crosses range in close order from a colonnaded memorial with its Wall of the Missing to and beyond a round chapel (pages 744 and 748). French maintenance workers and two American supervisors keep the property neat as a military post.

Hundreds of French and Americans attended the consecration of this battle monument in Normandy. Statesmen and military men of both nations voiced their people's gratitude to those who died for the cause of liberty.

The personal representative of France's President René Coty said: "These young men who here sleep their last sleep have taken a place in world history in the first rank of conquerors. When the survivors have dispersed, the dead remain together, fraternally, as they did in combat. Let us learn to meditate the great lessons that come from their graves."

And one line of a message from President Dwight D. Eisenhower summed up the purpose of the dedication:

"They will never be forgotten."

An American honor guard fired three volleys over their resting places. Before the rifle smoke drifted away, a bugler sounded the clear and haunting

Americans Present a Wreath for the Heroes of Normandy

Mrs. Theodore Roosevelt, Jr., makes the presentation on behalf of the American Battle Monuments Commission, of which she is a member.

Adm. Thomas C. Kincaid, Vice-Chairman of the Commission, watches from the podium on the speakers' stand. Others (left to right) are Rudolph G. Pesata of AMVETS; Henry H. Dudley of the American Legion; Ray H. Brannaman of the Veterans of Foreign Wars; Robert P. Joyce of the United States Embassy in Paris; and Gen. Jean Ganeval, representing the President of France.

American representatives of patriotic organizations attended all six memorial dedications. Omer W. Clark, of the Disabled American Veterans, and Mrs. Thelma Prather, of the American War Mothers, attended this ceremony, but are not shown.



notes of taps. Military bands played the national anthems of France and the United States. Then came a hush, broken only by GI boots crunching on a gravel path as the color guard withdrew.

A representative of each of five patriotic organizations chartered by the U. S. Congress accompanied the American Battle Monuments Commission to every memorial dedication. The group comprised the Veterans of Foreign Wars of the U. S., American War Mothers, the American Legion, Disabled American Veterans, and the AMVETS (American Veterans of World War II). Their members laid wreaths during the ceremonies.

The Battle of Normandy

The Americans from Omaha Beach linked up with those on Utah Beach. They cut off the Cotentin Peninsula, captured the vital port of Cherbourg, then began a wide-scale offensive toward the south.

Meanwhile, British and Canadian armies to the east fought for and took the heavily defended city of Caen, but met stubborn German resistance along their east-west front.

Even in the wake of effective bombing the Americans had to fight fiercely near Saint Lô, Coutances, and Avranches. About August 1, however, the war in France began to move with lightning speed. The Americans burst into Brittany, liberating Rennes, Nantes, and St. Malo within a period of two weeks.

The Germans were on the run, a fighting run toward the east. They made a desperate effort to escape through a narrow corridor between Falaise and Argentan. Here raged one of the hardest struggles in all Normandy.

Danger Hid in the Hedgerows

The Americans had swept north to Argentan, the Canadians south to Falaise. The Allied jaws tightened on the remnants of the enemy's retreating forces. At Chambois the Americans and Canadians combined their strength to close the Falaise pocket and deal the death bite. By the night of August 21 the battle for Normandy was won. Brittany was virtually in hand.

American fighting men who fell winning it lie near the little town of St. James. On the long bus trip from Caen to the Brittany Memorial I talked with several of their comrades-in-arms who survived. They were returning to honor friends lost in this pastoral land which is now so full of peace and plenty.

John D. Hawk sat near me in the bus. Now a schoolteacher in Tracyton, Washington, Hawk last passed through this region as a sergeant with the U. S. 90th Infantry Division. He told me he lugged a machine gun over 300 miles of Normandy in ten days, then burned it out in less than ten minutes during a hot engagement with the enemy at the closing of the Falaise pocket.

The veterans remembered the endless hedgerows as so many enemy lines; how they had dreaded the ditches, the sunken muddy lanes, and somber groves concealing snipers. Crawling through the orchards, they had suspected every apple tree, and tripped booby traps in open meadows where cows and horses lay dead. They slept and ate in ruined buildings or out in the rain.

And they had to fight their way into heavily fortified cities like Cherbourg. On that port's southern outskirts the Germans turned the rocky summit of Montagne du Roule into a strong point commanding nearly every approach.

Reverence in the Rain

Carlos C. Ogden, another of the Americans in the bus with me, took part in the attack on this hill position. Just what part he had played I learned only later when I visited the former citadel, now a war museum. It displays a picture of Lt. (later Major) Carlos C. Ogden, 314th Infantry, 79th Division. The accompanying citation tells how he won the Medal of Honor:

"For heroic leadership and indomitable courage at Fort du Roule 25 June, 1944. When the attack by his company was stopped by German fire from the fort, Lieutenant Ogden advanced alone up the slope. Although painfully wounded twice, he continued on, silenced an 88 mm. gun and two machine guns, and opened the way for his company to continue its advance and capture the enemy position."

Now from a speeding bus Ogden and the others watched mine-free fields and friendly farms slide by, pretty as pictures for a fairy tale. Towns like Villers Bocage, wholly destroyed in war, had been rebuilt out of all recognition. The valleys appeared beautifully green, the hills incredibly gentle.

In a miserable drizzle our bus rolled up to the gates of the Brittany Cemetery. Farming families and residents of near-by St. James had already arrived, some on foot, some by



bicycle. From more distant towns others came by car.

Fifteen hundred chairs outside the granite chapel were not enough; many persons stood throughout the dedicatory service. On the sheltered speakers' stand and out in the wet, everyone paid homage to the 4,410 Americans who lie here.

Senator Charles E. Potter of Michigan, who lost both legs in Europe during the war, introduced France's Foreign Minister Christian Pineau, U. S. Air Secretary Donald A. Quarles, and other distinguished persons who addressed the gathering.

School Children Write an Elegy

After the final talk, Senator Potter took a piece of paper from his pocket and said he wished to read a poem by some English school children. They had visited this American cemetery with their teacher, he said, and she had helped them express their feelings. With evident emotion he read:

Let them in, Peter; they are very tired.
Give them couches where angels sleep.
Let them wake, whole again, to new dawns
fired
With sun, not war. And may their peace
be deep.
Remember where the broken bodies lie.
And give them many things they like,
Let them make noise.
God knows how young they were to have
died.
Give them swing bands, not gold harps,
for these are boys.
Let them love, Peter—they had no time—
Girls sweet as meadow winds
with flowing hair.
They should have trees, bird songs, hills to
climb,
Tastes of summer and ripened pear.
Tell them how they are missed; say not to
fear.
It is going to be all right with us down here.

The Brittany Memorial, like others maintained by the American Battle Monuments Commission, remains open to the public every day of the year. The gates normally close at

dark; nevertheless, American visitors may be admitted at any hour of the night. The resident superintendent told me of escorting guests over the grounds by flashlight. Sometimes they come at dawn.

"Early one raw winter morning," he recalled, "I was sipping my first cup of coffee by the window when I saw an elderly Frenchman ride up on a bicycle. The gates had only just opened. He got off the bike, stepped out of his wooden shoes, and walked along the cold gravel path to the chapel—over 100 yards. He took off his beret outside the door and bowed his head. He stood like that for some time—praying, I guess. Then he went back to the gates, put on his shoes, and rode away on the bicycle."

Maybe he prayed for American friends made and lost during the war. Or perhaps he simply paused for morning devotions.

Except for its newness, the granite memorial looks like many a rural church in Brittany; it belongs to the landscape. The interior, however, is appropriately decorated with U. S. unit flags and wall maps (pages 750-51). Above and behind the altar, light filters through the Great Seal of the United States in a rose window of stained glass.

From the Shores of Tripoli

At the chancel rail I saw the prayer: "O Lord, support us all the day long until the shadows lengthen and our work is done. Then in Thy mercy grant us a safe lodging and peace at the last."

As the day drew to a close, the superintendent said to me: "You National Geographic people are used to raising flags around the world; now I'm going to give you a chance to take one down."

From a tall mast in front of the chapel we lowered the Stars and Stripes. A stillness settled on the cemetery, silent as dew. The peace of this summer evening made war—any war—seem remote.

Thirteen months before the invasion of Normandy the Allies completed the defeat of Axis forces in North Africa. Several thousand young Americans lost in this campaign have been buried in Tunisia, near the site of ancient Carthage. The U. S. monument here, still unfinished during my tour, will be ready for consecration during the summer of 1958.

On July 8, 1943, Allied landing craft pushed off from North Africa to take Sicily,

← "Spirit of Youth" Rises Symbolically; Peace Comes to the Battlefield

New York sculptor Donald De Lue created this 22-foot bronze as the centerpiece of the Normandy Memorial (page 745, upper). A line from the "Battle Hymn of the Republic" appears around the base: "Mine eyes have seen the glory of the coming of the Lord." Worshipers of all faiths use the round chapel.



← "I Have Fought a Good Fight
I Have Finished My Course
I Have Kept the Faith"

So state the lines on the pedestal of "Youth Overcoming Evil." The powerful statue by Lee Lawrie of Easton, Maryland, rears against the end of the memorial chapel in the Brittany Cemetery at St. James, France (below).

→ A map in the Brittany shrine traces Allied army movements from Normandy landings to war's end. This chart, a concrete mosaic, includes ceramics, glass, bronze, and aluminum. U. S. unit flags (left to right) represent the Navy Artillery Battalion, Navy Infantry Battalion, and Army Ordnance.

↓ Chapel is constructed of native granite. Architect William T. Aldrich of Boston, Massachusetts, designed the building along the lines of a Breton church.

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and later to invade the Italian mainland.* Amphibious forces successfully assaulted the "boot" at Salerno, seized the Naples-Foggia airfields, and pushed north on the peninsula to the Garigliano River where the advance came to a dead stop. From the newly acquired bases, however, U. S. planes struck Austria, the Balkans, later even Berlin.

Still, the strongly fortified German positions along the southern front restricted Allied ground movements. In a bold outflanking operation, American and British troops hit the beaches at Anzio and adjacent Nettuno behind the enemy lines.

Despite heavy German counterattacks, the invaders kept their precarious foothold on this coastal strip. In May, 1944, they finally broke through and joined with Allied forces advancing from the south; Rome surrendered early in June. The U. S. Fifth Army fought

its way across the Arno River and into the northern Apennines.

Near Florence a cemetery, which will be ready for dedication in 1958, holds 4,402 Americans who fell during this fighting. Most of them gave their lives in the operations north of Rome.

The memory of Americans who made the supreme sacrifice in Sicily and southern Italy is honored at Nettuno by a handsome structure of white travertine. One wing of the building forms a chapel whose walls list the names of missing thousands. Color maps cover the walls in the other wing, tracing the war through Sicily and Italy (page 756).

Doric columns of roseate marble rise around
(Continued on page 761)

* See "Sicily Again in the Path of War," by Maynard Owen Williams, NATIONAL GEOGRAPHIC MAGAZINE, September, 1943.

American and Italian Dignitaries Join in the Sicily-Rome Ceremonies

As Secretary of the Navy, Charles S. Thomas (left center) delivered the dedicatory address. Here he confers with John D. Jernegan, then U. S. Chargé d'Affaires in Rome, who welcomed the guests. Italy's Prime Minister Antonio Segni stands at left in dark hat. Adm. Thomas C. Kinkaid (in white hat) and former Secretary of the U. S. Senate Leslie L. Biffle sit at far right. Both are members of the Monuments Commission.







↑ Flags of Italy and the United States Fly Above the Sicily-Rome Memorial

This cemetery holds 7,562 Americans who fell in the campaigns of Sicily and southern Italy. Many of them made the daring landing behind enemy lines at Anzio in January, 1944, clinging to a precarious beachhead four months in the face of furious opposition. The Allies did not break out of the Anzio pocket until May, but by early June they entered Rome. Some 12,000 Americans originally buried in this region were returned home at the request of relatives. More than 3,000 U. S. servicemen missing in action in the operations are named on walls of the chapel.

Here honor guards of Italy and the U. S. form beside the chapel to dedicate the cemetery.

← Bronze soldier and sailor, relieved of war's strain, walk toward peace within the peristyle (opposite page). Paul Manship was the sculptor. New York architects Gugler, Kimball, and Husted planned the colonnade around an Italian stone pine. Mottled columns are of Italian marble; others are of white travertine, as is the main structure.

↓ U. S. Air Force officers stride past an honor guard of *carabinieri*, Italy's military police.

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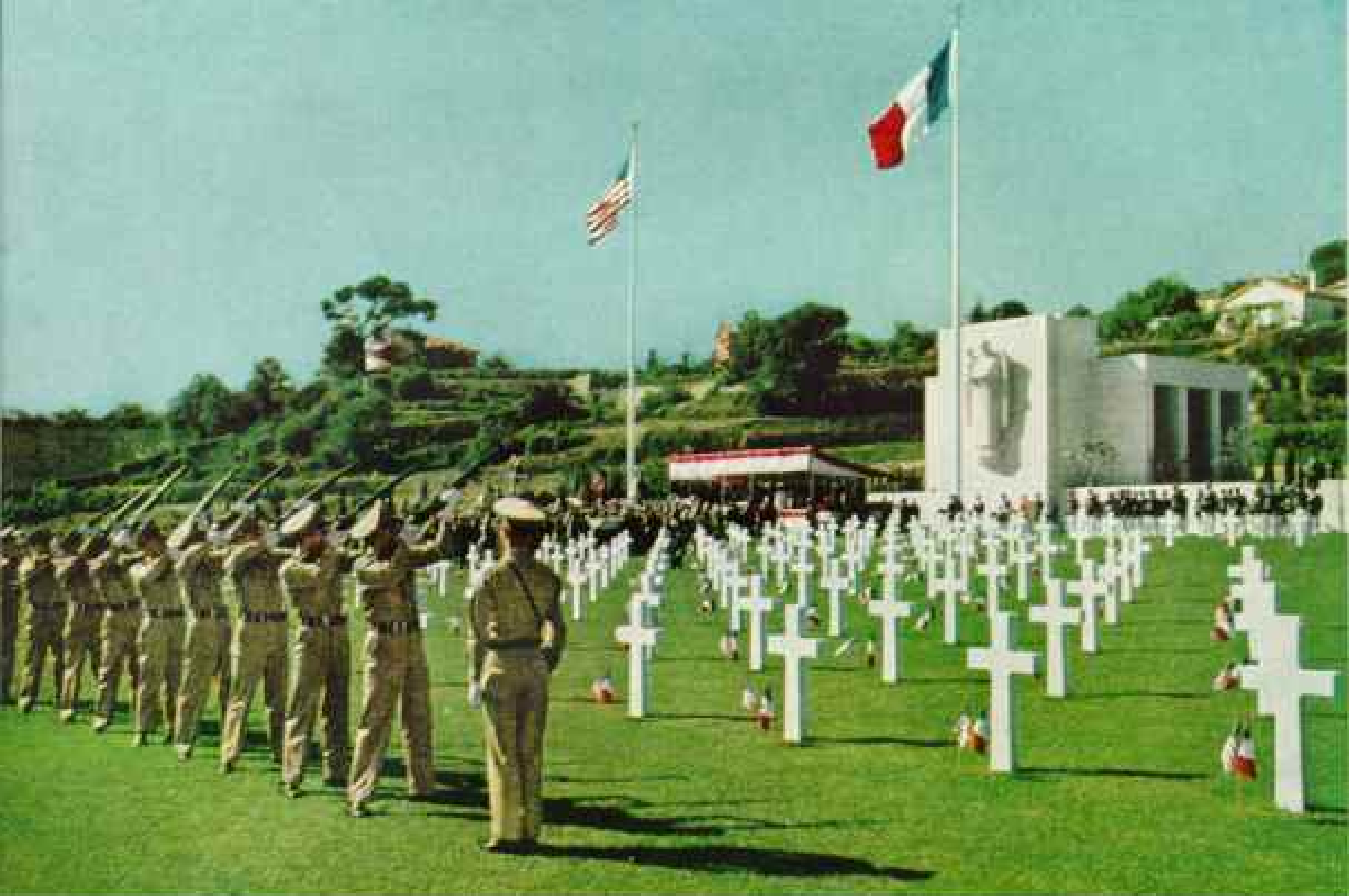




Bomber Lanes Fan Out to Enemy Targets Far from Bases in Southern Italy

Once in control of the Naples-Foggia airfield sites, American flyers could strike deep into hostile territory. They ranged over Austria, the Balkans, later even to Berlin. Fresco panels illustrate air strikes and the significance of vital bases at the ankle of the Italian boot.

Relief map of bronze and mosaic in foreground outlines Mediterranean campaigns. Spikes discourage sitters.



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♣ "Fire!" Rhône Cemetery Enshrines Men Who Fell in Southern France

Stars and Stripes and French Tricolor unfurled last July above this hallowed ground at Draguignan. A United States firing squad sent three volleys over 861 Americans lying here.

♣ An American Bugler Sounds Taps Above Draguignan's Crosses

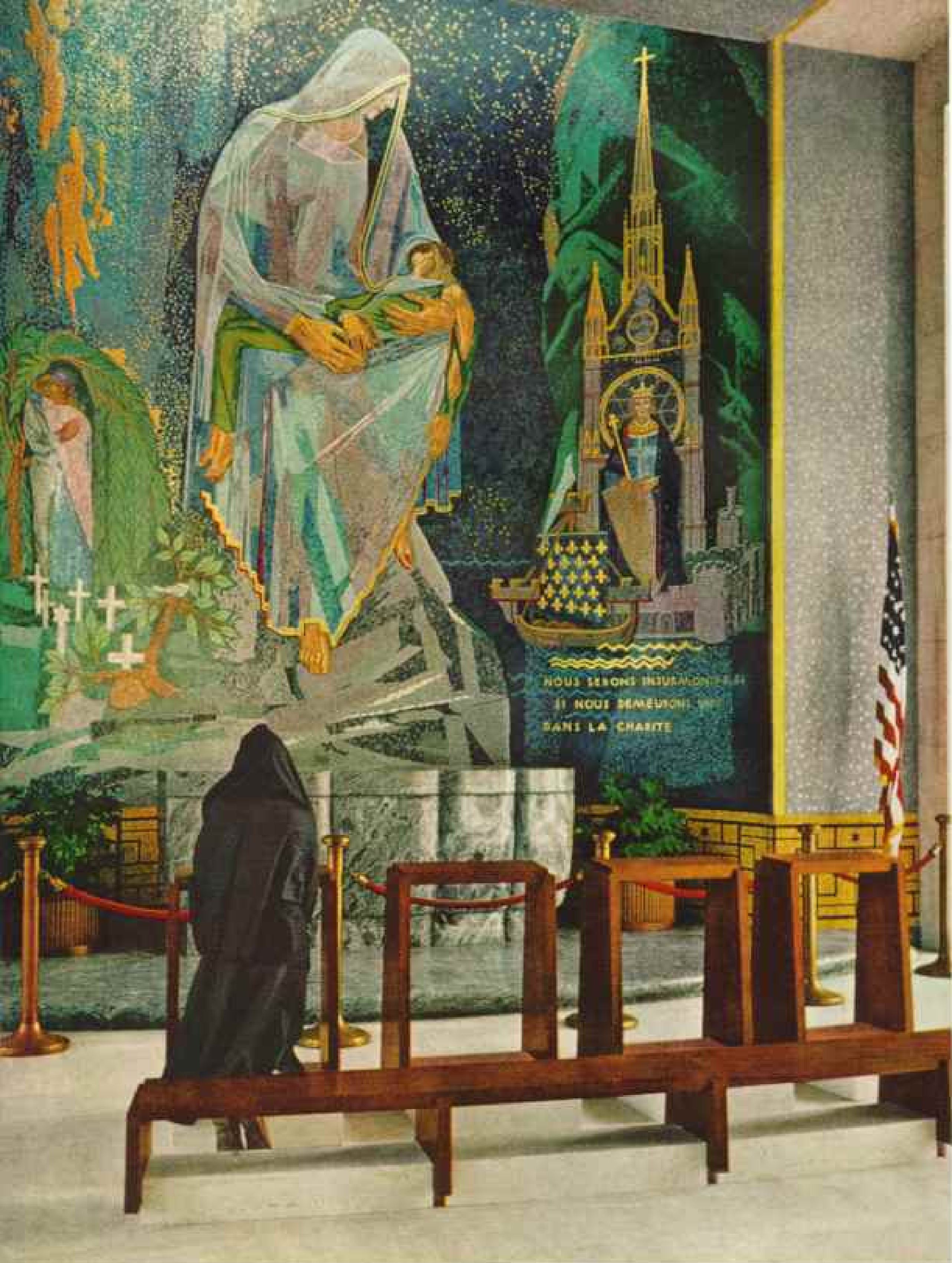
While smoke from the rifles (above) drifted away, the long haunting notes of taps rung over the Rhône Cemetery. French and United States flags flew in fraternal pairs at the foot of each headstone.





Soldiers, Sailors, Airmen, and Marines March as an Honor Guard at Draguignan

Two thousand persons attended the dedication. Henry Toombs of Atlanta, Georgia, designed the memorial. Edmond Amateis of Brewster, New York, sculptured the angel of peace with an infant to symbolize future generations.



Eternal Mother on the Rhône Chapel Wall Cradles a Fallen American Youth

King Louis IX of France, a 13th-century Crusader, stands before the Sainte Chapelle of Paris. Bearing fleurs-de-lis, the royal emblem, his ship sails against the Saracens. Austin Purves of Connecticut designed this mosaic honoring American crusaders. The inscription says, "We shall be invincible if we live united in charity."

a grass-carpeted peristyle. Here on a pedestal stride two life-size bronzes of a soldier and a sailor, each with an arm on the other's bare shoulder. Now in a friendly land they walk free of war, their duty done (page 755).

At the Nettuno monument one warm July afternoon I joined about 2,000 Italians and Americans on the mall before the memorial building. A U. S. color guard and honor guard took up positions to the right of the main steps. In full-dress blue with red-plumed cocked hats, a company of *carabinieri* (Italy's military police) formed on the left.

Between them Gen. Alexander A. Vandegrift, a wartime Commandant of the U. S. Marine Corps, presided on the speakers' stand.

Italy's Prime Minister Antonio Segni said: "It was in the logic of things that the men of America should fight together with us, in the name of liberty and independence." And he declared that those who fell in the struggle should encourage us to defend together the hard-earned liberty and peace.

Tribute to Italian Assistance

In his dedicatory address, the Honorable Charles S. Thomas, then Secretary of the Navy, recalled the military and political events that followed the landings at Nettuno and Anzio. He could not overestimate, he said, the value of Italian assistance, springing naturally from the traditional ties between Italy and the United States.

"Our fellow citizens of Italian origin," said Secretary Thomas, "have played a large part in the building of the United States. . . . Today our countries stand shoulder to shoulder for the common defense of our ideals. . . ."

The ceremony ended with a stirring fly-past of United States Navy planes. But many guests, largely Italians, lingered until the sun's last rays left the crosses to the quietness of twilight.

I strolled away with two Americans who had served in southern Italy. One of them was talking in the manner of a man thinking out loud. "It's upsetting to see all those crosses," he said. "I'd kind of forgotten how terrible the whole thing was. But a cemetery like this sure brings it back."

Near the main gates I entered a small stone house containing the superintendent's office and a reception room, where visitors get information and sign a register. In this book a veteran had written:

"I never thought I would return. However

it gives me a wonderful feeling to know that many of my buddies [his spelling] rest in peace in such a nice and well kept place."

Another serviceman: "I fought with the Rangers here. Some of these guys were my buddies. Poor guys."

A young Bostonian told me she traveled here expressly to see the grave of her brother, killed at 18. She wrote of the Nettuno memorial: "It does them justice."

What finer tribute than that?

The liberation of southern Italy opened the way for a large-scale invasion of southern France just as the battle for Normandy reached the decisive stage. This Mediterranean campaign, planned to assist the Allies in northern Europe, proved to be a masterpiece of military strategy.

Before dawn on August 15, 1944, Allied paratroopers landed near Draguignan, 40 miles northeast of Toulon. A few hours later, gliders packed with more fully equipped fighting men alighted in the area. Altogether, 9,000 Americans and British descended from the skies with 213 cannon and 221 jeeps in one of the most successful airborne operations of the war.

But some American parachutists went wide of their mark. Instead of landing in the inland Draguignan area, they hit the Mediterranean coast near St. Tropez. This turned out to be a providential miscalculation.

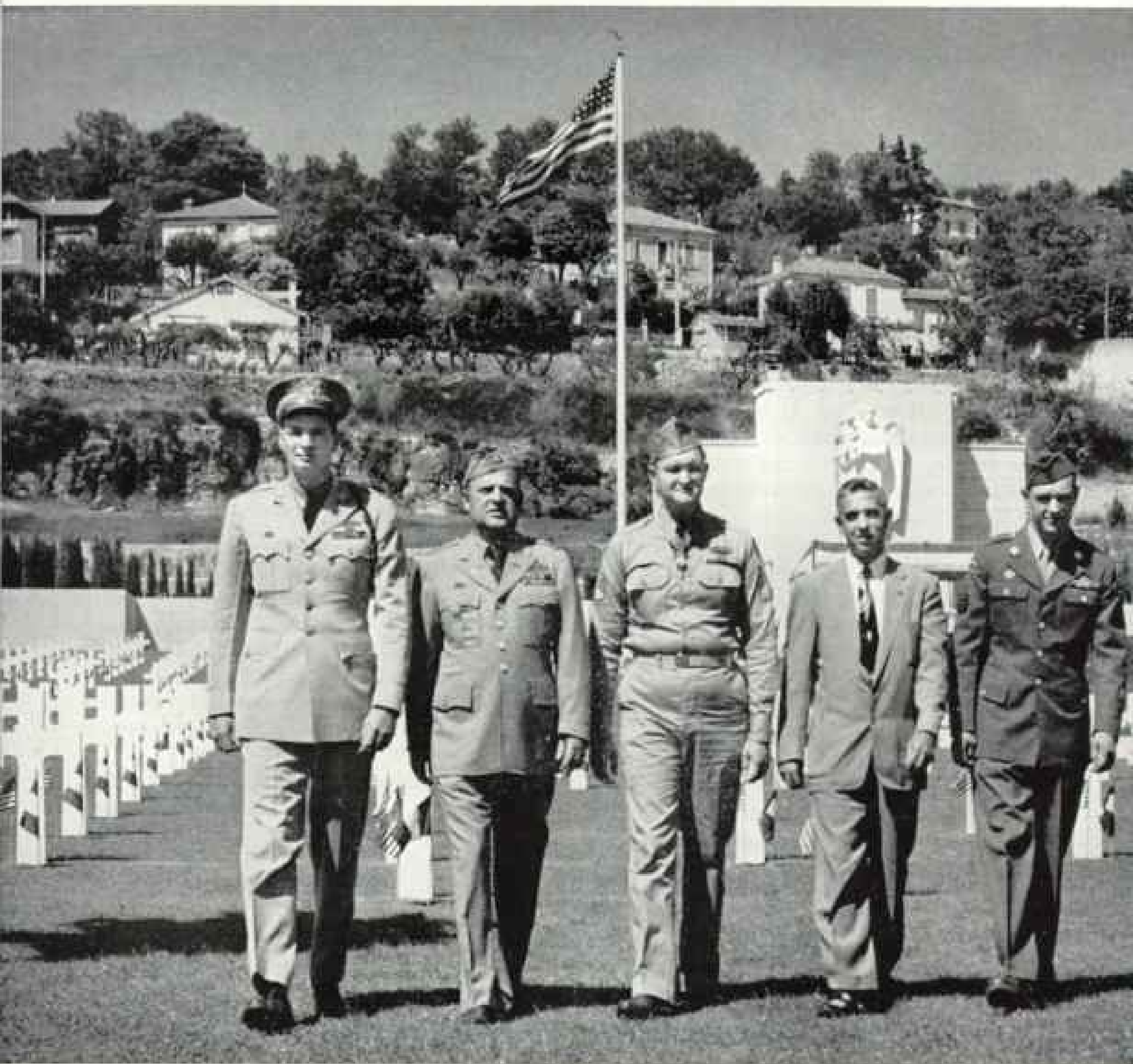
French Fighters Join Battle

Regional FFI (French Forces of the Interior) soon joined the wayward paratroopers, and together they attacked the Germans in St. Tropez. By noon this small but useful port belonged to the Allies.

Early that same morning three infantry divisions of the U. S. Seventh Army, supported by French Army units as well as bombers, fighters, and warships, made beach-heads between Toulon and Cannes; overnight the Gulf of St. Tropez became one of the world's busiest harbors.

A few days later the French General Jean de Lattre de Tassigny arrived in St. Tropez to discuss plans for an attack on Toulon with Lt. Gen. Alexander M. Patch, commander of the U. S. Seventh Army. There is a story that Patch handed him half a flower a little girl had picked on Mount Vesuvius.

"Let's each keep half," said Patch, "as a good-luck charm to lead our two armies, side by side."



On August 28 General de Lattre watched his troops parade through Toulon. A day later he reviewed his triumphant North African soldiers and FFI in Marseille.

One of the U. S. generals most responsible for Allied coordination in these actions, Jacob L. Devers, returned to southern France last July to dedicate the American memorial at Draguignan. "I'm not going to talk about military strategy," he said. "I'm going to talk about the men in those graves."

Of Men and Olive Trees

Their 861 markers make the Rhône Cemetery the smallest of the six U. S. overseas military shrines consecrated in 1956. But until unusually severe cold killed some 200

olive trees that winter, the memorial stood in perhaps the loveliest natural setting of all. Removal of the trees, cut down at ground level, left a pathetic emptiness.

However, among the plots I saw little shoots of silver-green leaves. These beginnings of new olive trees pushed up from the ageless root mass deep enough to survive the freeze.

"Sort of symbolic, isn't it?" said a man beside me. "Even in death there is life."

And that is the theme of the Draguignan Memorial. Overlooking the grounds from a high white façade of the chapel, a huge angel, like a winged Madonna in stone, holds a newborn child. The inscription under the sculpture speaks for the cemetery: "We who lie



Heroes All, They Pay Tribute to Comrades in Rhône Cemetery

Five winners of the Medal of Honor and two recipients (right) of the Distinguished Service Cross traveled from the United States to attend the dedication at Draguignan (pages 758 and 759). Left to right, they are Capt. Michael J. Daly, Southport, Connecticut; 2d Lt. Stephen R. Gregg, Bayonne, New Jersey; T/Sgt. Charles H. Coolidge, Signal Mountain, Tennessee; Sgt. James P. Connor, Elsmere, Delaware; Cpl. Robert D. Maxwell, Redmond, Oregon; Maj. Bernard M. Keogh, McChord Air Force Base, Washington; and M/Sgt. Edison K. Dunver, Homestead, Florida.

in wartime, he said: "That is when I learned to love this valorous country and her courageous soldiers. It is right that her people should be here with us today to pay homage to those who were brothers-in-arms."

At Draguignan I met a number of Americans who had reached the Mediterranean beachheads and then fought their way to north-eastern France. They were Medal of Honor men from various parts of the United States—men with different temperaments, different builds, different jobs. But all had one thing in common: they wanted to honor the

here died that future generations might live in peace" (page 759).

Inside the memorial building a design of the Great Seal of the United States in colored mosaic occupies most of one wall. There I saw printed in both English and French: "This chapel has been erected by the United States of America as a sacred rendezvous of a grateful people with its immortal dead." An apse opposite that wall contains some particularly fine mosaic work (page 760).

French Honor Brothers-in-Arms

Leslie L. Biffle, formerly Secretary of the U. S. Senate, spoke to hundreds of French and Americans at the dedication of the monument. Referring to the sufferings of France

fallen comrades they considered the real heroes of the war.

Robert D. Maxwell came from Redmond, Oregon, where he works as an auto mechanic. One dark autumn night in 1944 his squad took shelter behind a wall at Besançon, 45 miles east of Dijon. Dog tired, the soldiers lay down in their blankets to rest during a lull in the fighting.

A German grenade sailed over the wall and landed somewhere among them. Maxwell was determined to find the grenade and throw it back at the enemy. But in the pitch-black he could see nothing.

Maxwell figured he had three seconds to search. When his time was up, still clutching his blanket he dropped to the ground—

on top of the grenade. It went off, and in the ensuing confusion he was left for dead. When he woke up he was alone, injured, but so far from dead that he was able to walk back to his lines with the assistance of a comrade. After a spell in the hospital he returned to the United States.

"Guess my GI blanket saved my life," said Maxwell. "Must have muffled the explosion."

In September, 1944, swift-moving Allied armies from the south and those from Normandy forged a solid front in northeastern France. Meanwhile, British, Canadian, and U. S. forces had crossed Belgium and entered the Netherlands.

Logistic problems and stiff enemy resistance, however, checked the eastward advance. For weeks the Germans contested every Allied attempt to get a foothold along the Rhine.

Bitter Fighting for the Rhine

During December the enemy launched a desperate counterattack in the Ardennes. This offensive drove more than 50 miles into the American lines and involved the Allies everywhere along the western front. Despite frightful losses in bitter winter combat, Allied forces checked the attack, regained the initiative, and obliterated the "Bulge." Their momentum carried them across the Rhine in March and finally into the heart of Germany.*

Thousands of United States troops were killed in the Rhine campaign. Many of them now rest in the American cemeteries at Épinal and St. Avold in northeastern France; near Hamm, Luxembourg; at Neuville en Condroz and Henri Chapelle, Belgium; and at the village of Margraten, the Netherlands. Of these, Épinal was ready for dedication in 1956.

Charles H. Coolidge of Signal Mountain, Tennessee, killed 26 of the enemy in a four-day encounter near Épinal and won the Medal of Honor for it. Last summer he revisited the same battlefield, when the ABMC invited him to attend the dedication of the U. S. war memorial three miles south of Épinal.

"Just finished a Florida vacation when I got the word," Coolidge said. "I'd been away from my business long enough and really shouldn't have taken this trip to Europe. But then, I couldn't do enough for the men who weren't as lucky as I was."

Today, on a wooded hill, 5,255 Americans lie in this cemetery, which overlooks a gentle bend in the Moselle River. They, like 7,300

countrymen whose remains were returned home for reburial, fell during the campaign in this corner of France.

The people of the Vosges, remembering who helped save their land, filed up the hill to the dedication of the U. S. memorial under a gray sky. Many stopped to study the magnificent bas-reliefs on the south façade of the white stone rectangular building containing a chapel and war history room (pages 766-7).

Flags Fly Together at Épinal

To these French guests U. S. Ambassador C. Douglas Dillon spoke in their own tongue:

"We have not always succeeded in keeping ourselves as firmly united in peace as our soldiers were during the war. . . . But before this monument we feel our mutual confidence. . . . come to life again."

Small French and U. S. flags fluttered in fraternal pairs at the foot of each headstone. The breeze could scarcely stir the larger banners of both nations hanging together from one high mast.

"La Marseillaise" and then "The Star-Spangled Banner" echoed across the Moselle Valley. The sun burst through a rift in the slate sky, gleaming on the white marble crosses. How green the grass in the afternoon light; how young the men beneath it!

An American who had fought beside some of them said to me: "The fellows under those crosses made it possible for us to get through the war. They did a lot more than we did. Sure, we received medals. But they gave their lives."

In this spirit the United States honors its fallen sons. The memorials stand in proud and grateful tribute to them, an inspiration to us "that we here highly resolve that these dead shall not have died in vain. . . ."

* See "War's Wake in the Rhineland," by Thomas R. Henry, NATIONAL GEOGRAPHIC MAGAZINE, July, 1945.

Sword Unsheathed, Columbia Leads → Allied Troops into Battle

This mosaic extends across a memorial wall in the Épinal Cemetery, northeastern France. Here lie 5,335 Americans who made the supreme sacrifice in the Vosges Mountains and eastward across the Rhine Valley.

Artist Eugene Savage of Woodbury, Connecticut, designed the map. Arrows trace the Allies' advance north following their August 15, 1944, landings on the Mediterranean coast. Supporting aircraft soften up country ahead.





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↑ **French Veterans with Flags**
Pay Tribute to Americans

Pavilion shelters officials who spoke at the dedication of the Épinal Cemetery. Instruments at rest, members of a French military band stand on the right.

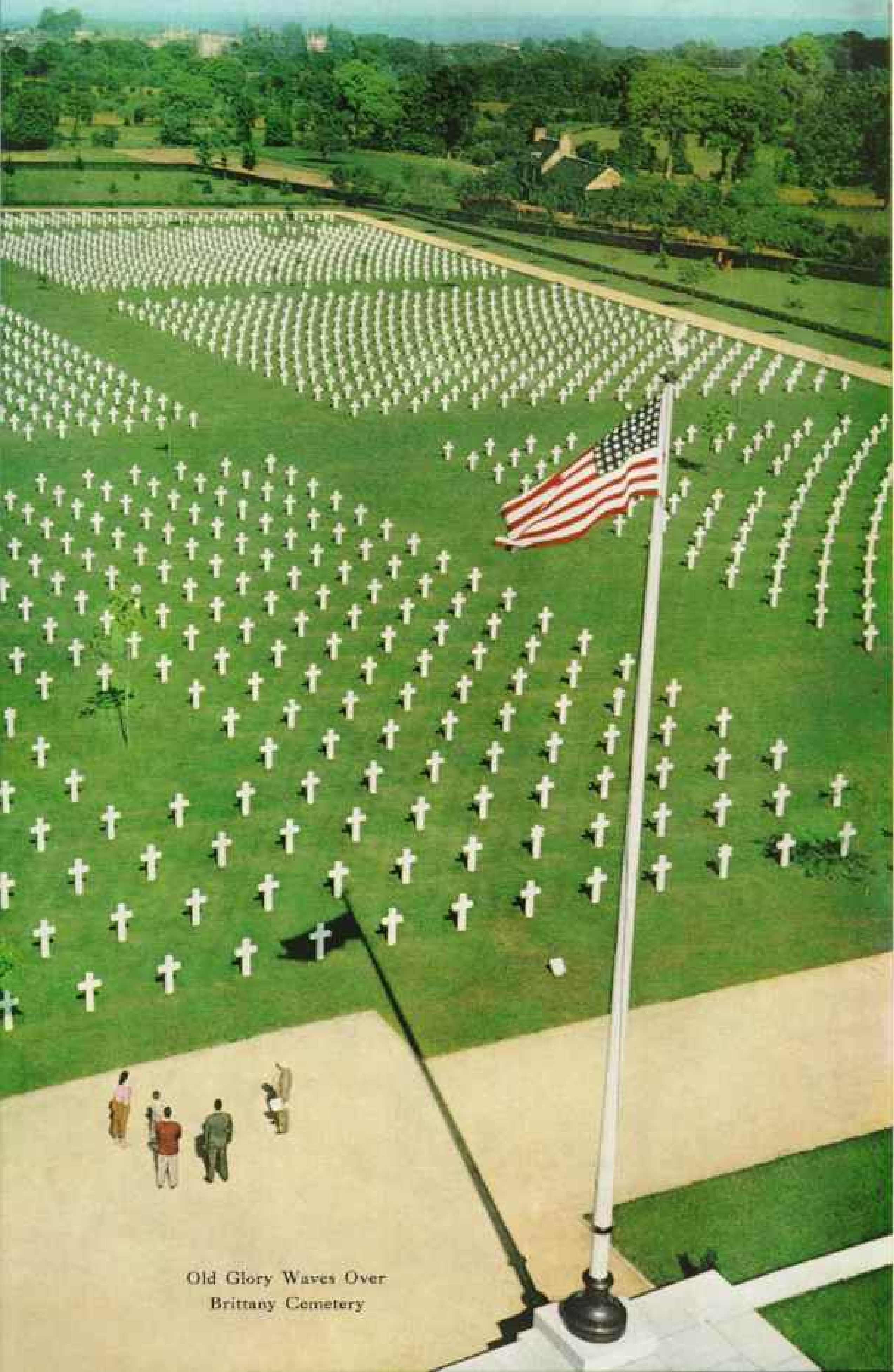
New York architects Delano and Aldrich designed the memorial building. Words along the entablature remind us that Americans fought "From Normandy and Provence—to Ardennes, Lorraine, and Alsace—beyond the Rhine."

← United States color guard at Épinal dips service standards as the national anthem rings out.

→ Visitors admire the south façade of the Épinal Memorial. Two reliefs by Malvina Hoffman depict United States troops marching to war (left) and survival of the spirit. Inscription reads, "Citizens of every calling bred in the principles of the American democracy."







Old Glory Waves Over
Brittany Cemetery

In Their Own Village on Wheels Foot-loose American Travelers
Learn How to See the World Without Leaving Home

BY NORMA MILLER

With Illustrations from Photographs by Ardean R. Miller III

THE Russians were polite, but insistent. "Such cars, such trailers! You are all American millionaires. Obvious!"

In vain Jim Bacigalupi, wiping his hands after adjusting a valve on one of the caravan's gas stoves, tried to explain that he was the ex-mayor of a small California city, that he was actually wondering at the moment whether or not he was overdrawn at the bank, that our 38-car cavalcade included school-teachers, a retired surgeon, a pharmacist, a photographer. The Russians merely smiled.

We met them in Austria—visitors, as far as we knew, like ourselves. Slowly the six Soviet citizens filed through our lightweight aluminum trailers, fingering the hot-water heaters, the refrigerators, the four-burner stoves, the shower heads, the bunks, the electric lights. Question followed question: What kind of insulation did we use? How fast did we travel? How much oil and gas did we consume?

"*Vot zamechatelno!* Fantastic!" they exclaimed. One added: "Never something like it I have seen!"

Bivouacked near the Blue Danube

We were camped in a meadow beside a tributary of the Danube, just outside Vienna, some 10 weeks along on the six-month summer tour that was to take the caravan through 16 European countries. Few of our 86 members had ever met before the trip. We had no common denominator other than a desire to explore the Continent in this informal and relatively inexpensive way.

This, perhaps, the Russians found hardest to grasp: that we did not "represent" anybody but ourselves, least of all the Government; that each family owned its own trailer and was free to leave and rejoin the caravan at will; that we traveled together simply for our common pleasure and convenience.

Leaving, they shook hands all around and distributed tiny metallic red stars as mementos. They were quite friendly—and still completely baffled.

That the Russians should have been amazed

by our aluminum cavalcade is perhaps not too surprising. But we found their astonishment matched by the people of most of the countries we visited in Europe. I well remember that when we crossed the border of Luxembourg into Germany and formed ranks in the town square at Prüm, a crowd gathered at once from nowhere. One woman, eyeing the three-year-old ocelot sunning itself in Barbara Allen's trailer, inquired nervously:

"Is this a traveling menagerie?"

"No," I replied, "but it's sometimes a three-ring circus!"

Shakedown Cruise, Florida to Wyoming

And it was. My husband, children, and I had taken a shakedown cruise in our new 26-foot Airstream trailer from our Florida home to Wyoming's Snake River country the previous summer. But we had never dreamed of crossing the face of Europe as part of an American expeditionary village on wheels.

Where did it all start? As with many grand conceptions, in the imagination of one restless man. Inventor, organizer, participant, and galvanizer, Wally Byam was not merely the leader of the European Caravan but also its heart and soul—a dynamo in cowboy jeans, boots, western shirt, and jaunty beret.

Wally stumbled into trailering for an odd reason: his wife Stella went on strike. A good sport, she had for years accompanied Wally on his fishing trips, sleeping on the ground and cooking in the open, through fair weather and foul. But the day came when the joy of feeling rain down her neck and mud around her ankles began to pall.

"I had to do something," said Wally. "So I rigged up a tent platform on wheels that I could tow behind my car. I guess we looked like an itinerant patent-medicine show. But it worked. Stella agreed to traipse along with me some more, and I had made, without knowing it, my first plunge into the field of trailer design."

A job with the Lockheed Aircraft Corporation during World War II gave Wally ideas about the use of lightweight metals in travel



↑ An American Caravan
Wheels to a Stop at
a French War Memorial

Last spring 86 men, women, and children set out for Europe with automobiles and trailers. Towing their homes behind them, they toured 16 countries.

Here at Verdun the tower of the Mortuary of Douaumont overlooks the field of World War I's "battle of annihilation."

← In the caravan's identifying berets, author Norma Miller and sons Bradley, Ardean IV, and Bruce survey Paris from the steps of the Palais de Chaillot. The Eiffel Tower beckons to them from the far bank of the Seine.

→ Encamped in the Bois de Boulogne, the caravanners vote on a question of schedule with a show of hands. Wally Byam, organizer of the trek, stands in the center.





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trailers. Result: his own company, manufacturing sausage-shaped aluminum trailers.

The idea of a caravan came next. Wally wanted to visit Mexico in his latest model, thought it would be more fun with a few friends, and persuaded three families to join him. A newspaper picked up the story, and when the four trailers arrived at the border, they found 34 others waiting to tag along.

This first impromptu caravan proved such a success that others followed, to Yellowstone National Park, to Nicaragua, to Canada, to Cuba; and an informal organization of caravanners under the Byam banner sprang up with a membership of some 3,000.

Our European jaunt, however, was Wally's first attempt to waft a whole brood of trailer chicks across the ocean. Anybody, with any make of trailer, could apply. There would be no charge; everyone would pay his own expenses as he incurred them. And there would

♣ At Home on the Road, the Miller Boys Take a Travel Break with Comic Books

Plywood partitions, foam-rubber mattresses, and folding doors help to lighten the trailer's load. At night the youngsters use pillowlike sleeping bags.

German Tents and U. S. Trailers Mingle → by the Titisee in the Black Forest

Above: Caravanners discovered that their method of travel invited friendships with Europeans. At camping grounds everyone bought bread at the same store, drew water from the same pump, and hung blue jeans on the same line.

German and American children at this campsite shared no language but found sports international. Once they hiked to the castlelike youth hostel on the far shore and sipped apple cider.

Dutch Cyclist Shaves Beside the Neckar →

As the Neckar nears the Rhine, a series of locks gives it breadth, and its serene waters mirror medieval towns and mountain vineyards. Here, close to Heidelberg, a coal barge breaks the tranquil flow. The sign *Abfalle* marks a trash receptacle.



be no self-appointed czar; in the day-to-day decisions of the group, the rule would be one trailer, one vote, except for Wally; he didn't vote at all.

Wally spent the summer of 1955 dashing about Europe, sizing up camping spots, checking with border and customs officials, arranging through touring clubs for our reception, and sketching an itinerary that took into account roads, underpasses, bridges, traffic, and even the weather we could expect en route.

In the months leading up to our embarkation, one communiqué after another emanated from caravan headquarters in Bakersfield, California. We were told how to get an international driver's license. ("Have six horrible-looking passport-type photos made of each person who is going to drive your car.") We learned about shipping costs, vaccinations, insurance, and what kind of hook-ups we could anticipate for water, lights, and refrigeration.

Caravan Assembled in Rotterdam

Rallying point in Europe for the caravan was Rotterdam. Here most of the trailer folk assembled, tuned up their cars, and got used to life in a goldfish bowl. Warmhearted, curious, the Dutch milled about the encampment every day, eager to find out what manner of beings these were who carried their silvery homes around with them, like hermit crabs.

Apparently they approved of what they saw, for, on the day before the caravan set out for Belgium, the Dutch really moved in to make it Christmas in April. An Edam cheese, a leather map portfolio, flowers for each woman, delft-blue mugs for the men, baskets of cookies, fruit, and candy, wooden shoes, potted tulips—the gifts poured in.

Next day, just south of Rotterdam, the caravan ran into a hospitable ambush. No sooner had the trailers parked in the town of Breda than an enormous calliope struck up, school children began dancing traditional figures, and housewives circulated from car to car, bearing coffee and hot chocolate, coffee-cakes and candy. And when the cavalcade

Cochem Castle Rises Like an Island from a Sea of Vineyards

Germans built many-towered Burg Cochem in the 1870's. French invaders had previously destroyed an 11th-century castle on the same site.

The Mosel River (left), called Moselle when in France, gives its name to the world-famous wine of the region.







Welcome to Düsseldorf! Citizens Roll Out the Barrel and Strike Up the Band

Frequent trade fairs accustom this Rhine River port to visitors from many lands. But the Americans' trailer caravan—something brand-new—created a sensation. The mayor himself turned out for this reception.



Germans Saw the Trailers as "Shining Zeppelins Pulled by Bonbon-colored Cars"

To satisfy thousands who wanted to see what a trailer was like inside, the caravanners often turned on lights and opened shades. One youngster dubbed her mobile home the "fish bowl."



A Blaze of Fireworks Lights the Medieval Face of Heidelberg, Germany

pulled out of Breda, every factory whistle blew a farewell salute, and every church bell seconded the motion.

"It was roses, roses all the way," or so it seemed to most of us. In Brussels our ambassador, the Honorable Frederick M. Alger, Jr., greeted the caravan against a backdrop of

Belgian and United States flags. At the famed fair of Lille, in France, as the trailers swung in behind a dashing escort of motor patrolmen, loud-speakers bellowed "The Star-Spangled Banner," and the Minister of Agriculture planted loud kisses on Wally's cheeks.

My husband and I, delayed by a photo-



graphic assignment in Bermuda, didn't link up with the caravan until it had reached Paris. Occasionally I would run into some friend from the States who would inquire: "And where are you staying, my dear? At the Crillon? The Continental? The Ritz?"

"Of course not," I would reply. "In the Bois de Boulogne." It was as if I had told a New Yorker I was living in Central Park.

Yet that is just where our caravan was most pleasantly encamped: the Bois, that beautiful 2,150-acre forest serenely embedded near the heart of a great metropolis. Our trailers clustered near a willow-rimmed duck pond under a grove of horse-chestnut trees in full bloom, pink and white, not far from the exquisite outdoor restaurant, the Cascade, and the sylvan race track of Longchamp.

Where to Put Up in Paris—the Woods

Here we had at our elbows several lakes, one of the world's chief zoos, a theater, several excellent cafes, a polo field, tennis courts, a dairy farm, even a waterfall. At night we could hear the pulse of the restive city and see the pinkish glow of its lights against the sky. But the moon fell tranquilly upon our campground, and there was bird song at dusk and at dawn.

Our greatest luxury was to be ourselves. No need for our children to tremble at a headwaiter's frown; clad in blue jeans and T shirts, in our own home on wheels, they could devour their peanut-butter sandwiches and hamburgers in perfect freedom. We would make our formal, spruced-up sorties into town to savor its urbane delights—plays, galleries, studios, churches, museums, the Flea Market*—but when we returned, we could relax, take off our shoes, and let the kids tumble about on the grass, blowing off steam.

Like any French housewife, I bought my groceries in the near-by open markets. It seemed odd at first to have to tackle separate shops for meat, vegetables, milk, bread, and fish.

"Town Meeting" on the European Trail

We rarely assaulted Paris in groups; each family explored the city at its own pace, following its own bent. Then, about 6 o'clock of an evening, we would usually gather, chairs in hand, and form a loose circle under the trees. One member after another would regale the group with an account of what he or she had seen and done that day.

Occasionally these social hours doubled as sessions of our community government. Wally would step outside his trailer armed with a portable loud-speaker and bellow, "Hurry, hurry, hurry! Meeting time! Come one, come all!"

Sometimes we would decide on the cara-

* See "Paris Flea Market: Bargain-hunter's Paradise," by FRANK SHOR, NATIONAL GEOGRAPHIC MAGAZINE, March, 1957.



Sculptured Clock Peddler and His Living Counterpart Tramp the Black Forest

German craftsmen in the mid-17th century began carving clocks from Black Forest wood, patiently whittling cogwheels, levers, hands, and dials.

After accumulating a stock, the maker turned seller. Strapping a pack on his back, he became a familiar sight in European cities. According to one chronicle, he traveled to "most remote lands, even as far as Sweden and Moscow."

↓ Norma and Bruce Miller talk with Anton Kirner, a manufacturer who parades on holidays to show the beginnings of the Black Forest industry, which now employs 90 percent of Germany's clockmakers. The scene is close to Neustadt.

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van's pace over the next leg of the journey. Generally we traveled in convoy at about 35 to 40 miles an hour and aimed to cover no more than 150 miles a day. But some members might prefer a late start and no stop for lunch, while others would like to hit the road at dawn and have the better part of the day to spend at our destination.

Our schedule might call for driving on Saturday, which made problems for our Seventh-day Adventist couple, or on Sunday, which perturbed others who preferred a day of leisure. Bad weather might have compressed our itinerary and forced a decision as to whether or not we should, say, spend more time in Rome at the expense of Naples, or cut out some other excursion altogether.

Majority Vote Settles All Questions

Once we had to rule on the application of an American couple who wanted to buy an English trailer and join us. Another time we had to decide whether or not to admit a German optometrist who had no trailer but slept in his Volkswagen. The vote was yes, and the new recruit proved invaluable with his advice on road and traffic conditions.

Whatever the issue, we thrashed it out openly and amicably, and the verdict went to the side with the most votes (page 771).

We were, in short, a vehicular American village rather proud of its capacity to handle its problems as they arose, in a democratic spirit. As such, we had not only ballots but also duties.

Wally, of course, functioned as mayor, and also as chief of state, protocol officer, and toastmaster on ceremonial occasions. Postmaster general was Don Hill, assisted by Bill Carlson. These useful citizens would rush to the American Express office as soon as we hit one of the towns on our scheduled route, pick up any mail awaiting us, and dispatch outgoing letters and packages.

Our policeman was Joe Kaufman. Armed only with a broad smile, a slow drawl, and the shoulders of a fullback, this ex-naval officer did not so much settle disputes as deflate them. If someone's kids played Wilhelm Tell too close to another family's trailer, a genial hint to the youngsters or their parents took care of the matter. If a caravanner became embroiled with traffic cops or a bus driver, Joe's appearance on the scene seemed almost magically to douse the controversy.

The post of "wagon boss" was occupied

by Louis Mousley, a fruit grower from California. He would scout our next camp before the main party arrived, test the firmness of the ground, stake out the caravan's formation in a wheel-like figure, then wave each arriving unit into position.

When we swung into a meadow by the Rhine, at Cologne, the astonished German papers reported next morning that we had completed our wagon-train barricade of modern prairie schooners in just seven minutes—"with Prussian precision!"

Every day in the Bois de Boulogne seemed to be open-house day. Many other wayfarers of varying nationalities were camped near by, most of them in tents, and they liked to drop in at all hours. The Germans seemed to have the liveliest curiosity; they wanted to know everything about everything, and to scramble over the language barrier they resorted eagerly to any medium of communication—hands, feet, shoulders, eyebrows.

They appeared to be amazed and delighted at the simplest things; for example, at my knitting socks.

"*Ach, das ist gut!* For the children, *nicht wahr!*" As if they had believed American women could use their fingers only for turning television knobs!

What seemed to perplex the Parisians, however, was not our knitting or any labor-saving gadgets so much as our ability to travel amicably together. They assumed that such a large group would naturally explode into a dozen cliques and cabals.

French TV Films Camp Life

French television cameramen and news reporters covered our camp assiduously. Our children were photographed stumbling from their sleeping bags in the morning; I was filmed hanging out the laundry and cooking hamburgers over our charcoal grill beneath the trees; Ardean was interviewed as to his opinions of French models, *le jazz hot*, and the Presidential election.

Even an emissary of the mayor came. He brought each caravanner a charming water color of some Parisian scene and welcomed us graciously to the City of Light. Wally replied in kind and ended by crowning the mayor with a Byam beret and making him "one of us." The Frenchman beamed.

Perhaps the most impressive testimonial to our caravan, however, followed a visit by Max Blouet, manager of one of Paris's best



Wild Flowers Spring Waist High from a Meadow near Grindelwald, Switzerland

→Opposite: Swiss and American smiles pass for conversation on the terrace of Hotel Bären, in Gsteig. Above: Frosted piano and stove furnish the Ice Palace; a Swiss show place carved out of glacier ice atop Jungfrauoch.





Bruce Miller Asks a Guide: "Can I Climb the Matterhorn?"

"Yes, if you follow me with my rope around your middle," says Alex Perrin at Zermatt, Switzerland. The 14,692-foot Matterhorn shines in the distance.

Tyrolese Make Merry → in Trailertown

Upper: Summer was breaking out when the caravan parked near Innsbruck, Austria.

Tyrolese proclaimed the new season with a *Sonnwende* (sun turn) celebration. From their valley camp, caravanners saw the near-by mountains lighted with flame. High on the slopes bonfires formed a huge cross; others shaped circles.

Lower: The musicians' leather breeches and yodels enchant American youngsters in a trailer living room. Smaller girl is an Austrian.

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hotels, the George V. He came out one day with his friend, the American journalist J. P. McEvoy. A well-dressed model of urbanity, M. Blouet stepped gingerly into our trailer and examined its equipment.

The consequences of this visit must have been as unexpected for M. Blouet as for us: he lost a guest. Mr. McEvoy decided then and there to quit the George V for the vagabond freedom of trailer life. He bought a Volkswagen "Microbus" with built-in camping equipment, and when we left Paris, J. P. was with us.

Caboose Brings Up the Rear

Following the caravan's usual routine on a travel day, we rose at 6:30, cleaned camp, held a drivers' meeting at 7:45, and had everyone on the road by 8—everyone but the "caboose."

For each leg we would choose a different car to bring up the rear. This caboose operator made a last check on the camp site (the caravanners were fanatically determined to leave any spot at least as neat as they found it), and then kept an eye out for any straggler along the line of march who might have lost his way, run out of gas, or developed engine trouble.

The caboose was useful, moreover, in preventing the type of mishap which had occurred on a previous caravan tour to Mexico. A member drove up, quite tardily, as the others had finished making camp and were settling down for a social hour.

"Where would you like me to park my trailer?" he sang out.

Wally looked at him in amazement. "What trailer?" he asked. Turned out the fellow had forgotten to hook up at the last camp!

We left Paris in style, preceded by a convoy of French motorcycle police in black uniforms and silver helmets. Before their screeching onslaught the swirling vortex of the city's traffic parted like the waves of the Red Sea, and we swept through unscathed.

Through the gray magnificence of central Paris we swung, through the drab industrial sectors, and out at last into the lush, well-tended countryside. Smiling, apple-cheeked farmers and their wives lined the village streets as we glided past, and from a hedge-row one man enjoying a solitary picnic lifted his glass toward us in a toast.

Some hours later we neared Reims, with its massive cathedral brooding over the city, and found ourselves in champagne country.

(Continued on page 793)





Snow-veined Bavarian Alps Probe the Heavens Above Garmisch-Partenkirchen

Oxen drink at the feet of St. Florian, a Roman soldier martyred under Emperor Diocletian. Householders look to Florian to save them from fire. Zugspitze, at distant right, is Germany's highest peak—9,721 feet.



United States Servicemen in Europe Make the Resort a Playground

Though wearing a village air, Garmisch-Partenkirchen works like a city to entertain many thousands of visitors a year. Here the caravanners saw expert skaters perform at a club run by the United States Army.





A June Snowstorm Halts the Caravan at the Foot of Austria's Arlberg Pass

Wally Byam (in beret) conferred with police in Feldkirch. "Cross the pass if you dare," they told him. The Americans took a vote and decided to try. With traffic cleared ahead, the trailers started up, three minutes apart, moving at 10 miles an hour or less. At the Arlberg's 5,900-foot summit the sun shone clear.

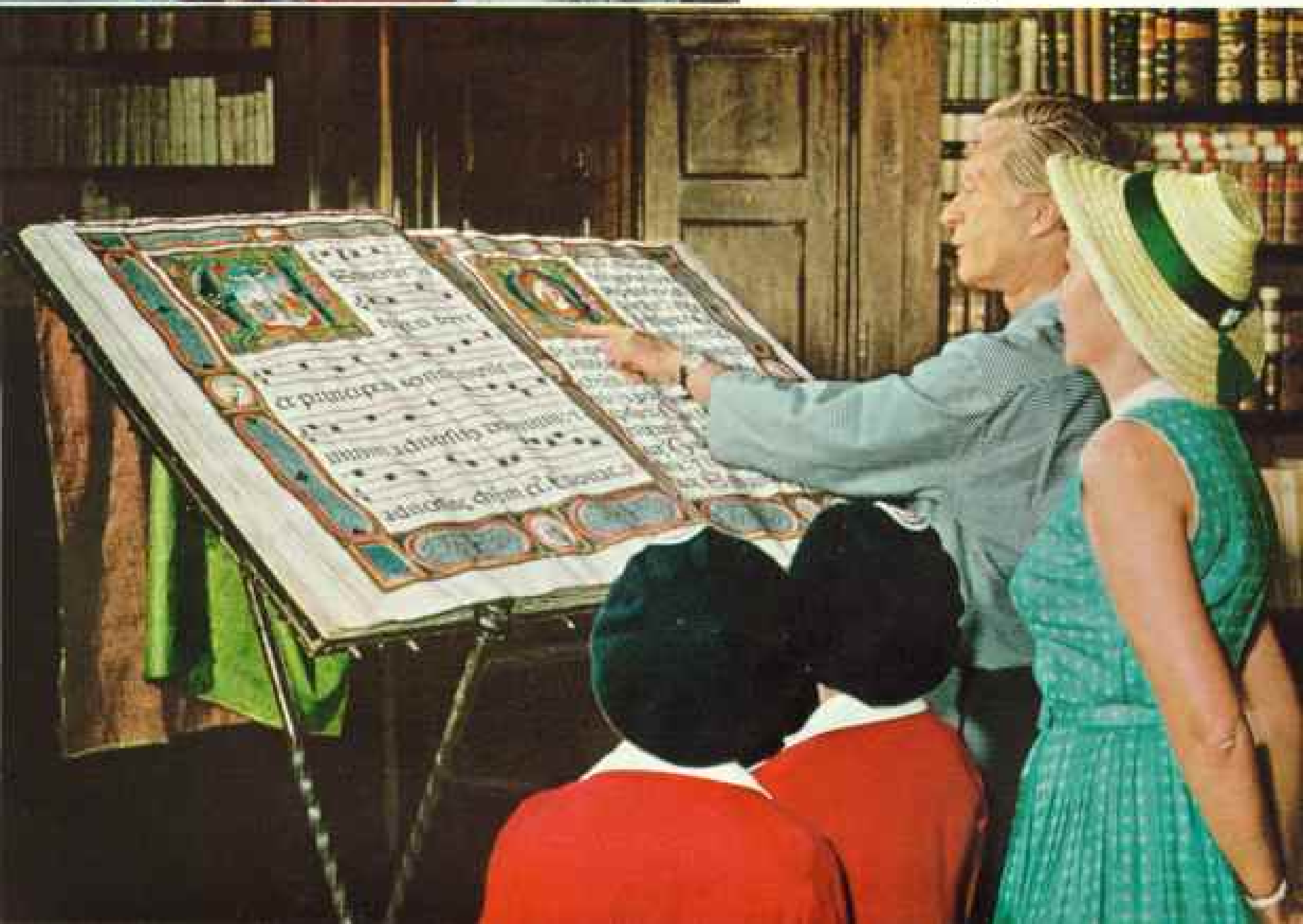
Prince Raymond Shows Treasures of Duino Castle, Italy

Visiting Trieste, the caravanners camped on the Adriatic near the castle, a cliff-top fortress dating from the Middle Ages. Intrigued by the "aluminum balloons" in which they lived, Prince Raymond della Torre e Tasso invited the group to call at the castle and inspect his works of art.

← Opposite, lower: The prince sounds a note on a spinet his great-grandmother used when she took music lessons from Franz Liszt.

↓ Mrs. Miller and the twins marvel at an illuminated chant book made by Italian monks four centuries ago. Even more enchanting to the boys was a secret passage, hidden by the books on right, that cut through several hundred feet of rock to the sea.

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Pigeons Claim St. Mark's Square as Their Own

Caravanners John and Eunice Halifax feed the birds.
← Daughter Joun lures them with corn in her lips.



"Finest Drawing Room in Europe," Napoleon Called Venice's Marbled Piazza

Gilded pinnacles and gem-bright mosaics give St. Mark's Cathedral the look of an oriental palace. Built about 830 and several times reconstructed, it is graced by treasures won when the city reigned as Queen of the Adriatic.



Grand Canal, Venice's Main Street, Serves Two Miles of Princely Palaces

Gothic arches and Venetian tracery adorn the Renaissance palace at left. Striped pilings carry the owners' colors. Gondola wears black to comply with medieval law, but the bright awning lightens its funeral aspect. Distant church of Santa Maria della Salute (1631-87) commemorates Venice's deliverance from plague.

Vineyards, lovingly nurtured on soil deposited in prehistoric ages upon a bed of chalk, produce the bubbly aristocrat of wines. Generations of viticulturists have enriched this primal soil with clay (for flavor), sand (for lightness), black lignite (to "warm it up"), and pyritic ashes (for iron). Gentle slopes raise the terraces above the blight of spring frosts and shield them from blustery west winds.

Touring a Champagne Estate

Our caravan stopped on the grounds of the estate owned by the great champagne firm of Pommery & Greno, headed by the two Princes de Polignac, Guy and Edmond. The spectacle so intrigued the princes that they invited us all in to meet their mother, the princess dowager, and to sip a glass of champagne or a cup of tea.

Most of us managed our teacups all right, even though they rattled a bit from stage fright; but we were not all so graceful in our curtsies as we might have been. It takes a bit of practice.

As fascinating as the Polignac château was the vast underground labyrinth near by where the family's liquid wealth is stored and carefully tended—some 12,000,000 bottles. We descended a staircase of 116 steps to the Pommery cellars. From this portal branches a spiderweb of tunnels connecting 120 quarries. Chalk building blocks from these pits went into the making of Gallic and Roman Reims (Durocortorum).

We found the 11½ miles of galleries laid out like streets, each with its own name, some with sculptured walls and arched ceilings. On either side stretch the racks bearing vintages of a special year and quality. The temperature—a steady 50° F. in winter and summer—matures and preserves the wine admirably.

Some 200,000 visitors find their way through these famous cellars every year, and why a few of them don't remain there, hopelessly lost in the maze, we couldn't understand. We were told that during World War I some American soldiers billeted here did get lost in the cellars—for several days.

Princes Guy and Edmond kindly offered the caravan a very attractive corner of the estate on which to camp for the night; and the next morning they provided a surprise of their own. They strolled from trailer to trailer gallantly carrying souvenir bottles of their own product.

When they knocked on Verona Halifax's trailer, she was busy at the sink. Impatiently she flung open the door, nearly dropped a wet plate as she confronted the Polignacs, and in a daze accepted the champagne and a hearty handshake.

"Wouldn't you know!" she lamented later. "The first and probably only time in my life I get a chance to greet a couple of real princes in my own home—and I have dishwasher hands!"

Nevertheless, when we pulled away from the grounds of the estate that day, we noted that Prince Guy was sporting a caravan beret and flying the caravan pennant from one fender of his limousine and the Polignac banneret from the other.

Not all our stopovers proved so light-hearted. On our way toward the Luxembourg frontier we visited the great cemeteries of Belleau Wood, Château Thierry, and Verdun (page 771). These are green and even beautiful parks now, but for all of us they invoked somber memories, especially for some of the caravanners who had actually fought there during World War I.

To Patton's Grave in Luxembourg

One of the caravan kids, poking about in the scrub, unearthed a rusty, muddy gun. Somehow it seemed more real, more eloquent of the grim slaughter that had occurred here than all the immaculate regiments of crosses, row on row. Just as we were leaving, a guide who had been showing us about rushed up to me and thrust into my arms a bouquet of lilacs. I burst into tears.

We breezed across the frontier into Luxembourg with a minimum of fuss. Here, as in other countries, Wally had done such a fine job the previous summer in arranging our passage that the customs officials greeted us almost as long-lost friends. Though our trailers could have been stacked to the ceiling with contraband, not once did a border inspector even step across the threshold except when invited to see our homes.

Through the postcard grand duchy we motored to a rousing reception at the town hall of Diekirch, with the United States ambassador greeting us in person and the mayor delivering a heart-warming speech. We reviewed the fateful scenes in the Battle of the Bulge, which thundered across this tiny land, and saw General George Patton's grave.

Then Germany. At Düsseldorf we were



For More Than 600 Years Florentines Have Crossed the Arno on the Ponte Vecchio

Living museum of the Middle Ages and treasure house of the Renaissance, Florence lost much in World War II. Retreating German soldiers blew up blocks of masonry near the span, including a score of palaces, 30 medieval houses, and a dozen towers. Obeying Hitler's order, they demolished five Arno bridges but spared Ponte Vecchio. New buildings rise from the ruins. A bell tower and the dome of the Church of Santo Spirito stab a stormy sky.



Tiny Shops, the Haunt of Artisans, Encrust the Bridge Like Barnacles on a Ship

Their trailers parked outside the city, the caravanners strolled across the bridge, stopping often to peer into the windows of shops that hang on wooden supports above the water. Upper windows light a walkway above the roadbed. Temporary bridge in background replaces the famed Ponte Santa Trinita. The architect's original plans, preserved since the 16th century, are enabling Florence to rebuild Santa Trinita.

ushered to a lush and spacious park alongside the Rhine. A German "umpah-umpah" band pounded out a welcome, foaming steins were freely circulated, and the burgomeister orated as if to visiting royalty, in the flattering fashion to which we were rapidly attuning ourselves (page 776).

German Hosts Strike Up the Band

If our new home was delightful by day, it was fairylike by night, as scores of tugs and barges, their lights winking like fireflies, passed by on the river. One tugboat skipper, in fact, came ashore and invited us aboard for coffee. His wife ground it, pungent and strong, in a neat cabin hung with freshly starched curtains, and we talked over steaming cups until late that evening.

Düsseldorf held other surprises for us. Eighty percent destroyed by bombing during the war, it had, guided by its new master plan, sprung up phoenixlike from the rubble in an ampler, more gracious design than ever. Here was not merely a beautiful but also a tremendously vital city, already beginning to function as the industrial and commercial heart of West Germany.

We had our own surprises for the good people of Düsseldorf. When my husband was sweeping out our trailer one day (a task he would never deign to perform at home), he looked up to see a knot of some 20 or 25 German males staring at him in utter fascination. One of them, at last finding his voice and a few words of English, asked:

"The men in America—all the housework they do, *nicht wahr!*"

Caravanners Storm Camera Shops

In Düsseldorf caravanners took full advantage of their first real opportunity to buy a famous German product: the camera and all its many accessories. In one frenetic day, shepherded by my photographer husband, they bought \$22,000 worth of equipment.

By Germany's well-landscaped expressway system of *Autobahnen* the caravan rolled northeast through miniature, seemingly hand-carved villages to the bewitching town of Wiedenbrück. Here, after parking in a flag-decorated field, playing host to hundreds of window-peeping visitors, and hanging out the boys' newly washed blue jeans to dry, we repaired to the venerable inn of the Fox Den for hot chocolate and coffee.

A steep-gabled, half-timbered farmhouse,

with a hayloft above and one main room below, the Fox Den breathed an air of rough-and-ready hospitality. A gilded fox reared upon an openwork wrought-iron sign, and above the door Gothic numerals gave the date when the tavern was built: 1686.

We found the one big table that evening occupied by half a dozen German men. Bowing and smiling, they made room for us at once, and a merry "conversation" ensued. They had no English, and we no German, but it didn't seem to matter much.

We hadn't been there long before a hunter dropped in. He was clad in the traditional dark forest green, with black leather boots, and when we left the inn to go home, we saw in the rear of his little car the buck he had just shot—small, neat, precisely in scale with the Volkswagen!

We took the road south to Frankfurt and its marvelous shops. I lost myself promptly among the toys at Behle's—whole villages of dollhouses, a complete funicular and tramcar system traversing papier-mâché mountains, helicopters that rose more than 100 feet into the air, music boxes of silvery tone, platoon upon platoon of lead soldiers, an entire waterfront alive with miniature cranes, hoists, trucks, and stevedores.

Baseball in Old Heidelberg

We had camped at Frankfurt along the Main, and it was by another lovely river, the Neckar, that we settled down in Heidelberg, gazing across the placid stream at the dreaming spires and bell towers of this beautiful university city (page 778).

Its academic traditions, its garden restaurants, its gay parade of excursion boats meant much to Ardean and to me; but to our three youngsters the exciting thing was to discover a group of children playing baseball along the bank and munching hot dogs.

When Bruce accosted one of them, he was delighted to get an answer in idiomatic American.

"Look here," he asked in bewilderment, "how did you learn to speak English so well?"

"Well, why not? I'm from Cincinnati."

Then, leaving the main group for a while, we struck up into the Black Forest (*Schwarz Wald*). At Baden Baden we deserted our station wagon and trailer for an ancient victoria and, with our caravan companions Harry and Marion Deaver, clip-clopped through the streets and parks of south Germany's noted



Benvenuto Cellini's Bronze Perseus Lifts Medusa's Head in Triumph: Florence

A marble David, copied from Michelangelo's masterpiece in the rotunda of the city's Accademia, stands at the entrance to Palazzo Vecchio, the city hall. Long the home of Florentine rulers, the fortresslike palace housed Italy's Chamber of Deputies from 1865 to 1871. Near this spot the reformer Savonarola was hanged on a cross of fire in 1498; flowers strewn here each year commemorate the anniversary of his death.



Towers of San Gimignano Have Defied Time and War

World War II shells fired into the Italian town spared its 13 medieval towers. This lofty citadel in the 14th century served the Salvucci, one of the families whose feuds divided San Gimignano, costing it its freedom.

spa. Then we motored to Oberkirch and supped at a 300-year-old inn.

The proprietor, intrigued by our manner of travel, asked where we planned to spend the night.

Ardean shrugged. "Anywhere! That's the beauty of being self-contained. We carry our home with us."

"May I suggest a site? I have a relative who has a sawmill, up in the forest. I could phone ahead...."

Half an hour later, a man stepped out onto the road and flagged us down. With a wide smile he beckoned us in, past stacks of lumber and the silent mill, to a pleasant spot beneath the brow of the mountain.

Camping by a Sawmill

That night we slept with the chuckle of an ice-cold tumbling brook not far off and the clean smell of fresh-cut timber drifting through our windows. In the morning our impromptu hosts invited us to breakfast on homemade bread and newly churned butter.

Their chalet was a museum of everything the master sawyer, and his fathers before him, had shot. Thickets of antlers studded the walls.

Farther into the forest we pushed. From mist-swathed peaks streamed ghostly waterfalls. Sheepherders stumped along in boots, leaning on elaborately carved canes. Once, near Neustadt, we passed an elderly stroller in the costume of a bygone Germany: wing collar, plush vest, and looping chain, crooked stick, umbrella under his arm, and his back loaded with old clocks

(page 780). He gave us a courtly "*Grüss Gott.*"

Descending to the Titisee, we pitched camp by the lake in a meadow dotted with dandelions and from this base explored the heart of the wood-carving country. All through the forest are little shops and studios turning out anything from church pews to cuckoo clocks, from dolls to decorative signposts.

At the border of Switzerland we rejoined the caravan. That beautiful country, to me, is a haze of memories so pleasant as almost to be suspect, like a stack of postcards impossibly picturesque (pages 782-3).*

I recall the frisky cows kicking up their heels in the mountain meadows as we passed; nights when the music of their bells, each different, each harmoniously tuned, lulled us to sleep; evenings around inn fires, dipping bread on long forks into bowls of hot fondue; a day when I floated up to the peaks above Grindelwald on a chair lift, feeling exactly like Peter Pan as I skimmed over field and brook and crag.

I remember the goat boy of Zermatt, herding village goats through the streets each morning on his way to the upland pastures. I remember the Ice Palace carved from the Jungfrau's glacier, high above the clouds. I remember the huts in the fields of Winkel-matten, below the jagged Matterhorn, each foundation post collared with a sort of millstone to keep rats from the grain.

June Snow Blocks Arlberg Pass

When at last we headed for Austria, on a fine morning in early June, the Alps ahead of us looked more spectacular than ever in a new top dressing of snow. But as we climbed toward Feldkirch past the border, we soon learned that the snow was not merely pretty; it had so blanketed the Arlberg Pass that we couldn't cross that night.

Next morning it was still snowing high up on the peaks, but a conference of police and auto club officials finally decreed that the caravanners might attempt the pass if they dared (page 788). We held a meeting, voted, and a majority declared in favor of trying it.

Up we crawled, the snow a foot deep on the highway and banked door-high on either side. A tow truck stood by, ready to help. Near the top the police halted us and had us wait until all downward traffic had been cleared from the road. The caravan children joyfully catapulted from their cars and flung

snowballs at everyone concerned. Then, at three-minute intervals, we were waved ahead.

We entered a lonely, hushed world of white. Snow in soft gusts battered at the windshield. Our eyes kept flickering back to the speedometer: the needle dropped from 15 to 10 to 8 miles per hour. Could we maintain traction?

Suddenly we broke through the storm into an equally blinding blaze of sunlight. We had reached the summit. All around us lay a sea of fluffy clouds, pierced here and there by sharp-fanged mountaintops. The great firs held up their sugary branches to the sky like cutouts from a Christmas card.

The descent was easy. By nightfall we were camped in a rolling field outside Innsbruck. Snow-capped, the mountains encircled us, their flanks dotted by little villages.

In the center of the cup lay the enchanting city, capital of Austria's Tyrol, a curious compound of narrow, arcaded medieval lanes and broad avenues.

Tyrolese Dancers Set a Fashion

Next morning, a warm sun melted the snow in the meadow and on the still-damp grass a troupe of Tyrolese slap dancers genially cavorted for our benefit, yodeling and singing before an incomparable Alpine backdrop (page 785). They made a profound impression on many a male caravanner; in a few days their leather shorts and jaunty hats had become practically a uniform for many of the drivers. Not a few gentlemen well past the half-century mark could be discerned practicing modest leaps behind their trailers and slapping themselves in time to some odd rhythm of their own.

It is hard to relate the kind of wide-armed welcome we received from the people of this region without becoming a bit maudlin and slightly implausible. When we drove up through the evergreen forests and brawling trout streams of the border to Garmisch-Partenkirchen (page 786), we were met by a German band operating fortissimo; and at Salzburg, after we had held open house and retired to bed, we were roused by singing. Ann Hornung, peering out her trailer window, saw a whole chorus of Austrians.

One young man stepped forward, bowed, and said in excellent English: "You were kind enough to show us your 'home on wheels.'"

* See "Surprising Switzerland," by Jean and Franc Shot, NATIONAL GEOGRAPHIC MAGAZINE, October, 1956.





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Swiss Guard in Renaissance Dress Points the Way to the Vatican

Recruited from Roman Catholic Cantons of Switzerland, guards police the Papal State in uniforms said to be designed by Michelangelo.

Upper left: Caravan drivers fought Rome's rush-hour traffic to make a pilgrimage to St. Peter's Basilica, world's largest church. Here the trailers, rolling across St. Peter's Square, circle an obelisk taken from Heliopolis, Egypt, in the year 37.

← In St. Peter's, white-robed Pope Pius XII sits before the bronze pillars of the canopy above the tomb believed to be the Apostle's.

Partly obscured by a temporary balcony, a massive figure of St. Helena holds the Cross. On occasion a relic venerated as part of the true Cross is shown above the statue.

A marble St. Bruno (right), founder of the Carthusian Order, refuses as an act of humility the miter and staff symbolizing the rank of bishop.

Members of the caravan joined thousands of others to receive the Pontiff's blessing.

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Rephotographed by National Geographic Photographer
B. Anthony Stewart (above) and Ardun R. Miller III



Now we want to express our appreciation with a serenade."

Near the Königssee, a lake across from Hitler's "Eagle's Nest" high in the mountains above Berchtesgaden, the Hornungs made friends with a lithographer and his wife. When the caravan pulled out early next morning for Vienna in a downpour, the Austrian couple were discovered standing by the roadside under a large umbrella. The gentleman held a bottle of wine for Mr. Hornung; his wife had picked a great bouquet of flowers for Ann.

Days later, in Graz, the Hornungs had a somewhat similar experience. Leaving the campgrounds on foot, they asked an Austrian the way to the tramcar line. Instead of telling them, he whisked them into his car, drove them to a delightful little pastry shop, plied them with good things, and then

summoned his wife from the kitchen to translate his explanation.

"We Austrians," she declared, "appreciate deeply what America has done for us. When you get back to the States, please tell Mr. Eisenhower that we will never forget how America fed us when we were starving. We shall be forever grateful!"

The strangest place we encountered in Austria, to my way of thinking, was the Hellbrunn Pleasure Castle, near Salzburg. Erected by a quite mad architect for 17th-century Archbishop Marcus Sitticus, it abounds in elaborate built-in practical jokes.

← Sip an Apéritif in Galleria Umberto I and All Naples Will Pass Your Table

Completed in 1890, the arcade stretches four arms in a Latin cross and soars 125 feet from marble floor to glass ceiling. Cafes and specialty shops open at ground level; offices fill the upper stories.

Thousands of Americans who served in Italy during World War II remember Galleria Umberto as a favorite meeting place.

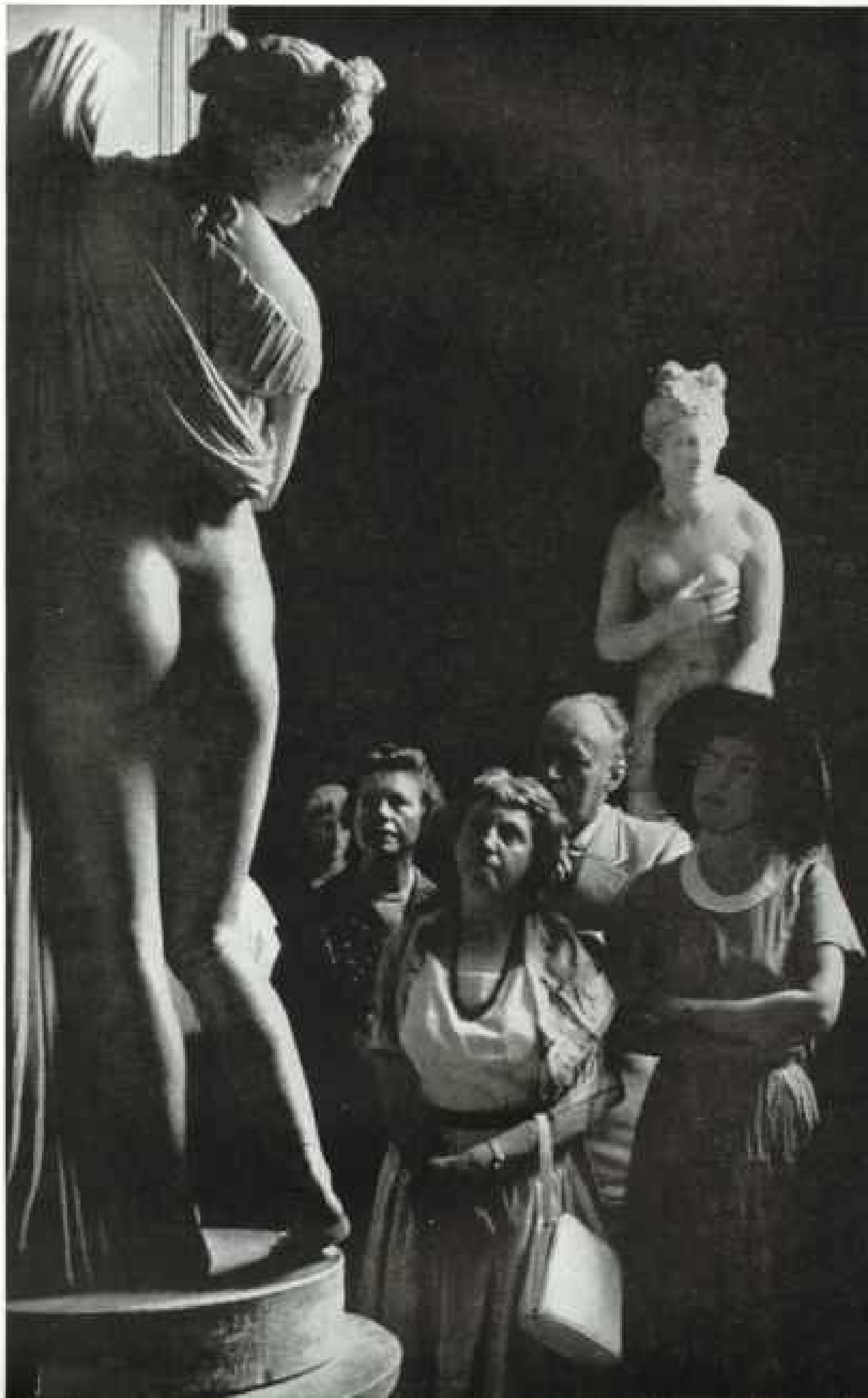
In *The Gallery* John Horne Burns described the arcade as "a cross between a railroad station and a church. You think you're in a museum till you see the bars and the shops."

Marble Goddesses Grace → the National Museum

Sightseers in Naples watch frozen motion as the Callipygian Venus disrobes before bathing. A copy of a Hellenistic original, the statue adorned an imperial palace in ancient Rome. It is skillfully restored.

The Venus at right is a version of a masterpiece from the hand of Praxiteles.

David Seymour, Magnum





The chairs set about the formal gardens are designed to squirt water. Elves, also run by water, play weird tunes upon a water-powered organ. Water-driven marionettes whirl about an ornate, fully furnished theater. Fountains balance balls upon their jets of spray.

Into one fortnight we crowded a rich store of experiences: a gourmet's meal, topped by strawberries and cream, in the old walled town of Enns, only lately freed from Russian occupation; a visit backstage at the fabulous Vienna Opera, where they were presenting *The Tempest*; sausages and schnitzel at a 700-year-old rathskeller in the capital; a tour of dreamlike Hochosterwitz, north of Klagenfurt, which could have been the model for Walt Disney's castle in "Snow White"; fireworks and a water carnival near by, with water skiers zigzagging across the lake between rows of candles bobbing in cork floats.

Then Trieste.*

If we had been anticipating, subconsciously, a letdown after the exuberant reception which Austria had accorded us, we were to be rapidly reassured, for one of our first stops was at Duino Castle, home of Prince Raymond della Torre e Tasso (pages 788-9).

Few Americans have had the privilege of entering this fabulous mansion perched on a cliff overlooking the Adriatic. We were lucky. The prince's curiosity was piqued by the sight of our encampment of "aluminum

balloons," and in short order an invitation came down to us to meet him.

A handsome, engaging man in his forties, Prince Raymond graciously offered us cakes and told us he had been "raised on the NATIONAL GEOGRAPHIC MAGAZINE"; his grandfather, Alexander, had been a member of The Society. He had another point in common with us, he said: he was a camper. After World War II, when Duino Castle served as headquarters for the British-United States Zone Commander, he had camped next door in the ruins of the original castle.

Duino Castle Houses Works of Art

That first fort was built by the Romans to protect them from pirate raids. In 1467 the Turks destroyed it. The present castle, providently begun before 1300 by the lords of Duino about a Roman tower, has had its own troubles. Italian artillery nearly demolished it in World War I, and reconstruction was started only in 1926.

We found Duino's inner courtyard lined with ancient statuary. A beautiful staircase of stone led up to the main salons. Within, intricately patterned rugs and delicate tapestries softened the chill of walls and marble floors. With casual pride the prince showed us a magnificently illuminated chant book, the creation of Italian monks in 1538.

"It's among the fine ones of Italy," he remarked. "Duino, you know, has been something of a haven for poets and artists and writers over its long lifetime. This spinet, for instance—" he sat down at a delicate instrument—"is one the Hungarian composer Franz Liszt used in teaching my great-grandmother to play."

We found we had our own unexpected connections with Prince Raymond. One of our caravanners, Joe Sedlack, had come to the United States from Czechoslovakia, worked as a toolmaker, then built up a highly successful machine business. But in his younger European days he had served as mechanic to Prince Raymond's grandfather, a racing-car enthusiast. Joe had sat beside Prince Alexander through many a thrilling cross-country "rally," bucketing around the curving, dust-smothered roads of Europe.

When we had finished our ramble through the castle, the prince came back with us to

← Tower of Pisa Not Only Leans; It Sways in the Wind

Begun in 1174 as a campanile for the Pisa Cathedral (left), the 180-foot tower was not a fourth finished when wet soil at its base caused it to list. Attempts to straighten it proved vain. Still leaning, the structure was completed about 1350. To adjust the center of gravity, the architects gave the upper stories a countertilt.

At present the list continues to grow at an average .027 inch a year. Today the edifice stands more than 16 feet out of plumb. Sun's heat and night's cold expand and contract the marble, producing a measurable motion each day. All these movements give rise to fears that the tower will tumble in a century or so. To save it, Pisans are thinking of rebuilding on a concrete foundation.

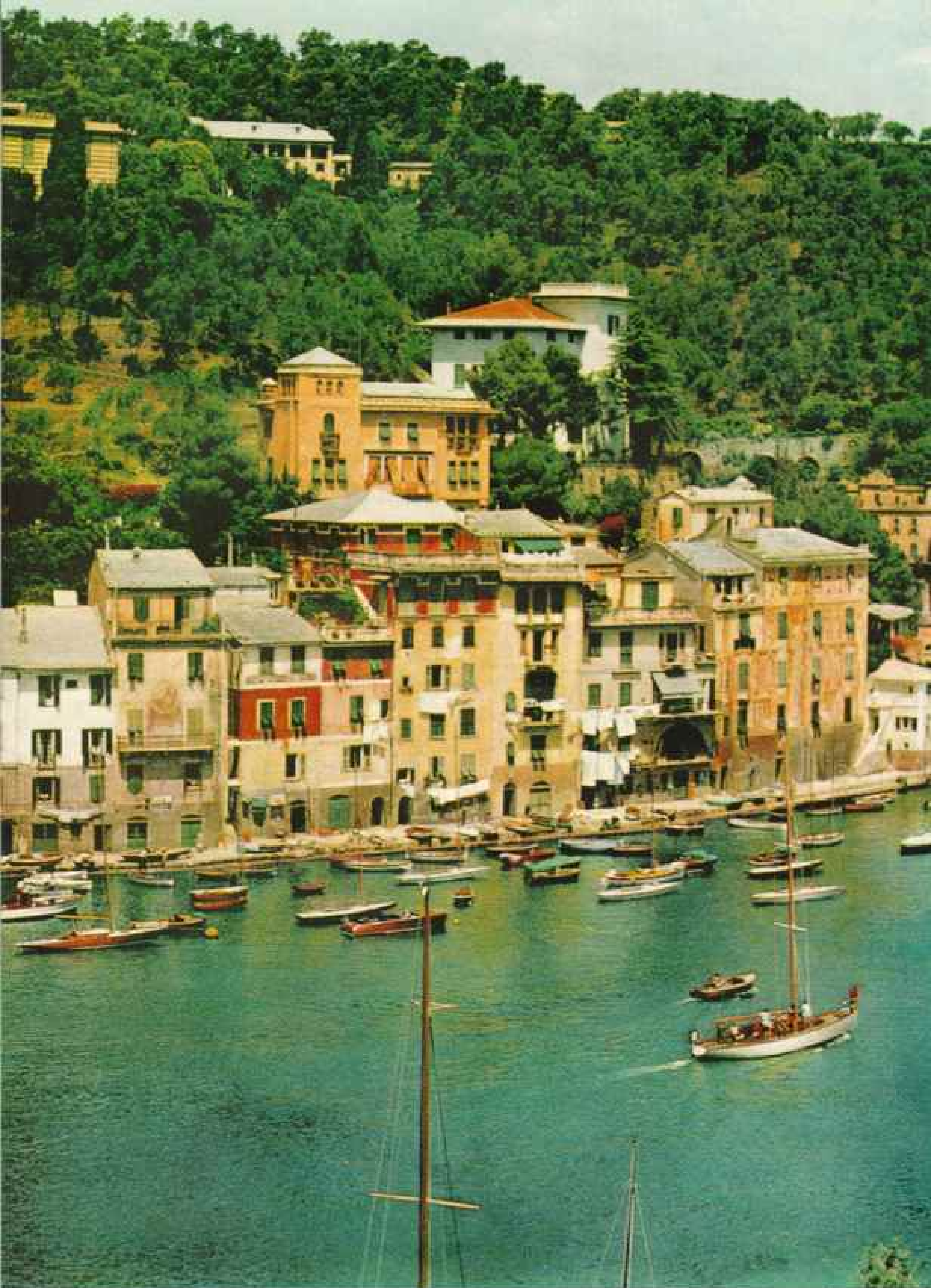
When the caravan stopped in Pisa, Wally Byam told the Miller boys the story about Galileo's standing atop the tower and dropping two objects of different sizes and weights, demonstrating that both were borne to earth at the same speed. "I'd sure like to try that," mused 10-year-old Ardean IV, "but it probably wouldn't work for me."

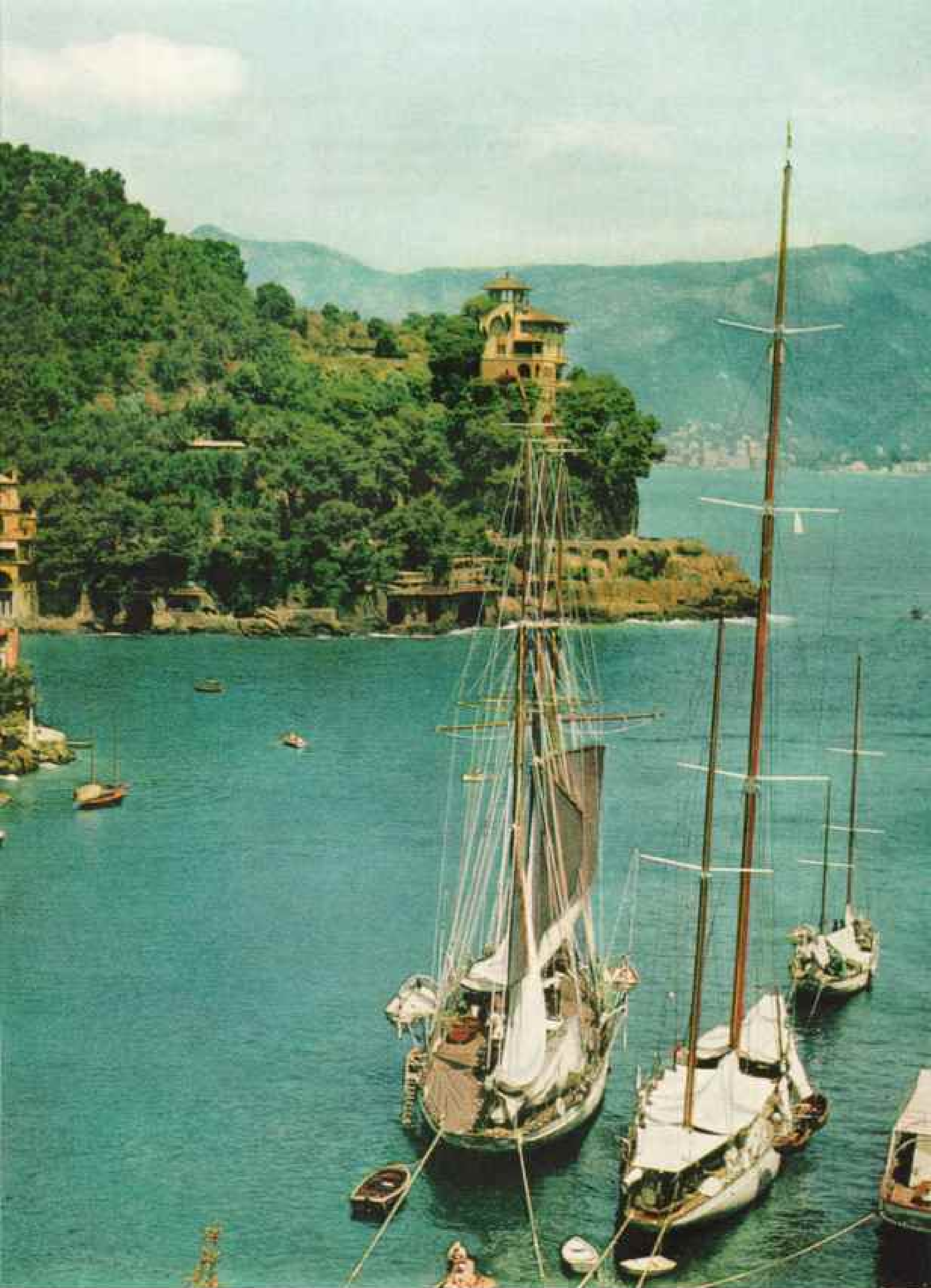
Pisa's flag tops the tower.

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Walter Meadery Edwards, National Geographic Staff

* See "Trieste—Side Door to Europe," by Harnett T. Kane, NATIONAL GEOGRAPHIC MAGAZINE, June, 1956.





Tall-masted Yachts and Small Pleasure Craft Crowd the Harbor of Portofino

camp and attended a "town meeting." He not only attended, but insisted on putting motions and casting a vote. The burden of his repeated motion was that we should all stay a few days, beginning with a swim and breakfast at the castle next morning.

Wally's effort to table this idea got nowhere. "If you don't stay, I'm handing back my honorary beret and caravan insignia right now," the prince protested.

"What about a compromise?" we suggested. "You come down and have a typical American breakfast with us."

"Done!" said the prince. And at 7:30 the next morning he rolled up in his sports car and happily devoured ham and eggs, pancakes and syrup.

Music Under the Stars in Venice

Venice, that watery tableau so artfully staged by the doges of old, took us quite by storm (pages 790-92). We parked our trailers some miles from the Grand Canal, but the caravan spirit prevailed. We were soon traveling about in a string of gondolas, accompanied by a floating orchestra.

For me, however, the most moving experience took place on dry land. Wandering at night behind St. Mark's Cathedral, I chanced upon a lovely courtyard in which a concert was being played. Scarlet geraniums glowed from niches in the surrounding walls. Spires, dimly profiled, stretched toward a canopy of stars. I stood for awhile, listening to Debussy's "Prélude à l'Après-midi d'un Faune" and to Gershwin's "An American in Paris," then strolled on, elated and yet at peace.

Rome saw us bivouacked on one of its pine-clad hills. Here the camping club seemed to have foreseen all our needs; even a guard had been assigned to patrol the site 24 hours a day. The camp manager provided a store, took care of our laundry, introduced us to some fine restaurants near by, and once took our boys off to the zoo so that Ardean and I could have a chance to explore the city by ourselves (page 801).*

From this Roman base we branched off in side excursions to Pompeii, Naples, Sorrento, Capri. Then we headed north once more.

As we pulled into Pisa (page 804), Oscar Payne of Wyoming took one look at the

famous tower and, startled to see that it actually did lean at an angle, ran right into the car in front of him. A knob on his bumper made a very distinct hole in the Italian's trunk.

His victim bounced out of his Fiat with fire in his eye. But when Mr. Payne, upset and contrite, immediately apologized and proffered \$25 in damages, the Italian took it in a dazed way, thrown thoroughly off balance by receiving no argument. Stumbling back to his car, he returned with an armful of flowers for Mr. Payne!

The days merged into weeks, the weeks into months. We drove from château to château along the Loire, roamed the Riviera (page 806), and watched festal rockets burst over the esplanade at Nice. Then we swung back into the Alps to camp contentedly at Chamonix, with Mont Blanc rearing its resplendent head right in our front yard (page 814), and also tacked northwestward into the undulant pastures of Strashbourg.

The fitting climax to our family's part in the odyssey came in little Denmark. There in Copenhagen's joyous amusement park, the Tivoli—all rainbow fountains, flowers, fireworks, and fun—we wound up our vagabondage in a good-humored glow. On August 28, nearly four months from the day we had landed in Europe, the Millers set their faces again toward the New World.

Others in the caravan continued on to Norway, Sweden, and Germany, thence along the IJsel Meer (Zuider Zee) to Rotterdam in the Netherlands and a sailing of the *Nieuw Amsterdam* on October 5.

Caravan Travel: "Home in Motion"

Had it been worth it? Mr. Robert Benchley once genially observed, "There are two kinds of travel: first class, and with children." We proved to our own satisfaction, at least, that you can combine the two—in a trailer caravan. There may be a better, more flexible, more economical, more comfortable way for a family to see a country and to know its people. But if so, we haven't yet seen it come down the pike!

We reached a stage in our journeyings, indeed, when we almost ceased to think of ourselves as travelers at all. As the poet Leigh Hunt wrote prophetically more than a century ago:

"Traveling in the company of those we love is home in motion."

* See "Rome: Eternal City with a Modern Air," by Harnett T. Kane, NATIONAL GEOGRAPHIC MAGAZINE, April, 1957.



Youngsters Scuffle for Supremacy atop a Beach Ball near Perpignan, France

Meeting here with an international camping and caravanning rally, the Americans compared notes with their European counterparts. These French boys and girls play beside the Gull of Lion.



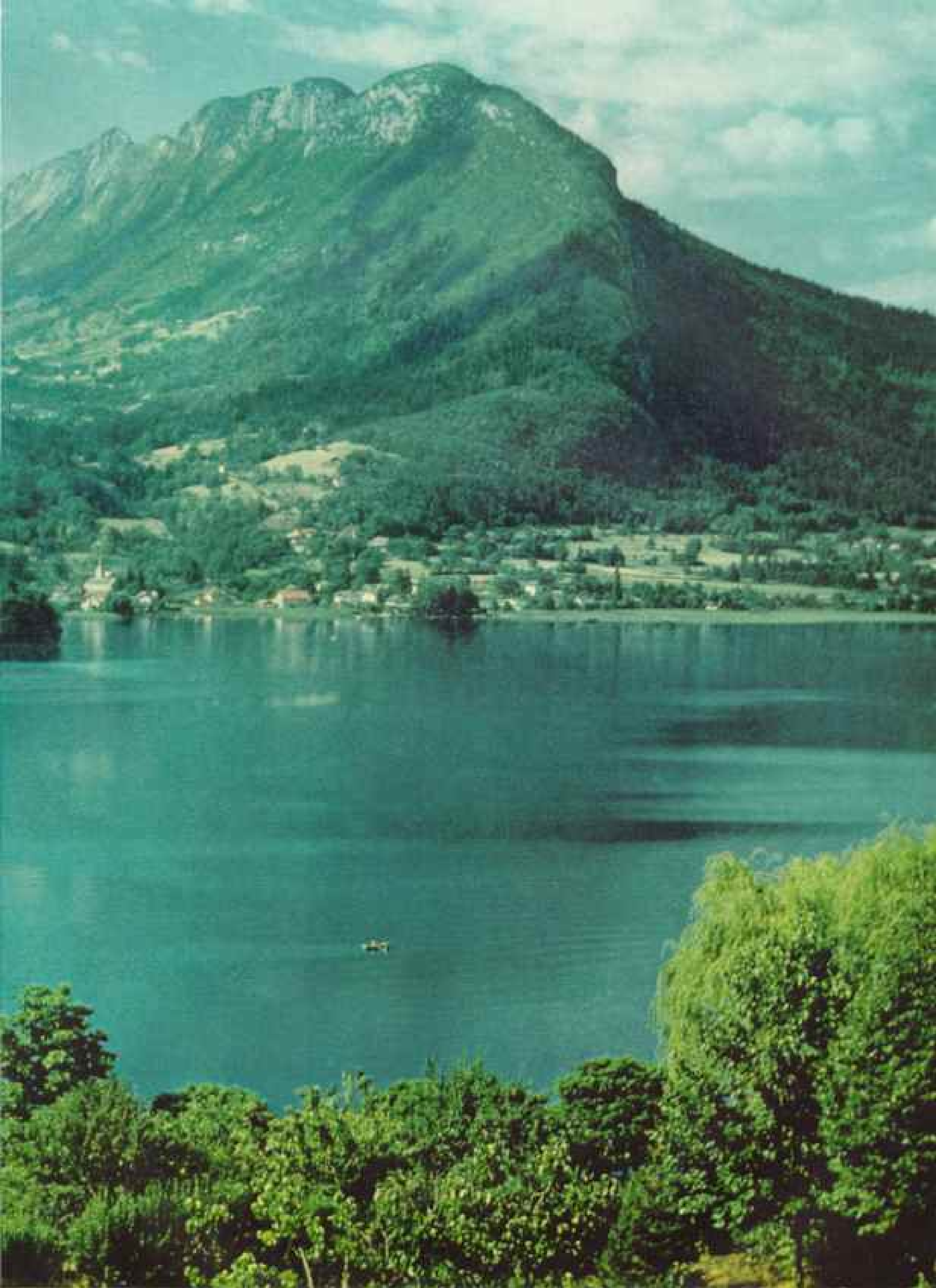
St. Tropez Lures Sailors of All Ages. Balconies Overhang the Sports Fleet

World War II bombs destroyed harborside shops and homes in this French Riviera village. St. Tropez restored the row exactly, even to the colors. Round tower of Duamas (left) survives out of medieval times.



Fishermen Spread Nets to Dry on a Stone Jetty. Sainte Maxime Edges the Far Shore
Artists discovered St. Tropez about 1900. Their canvases carried its fame abroad. Hordes of vacationers then came to see for themselves. Last year the American caravanners soaked up sun and atmosphere here.





Swans Shared the Lake When the Caravanners Swam Out from Piers of Talloires (Left)



814

↑ A Collar of Clouds
Drapes Mont Blanc,
Summit of Europe

Sipping chocolate on Mont Brévent, these vacationers face the wall that divides France and Italy. Glacier des Bossons cascades before them. Their terrace overlooks the dramatic valley of Chamonix, France, shown on left. Mont Blanc's snowy dome (right) lies seven miles distant.

The first ascent of 15,771-foot Mont Blanc was made in 1786. So many scaled the peak thereafter that John Ruskin wrote bitterly, "You have made racecourses of the cathedrals of the earth."

← In the 1800's the village of Chamonix became the first tourist center in the Alps. Steel cables in foreground lead to Mont Brévent (above).

→ Mrs. Miller, camping at Chamonix, serves pancakes with berries picked by her sons.

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Bill Carlson Lists the Nations He Visited by Trailer

Before returning to the U. S., Mr. Carlson added the names of Norway, Sweden, England, Scotland, and Portugal. His earlier caravan journeys in Mexico and Canada, like those in Europe, were made under the leadership of Wally Byam.

Wise investments in real estate freed Mr. Carlson and his wife for a life of vagabonding. "We like trailer travel," he says, "because we can go where we please, stay as long as we wish, and still have all the conveniences of home."

↓ Metal Plaques Illustrate Another Book of Memories

Tom Fenner, a caravanner from Vancouver, British Columbia, collected the crests of cities, regions, countries, and touring clubs. His trailer makes a display board.

The caravan harvested souvenirs throughout the Continent. What did it leave behind? Paul de Bruin, a Netherlands student employed by the group as an interpreter, had this to say: "For the first time in their lives many Europeans had a chance to be in a North American home and meet American hospitality. They found that the American was not what they had expected, but, in his honesty and uprightness, he was more unforgettable than ever."

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New National Geographic Map Shows 817 Modern Europe's Highway Network

IN record numbers this year, pleasure-bent pilgrims from the United States are using their favorite means of locomotion, the automobile, to tour the Old World.

A trailer caravan is still a novelty (page 769), but more and more Americans ship their cars abroad and some tow their own rolling homes. Others travel in rented "drive-it-yourself" or chauffeur-driven automobiles. Still others purchase foreign cars, small but easy on gasoline consumption. All see Europe with maximum freedom of movement.

For such motorized wayfarers the National Geographic Society's new 10-color MAP OF EUROPE, sent to 2,175,000 members everywhere with this issue of their Magazine, will prove a helpful companion. But members who journey by ship, plane, and rail—or those who travel by armchair at home—also will find the map useful and a study of it absorbing.*

Motor Tourism Booming in Europe

The 29-by-33-inch sheet, 14th MAP OF EUROPE published by The Society since 1899, features a network of red lines indicating the principal highways of the elaborate system serving the Continent and the British Isles. Motor tourism in Europe has shown a tremendous upsurge since World War II. In 1947 only 1,115 international drivers' permits were issued to U. S. citizens. By last year the figure had jumped to 46,000, and for 1957 the estimated total is 60,000. By far the largest number is for travel in Europe.

Twenty-five countries, including most of those in Europe, are parties to the 1949 United Nations Convention on Road Traffic. Through the American Automobile Association and the American Automobile Touring Alliance, international permits are granted to drivers holding licenses in their own States. Though not yet a party to the convention, the United Kingdom also issues permits to visiting motorists.

In the spring of 1957, despite shortages resulting from the Suez Canal crisis, visitors to Europe were assured of gasoline supplies.

In some parts of Europe, Americans will come upon a useful institution that is commonplace at home but new there—the motel. More than 100 of these efficient highway havens were open for business in 1957, and others were in the planning stage.

For students of international affairs, and all who follow current events, the new map is invaluable. It shows a Europe and near-by areas that have known much ferment since they were last depicted on a one-sheet map by The Society's cartographers in 1949.

Southward from near Vienna to the Yugoslav frontier runs the jagged Austro-Hungarian border across which thousands of Hungarians fled to freedom from their Communist rulers last fall.

Other areas of political unrest on the map include the Suez Canal, nationalized in July, 1956, by Egypt's President Nasser; the strife-torn Egypt-Israel border, and the British Crown Colony of Cyprus, scene of a violent movement for union with Greece.

Some place name changes reflect the growing nationalistic trend by small countries. Egypt has substituted the Arabic El Qahira for Cairo and El Iskandariya for Alexandria. Syria also has applied Arabic names—Esh Sham for Damascus and Haleb for Aleppo. The new map is the first to show the change from French to Arabic names in Tunisia, now independent. Morocco and Libya also have achieved sovereignty since publication of the last National Geographic map of this area.

Occupation Zones Erased

World War II military occupation zones have disappeared from Austria and Germany. Austria is independent, but Germany remains divided between the independent Federal Republic of Germany (West Germany) and East Germany, under Soviet domination.

The name Stalin still appears in Russian nomenclature, since there has been no word of official change. However, in Bulgaria the town renamed Stalin is once again called Varna, and in Poland the city renamed Stalinogród has reverted to Katowice.

Stalin comes from the Russian word for steel, which is why Iosif V. Dzhugashvili chose it when he changed his name to Stalin.

* Members may obtain additional copies of the new MAP OF EUROPE (and of all standard maps published by The Society) by writing to the National Geographic Society, Washington 6, D. C. Prices, postpaid to all countries, 75¢ each on paper; \$1.50 on fabric. Enlarged Europe map on heavy chart paper, \$3. Indexes to place names, available for this and most other maps, 50¢ each. All remittances payable in U. S. funds.



Cattle Get the Right-of-way over Cars as Herders Drive Through a Swiss Town

These cows graze in the high mountains in summer, stay in barns during winter snows. In spring and fall, Pied Piper herdersmen collect the animals each morning, lead them to hillside pastures, and return them home at dusk. Cowbells chime in the crisp air as this procession moves through a village in Emmental region.

It probably will never completely disappear from maps of Russia, even if its late owner should be further downgraded or forgotten. For example, the steel-producing city of Stalino in the Ukraine was named for the product, not for the former dictator.

In East Germany the industrial city of Chemnitz, almost totally destroyed in World War II, has been renamed Karl Marx Stadt for the founder of Marxian socialism.

One inset in the new MAP OF EUROPE shows how the Continent is split into Communist and non-Communist camps. Yugoslavia, a Communist country not behind the Soviet curtain, separates Albania from the other Russian satellites. An island in this Red sea is Berlin, where deep in Communist-held territory Americans, British, and French administer the western part of the metropolis.

The Dutch Win More Living Room

Comparison of the new map with the one of Europe published by The Society in 1949 shows how the Netherlands has gained more land area. This resulted from the huge project of draining IJssel Meer (Zuider Zee) and reclaiming the land for farms.

Color shadings, contour lines, and depth

figures explain the map's sea areas so clearly that one easily understands the statements of geologists that the Continent and the British Isles once were a single land mass. Many underwater features are indicated by name, such as Dogger Bank, the famous fishing grounds in the North Sea. Soundings are given in fathoms.

The shallow North Sea rests on the broad Continental Shelf, which, like the British Isles themselves, was part of the Continent. Large animals, migrating westward along with Stone Age man, once roamed a great plain that is now the southern part of the North Sea.

Bones of Paleolithic and Neolithic man and of the rhinoceros, elephant, and hippopotamus have been found in England. Fishermen on Dogger Bank still dredge up bones and teeth of mammoth, reindeer, and bear.

European rivers once flowed through the basin now occupied by the North Sea. Outer Silver Pit is thought to be part of the ancient bed of the Rhine, which, joining the Thames to the southwest of Dogger Bank, flowed north into the Atlantic. With the end of the last Ice Age and the rise in sea level, the Strait of Dover came into being.

Rhododendron Time on Roan Mountain

Each June Giant Blossoms Flame in Natural Gardens in the Clouds on the Lofty Tennessee-North Carolina Border

BY RALPH GRAY

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National Geographic Magazine Staff

WHEN I was a boy, my parents shoe-horned my brothers, sisters, and me into the family car and headed east. Always one to mix a bit of vagabonding with a business trip, father mapped out a rambling itinerary that took us from southwestern Missouri to Washington, D. C., by way of the Great Smoky Mountains.

One late summer evening, after dusty days on the lowland roads of Arkansas and Tennessee, we began climbing into a cool world of rampant greenery, running streams, and smoky blue mountains. At nightfall father pulled our overheated car into the village of Roan Mountain, Tennessee, and stopped in front of the inn.

Outside our rooms a mountain stream brawled lustily—a marvel to children from a region where branches run only after heavy rains and fair-to-middling rivers go dry in late summer. Next morning father dredged up one of his time-tested jokes: "Pretty wasteful. Somebody forgot to turn that stream off. They let the water run all night!"

Mile-high Meadow Crowns the Roan

A piping whistle and chuffs of steam drew us from the breakfast table to look at "Tweet-sie," a narrow-gauge locomotive pulling a string of boxcars along the main street. As it topped a rise toward North Carolina, I looked up and saw a huge flat-crested mountain walling off the world to the south. A townsman, seeing my absorption, sidled up and said, "That's the Roan."

"You mean Roan Mountain?" I asked.

"Maps might call it that, but to us who live with her she's more than a mountain."

An almost mystical note entered his voice. "Climb the Roan and you'll see what I mean. It hasn't got a rocky top like ordinary mountains. Up there, a mile high, you'll find six miles of meadows stretching through the clouds. The biggest, purplest rhododendron you ever saw grows there in great clumps."

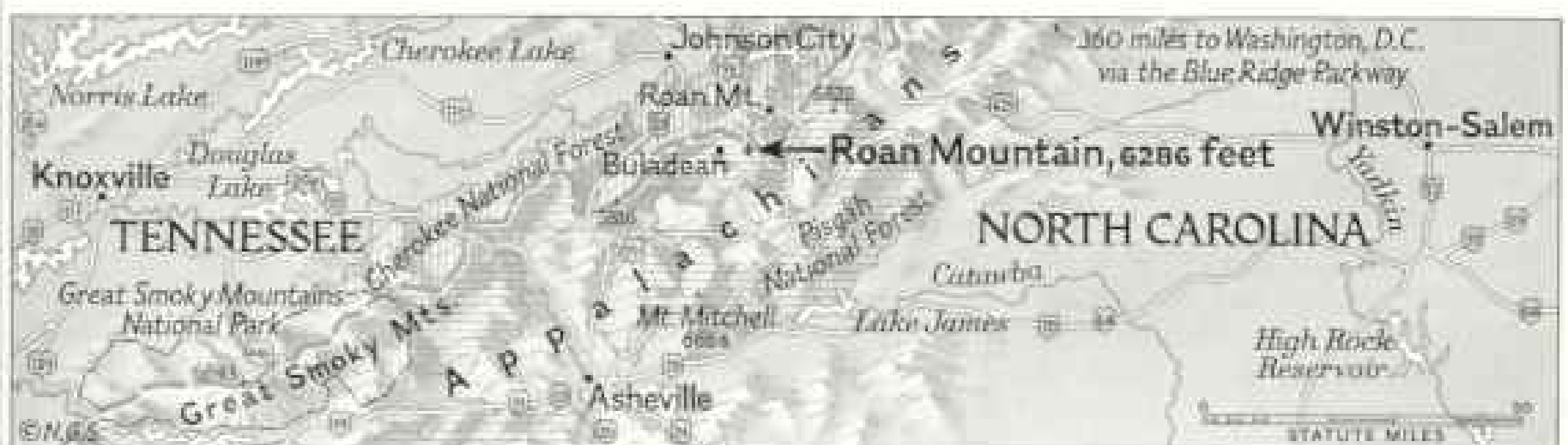
He told me to come back sometime in late June, when the blossoms were out. "Of course, you may have to get your daddy to walk up the mountain with you. The old carriage road that people used to take up to Cloudland Hotel is awful rough on cars."

Twenty-seven Years Between Visits

In my boyish mind, after that visit, the Roan became the symbol of all the world's magic mountains. I resolved to revisit it someday and reach the top in blossomtime. But life's road has many turnings, and 27 years passed before I came this way again.

Time had changed things. When I finally returned, Roan Mountain Inn had burned down, the narrow-gauge tracks were gone from the street, and Tweetsie's whistle was only an echo in the hills. Instead of hiking up Roan Mountain with my father, I drove a car up in high gear, with my own children. Instead of lone exaltation on a remote, mysterious peak, we shared our feelings and the blossoms with about 10,000 other pilgrims.

We were there for the annual two-day Rhododendron Festival, which this year celebrates its eleventh renewal over the weekend



of June 22 and 23. The blossoming period lasts nearly a month.

People from western North Carolina and eastern Tennessee long have flocked to the Roan's natural gardens for picnics among the towering flowers.

Now the new highway, paved to the very top, has begun to attract travelers from farther away. And no wonder. Here is probably the world's most extensive, beautiful, and accessible stand of *Rhododendron catawbiense*.

I clambered to a high point and surveyed the almost unbelievable scene. As far as I could see along the mountain, the giant blossoms reached into the sky. The gnarled plants grow in clumps as big as houses, their glossy leaves forming an olive-green background for the flame-hued flowers. Covering hundreds of acres, the display stuns the senses.

Favorite Spot for Picnickers

In grassy areas picnickers were scattering to find favorite nooks. The thousands were accommodated with ease on the broad bosom of the mountain. My children and I lunched on the front lawn of the long-since dismantled Cloudland Hotel.

"Nothing left but these foundation stones," a neighbor told us. "Folks used to come up here before the turn of the century and spend the whole summer at the hotel. Hay fever sufferers, mostly. But what a spot for a resort! Best view in North Carolina. Now the Forest Service is talking about putting up a modern lodge on the old site."

We learned that much is owed to the United States Forest Service for the preservation and accessibility of Roan Mountain's rhododendron. In 1941 the Government acquired 20,000 acres and added it to Pisgah and Cherokee National Forests. Later, when North Carolina and Tennessee built a highway across the Roan at Carvers Gap, the Forest Service laid down a two-mile link, bringing sightseers directly to the flowers.*

At 6,200 feet elevation, we were standing on one of the highest points in the eastern United States (page 826). There was a crisp Canadian feel to the air, though the sun beat down with southern ardor.

We wandered along natural grassy walkways through rhododendron bushes higher than our upstretched arms. Some of the individual flower clusters are as big as a child's head and hundreds of them blaze from a single clump.

As evening approached, everyone on the mountain but us started for home. We had brought camping gear and were going to spend the night (page 822). As we had planned earlier, we met National Geographic photographer Robert F. Sisson on the vast flower-dotted slope that terminates in Eagle Cliff.

"Noble Mountain" Lures Botanists

Soon we had the Roan to ourselves. Darkness filled the great valley below us, and the faraway lights of tiny Buladean, North Carolina, emerged to twinkle in a ticktacktoe pattern. In our twilit eyrie, as the evening breezes souged through the Fraser firs, I began to understand the mountain's spell.

Not just beauty lovers, but men of science—particularly botanists—have been lured to the Roan. Rising more than 4,000 feet above its surroundings, it presents, in vegetation and climate, a Canadian island in the southern highlands. Even more interesting to the student of plants is the fact that some species grow here almost exclusively; others were first discovered on the mountain and some were named for it.

André Michaux, the great French botanist, was the first white man of record to explore Roan (1794). He described and named its rhododendron. Dr. Asa Gray, the only botanist in America's Hall of Fame, in New York City, talked like a press agent after visiting the Roan in 1841. In his account he called it "this noble mountain."

"How was the mountain named?" my daughter Judith asked as we broiled steaks over charcoal.

"No one knows," I told her. "When you mix rhododendron pink with a green background and look at it from far off you get

* For a color-illustrated account of the widespread activities of the United States Forest Service, see "Our Green Treasury, the National Forests," by Nathaniel T. Kenney, in the NATIONAL GEOGRAPHIC MAGAZINE for September, 1956.

Rhododendron Clusters Explode → Among Lady Ferns

This brilliant member of the heath family takes its name from the Greek: *rhodon*, rose; *dendron*, tree. Botanists named the species shown *Rhododendron catawbiense* for the Catawba River in North Carolina, where it was found.

The author took his family on a camping trip to Roan Mountain on the Tennessee-North Carolina line, site of a catawba stand of several hundred acres.





sort of a roan color. But some think the name comes from rowan trees, or mountain ash. Others believe the legend about Daniel Boone's roan horse. Daniel is supposed to have turned his exhausted mount loose on the summit and continued on his way afoot. When he returned the following autumn, the horse had revived and grown fat on the natural pastures."

Bob Sisson parted the grass where he was sitting and dug down eight or ten inches with a stick through rich, loamy topsoil. "Pretty unusual for a mountaintop," he said.

Actually, natural "balds" are common in the southern Appalachians. Their summits, totally or partially bare of trees, support a rich cover of grasses, mosses, laurel, rhode-

dendron, or other low-growing vegetation.

Will, my 8-year-old son, drank in every word as we talked. Here we were in the land of Daniel Boone and Davy Crockett. On our way up the mountain we had seen the hardy descendants of those coonskin pioneers still farming their little plots and searching the woods for roots and herbs.

"Herbs and Simples" Make Modern Drugs

At Roan Mountain village Mr. K. Wayne Graybeal had shown us through his company's warehouse, stacked with pungent bales of everything from angelica root and balm of Gilead buds to wintergreen herb and yarrow leaves. All had been laboriously picked by mountaineers and sold for a few cents a



Author and Family Cook in a Mile-high Garden

Catawba rhododendron, like its cousin, Scotch heather, survives on wind-swept heights. Botanists attribute Roan Mountain's magnificent specimens to cool climate, high humidity, and acid soil. High winds and forest fires have helped to check the growth of invading conifers.

Ralph Gray and children here set up camp on the Roan's summit.

✦ Two-year-old Kenny Garrett reaches for rhododendron's leathery evergreen leaves, curled by cold weather.

Roan Mountain's owners at the turn of the century stripped acres of plants for sale, but happily the rhododendrons grew back. Today the United States Forest Service protects the best stands, now a part of Pisgah and Cherokee National Forests.

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Robert F. Howe (left) and
W. E. Garrett, National Geographic Staff



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pound to supplement their incomes. Modern pharmaceutical houses use dozens of roots and herbs in medicines and balms—testimony to the efficacy of the old-fashioned back-country practitioner of "herbs and simples."

The woods on the slopes of Roan and other near-by mountains are so prolific that the gleanings of root and herb pickers scarcely leave a mark. But a more severe pruning that continued into the 1930's, when acres of rhododendron were dug up and sold to nurseries, nearly denuded Roan of the giant shrub. From roots and





seeds left undisturbed, the rhododendron has now come back in large clumps of nearly uniform height, accounting for the almost formal-garden look of grassy allées and promenades.

"It's the clouds and humidity that make the flowers do so well," offered one veteran visitor. "Taking the bushes away is against the law, but some people do it and transplant them at home. Never saw one yet but what looked puny when taken off the Roan."

Our fire died down. Bob, the children, and I crawled into tents and sleeping bags. Soft grass and soil made a springy mattress, but through the long night I got colder and colder, and reflected that henceforth perhaps I'd better leave camping to the younger generation. When I rose at the first glimmer of dawn, chattering, to start another fire, I noticed that a thin film of ice had formed over a pan of water, though the date was

Roan Mountain's Grassy Avenues Lead Sightseers Through a Forest of Brilliants

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June 30! No wonder I had been cold in a thin sleeping bag.

Fog blanketed the sunrise, but soon the clouds lowered and sat in the valleys. My children awakened and joined me in silence. Twelve-year-old Mary Ellen started to speak, then stopped—too awed for utterance. The sun burst upon our island in the sky and bejeweled each still-damp rhododendron blossom. This was worth waiting 27 years to see.

Nature, Not Man, Is the Landscape Artist



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Robert F. Bloom

Bare Rock Caps Floral Jungle

Hikers in North Carolina look toward Tennessee, a short distance off. Golden ragwort gilds the grass.



Like Waves Endlessly Tumbling Ashore, Blossoms Billow in Tiers

Catawba rhododendron may rise 15 feet and bear 800 flowers. F. A. Michaux, an early explorer in the Roan Mountain area, described thickets so dense that the traveler "is obliged to use an ax to clear his way."

Sun-drenched Atolls in the Indian Ocean Hold a Seagirt Sultanate
Where Phones Rarely Ring and Kites Fly from Office Windows

BY ALAN VILLIERS

With Illustrations from Photographs by the Author

"SOME stamps, please," I said, "for a letter to the United States."

The clerk looked up and grinned.

"Ah, stamps. Yes, yes," he said, not making much effort to produce any. He had only one hand to work with, which seemed a little strange. Even stranger was the fact that with the other hand he was slowly manipulating a piece of twine, which led mysteriously upward out of the barred and glassless window beside him. Through this the twine seemed to disappear into thin air.

What was this? The Indian rope trick at last—the trick all travelers have heard about, where a fakir flings up a rope and a boy climbs it and disappears—could this be it?

If so, where was the boy?

All Maldive Men Like Kites

I turned inquiringly to my guide, Mr. Ibrahim Didi, the all-knowledgeable one, who also was a customs and postal clerk when there was nobody about to guide, which was often.

"He likes kites," answered Mr. Didi. "All men in the Maldive Islands like kites. Look!"

I followed the sweep of his eyes into the clear blue sky of the monsoon morning outside. There, sure enough, a kite was performing skillful aerobatics, five or six hundred feet up. It was a very special kind of kite, all blue and shining gold, and a sheen of flickering white led away from it like a gossamer thread—right to the window where the clerk was sitting. He was cheerfully flying a kite while carrying on his job.

I had known earlier that I had come to a most unusual group of happy islands. But, after a lifetime of wandering the face of the earth, I was astonished to find at last a clerk who had time and inclination to play with kites out of his office window.

Flung on the map of the Indian Ocean like a double line of blots from some old chart-maker's pen, the Maldives are off the main steamer tracks and, at present, off commercial air routes. This little-known and seldom-visited group of atolls, lying south of the great Indian peninsula, numbers at least

2,000 islands and islets. Two hundred and fifteen of these islands support some 93,000 people, virtually all Moslems. The land area they occupy is about 115 square miles, but the zone of sea around and between the islands is immense (map, page 834).

The capital is the island city of Malé, the only port of entry. The 8,000 inhabitants of Malé live in good homes built beside straight streets and wide sandy roads. The whole island is only a mile long and half a mile or so wide. Though the Maldives are a democracy under British protection, no Britishers live there; in fact, no Europeans of any kind are resident anywhere in the islands—not so much as a consular official or a merchant.

During World War II, Gan Island in Addu Atoll, southernmost of the Maldive group, held an RAF airfield. It was later abandoned, but this year Britain obtained Maldivian consent to re-establish facilities on Gan to fuel and repair aircraft.

Sailing by *Baggala* to Malé

I had long wanted to visit the Maldives, but it was not easy to arrange. No steamship, no airplane would take me there. The chief means of communication was an old sailing ship from the port of Colombo in Ceylon.

She was a *baggala*, or *buggalow*, a type common in the western Indian Ocean for centuries. I had sailed in such ships before when I was with the Arabs.* She had a lateen rig and a hull like a galleon of old.

The only accommodation the *baggala* offered was a "great cabin," which took up the afterpart of the big teak hull and contained eight shelflike bunks, a writing table, an old hurricane lamp, and miscellaneous goods the Maldivian crew were taking home. Prominent among these were umbrellas.

The beautiful carved stern of this venerable craft reminded me of the models of Portuguese caravels I had seen in Lisbon. Her melodious name was the *Glory of Mercy*.

The captain, Mohammed Maniku, spoke

* See "Sailing with Sindbad's Sons," by Alan Villiers, NATIONAL GEOGRAPHIC MAGAZINE, November, 1948.



Sultan of the Maldives, Flanked by His Palace Retinue, Parades to the Friday Mosque

For beauty and serenity the isolated, sun-drenched Maldives have few peers. There are no police, no traffic, no television—and orchids bloom over many a wall. Under British protection, the islands are ruled by an independent Sultan with 93,000 subjects, virtually all Moslems. Here, dressed in a green ankle-length robe, His Highness Mohammed Farid Didi walks to prayers through the white-sand streets of Malé, his capital and chief port. Attendants wear sarongs and turbans. Sultan's flag leads the procession.



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↑ **Malé Says "Welcome" with a Kite**

Kite flying is the Maldivian's favorite sport. Men and boys alike sail big tailless toys in the monsoon winds. Noisemakers attached to frames roar like jets and whine like sawmills.

↓ **Bonnets Ward Off the Tropic Sun**

Maldivians, a people of uncertain origin, speak a language akin to Sinhalese. Education is compulsory. Necklace of pieces of eight may have come from the wreck of an old Portuguese galleon.



good English, and life aboard was pleasant. There were six other passengers, who slept in the bunks. The crew slept on deck, and so did I, on the high, sloping poop. There was a wooden platform just behind the wheel, where the captain and mates took their rest. Up there it was always delightfully cool, and the sound of the water slipping past the quietly moving ship was peaceful.

I was especially interested in all that went on aboard ship, for later I was to sail a reproduction of the Pilgrims' *Mayflower* across the North Atlantic, and the baggala was almost the same size, with somewhat the same rig, except she had no square sails.*

Life Primitive Aboard a Baggala

The life was primitive. Cooking was done at a firebox on deck, and water was carried in iron tanks. The ship had unloaded dried tuna from the Maldives and in return loaded rice and flour and drums of kerosene. She also carried the mails, for she was a Maldivian Government ship.

A few years ago there was a fleet of 20 of these vessels sailing between the Maldives and Ceylon, with an occasional visit to Calcutta. There was also a famous old brig. Now there is no brig, and only eight baggalas. Such ships are no longer being built, and soon they will disappear (page 842).†

The weather was good and the winds favorable for the Colombo to Malé run. Outside Colombo's harbor we set a lateen topsail; porpoises and flying fish skimmed before us. Soon the city's modern skyline dropped from sight, and we were in a world of our own.

Our passengers were interesting fellows. One was a sick old man returning from a fruitless visit to a Colombo hospital, where surgeons had found him too weak for a needed operation. It was the second time he had made the journey, the second time he had been turned back for the same reason. He had a fine face and a cheerful smile, despite the state of his health.

He was a professional storyteller, and he sat in the shade of the longboat, the only boat the *Glory* carried, and spun yarns all day to the crew. Unfortunately they were in the Maldivian language, which I could not understand, but the way he held those tough mariners spellbound indicated they must have been wonderful yarns. The old lad was returning home to die, but he kept his spirits.

There were also three young fishermen who

had been blown away from the Maldives in a storm eight months earlier. Their boat had capsized and tossed out her gear. Only the fact that they were strong swimmers had saved their lives. They had righted the boat and sat down to last out their ordeal; the wind was southwest and strong, and all India lay to the northeast of them.

Their craft, though frail, was seaworthy and could be trusted to drift. So they sat there for 10 days, hungry and without water. Then their boat touched somewhere along the Malabar Coast, and they dragged themselves ashore, more dead than alive. Now they were going home to carry on fishing again.

Capt. Mohammed Maniku said that Maldivian fishermen are often blown away like that. Mostly they survive. They are excellent seamen, with a rugged endurance. He knew one who was picked up by an oil tanker bound on a long voyage to South Africa. The castaway spoke only Maldivian, which no one understood, and it was years before anyone found out where the poor fellow lived. But now he, too, was back in Malé fishing.

We were only three days sailing to Malé. The captain entered the big lagoon by night. There was moonlight, and we sailed close by several sandy islets, near enough to hear breakers curling on the beaches and the monsoon sighing in the palms. I knew then that our captain was an able sailor, both to find the entrance to the lagoon by night and to have the courage to sail in.

In the morning we were anchored off a flat island at the southern end of a large lagoon, so large that I could not see the islets at the

* See "We're Coming Over on the *Mayflower*," by Alan Villiers, NATIONAL GEOGRAPHIC MAGAZINE, May, 1957.

† See "Ceylon, Island of the 'Lion People,'" by Helen T. Gilles, NATIONAL GEOGRAPHIC MAGAZINE, July, 1948.

Sails Converge in Malé Lagoon; → Coconut Palms Rise Out of the Sea

Captain Villiers sailed to the Maldives aboard a baggala—rakish Indian Ocean craft of a type now fast disappearing (page 842). Borne on the northeast monsoon, his ship (left foreground) made the voyage from Ceylon in three days. Bucking the same winds, such a vessel may require a month to return to Colombo. Here she delivers mail to a launch flying the harbor master's flag. A lighter approaches to transfer cargo.

Dunidu islet (right) and distant Hulele are wooded dots on the rim of Malé lagoon.





Maldives Break the Blue Monotony of the Indian Ocean, 450 Miles Southwest of Ceylon

More than 2,000 palm-clad coral isles make up the Maldives, a tropical paradise seldom visited by outsiders. Once the islands stood athwart the main sailing routes of the Indian Ocean; fringing reefs trapped many a spice-laden galleon. Today most steamer lanes cut north of the sprawling archipelago. Early this year Great Britain announced plans to re-establish an airfield built during World War II in Addu Atoll.

northern end. All the land was low, just a few feet above sea level, marked only by palms and the buildings of Malé.

I landed on Malé's waterfront at a fine teak landing stage by the post office and the customs house. Malé looked a wonderful place. Two smiling figures met me, each wheeling a magnificent bicycle, which I soon discovered was the common means of transport in the islands. Only the Sultan had a small automobile, and there were two light trucks for handling cargoes.

I walked between the cyclists, who were the Chief of Customs and the Secretary for Health, and felt as if I were strolling through a well-kept flower garden. I had heard of the "flowered isles of the South Seas" and had even spent some time fruitlessly looking for such places. Now, unexpectedly, I had found one!

Orchids were everywhere, and flowering creepers flung crimson and violet blooms lavishly over every wall. Breadfruit trees, mangoes, papaw, coconut, and bananas filled the garden of every house, and the great

square before the Sultan's palace, where it was not a luscious green, was ablaze with color.

I entered all this through a well-built white arch by the waterfront, which was crowded with small ships of a distinctive type, all of them with large crews of laughing boys and men. From the great square, in a precise rectangular formation, wide, sanded streets led to the four corners of the island. The streets blazed white in the hot morning sun. Only the Sultan's palace and some of the Government buildings were two-storied. The rest were spacious and well-built bungalows.

There was a shopping area near the main gardens, and as I walked along with my new companions, chatting in English (which they had learned at school in Ceylon), I noticed several shops selling magnificent kites, beautifully decorated with tinsel and pictures. Other shops were well stocked with all sorts of provisions, patent medicines, stationery, and household requirements of all kinds.

On the square, a group of barefooted sailors were sewing on what looked like a huge lateen mainsail. In an alley near the shops boys

and men were twisting cordage from strands of coir, and making an excellent job of it. From a shed by the waterfront a stream of men were carrying sacks filled with dried fish. The sacks looked enormous and must have weighed well over 100 pounds, but the men were dancing and singing as they worked.

No Traffic, No Policemen

There was no sign of an automobile anywhere, nor so much as a ricksha to be seen. No traffic lights blinked their imperious messages; no harassed policeman stood on duty; indeed, there was not a single policeman, or a uniformed figure, anywhere. No newsboys shouted their wares—no vendors, no police, no traffic. What an island was this!

The city was all so neat and well kept and laid out with such geometric precision that it looked as if some martinet of an old gunnery admiral had laid it out and written the regulations for its cleanliness. But the only admiral there was the Captain of the Port, called the Emir of the Sea, and he laid down no rules. As far as I could ever gather, no outside influence had led to all this orderliness and peace. It was spontaneous, and it was 100 percent Maldivian.

I took a great liking to the place on sight, and the liking grew the longer I stayed.

The Sultan gave me an attractive, airy bungalow in a flower garden on a wide street called Orchid Lane. Lizards scampered on the sand and climbed the walls at sundown. Flying foxes screeched by night and pelted mangoes on the roof.

Crows squawked every day but Fridays, when soldiers went about the streets with shotguns to dispatch them. That day the cunning birds kept quiet. They were the scavengers for the town, but it was so clean they had little to do and were a noisy nuisance. And all day kites buzzed above me, except when a rain squall came.

All the Maldivé Islands lie close to the Equator, the farthest south being actually 40 nautical miles south of what sailors call the Line. It was late February and March when I was there, and the influence of the northeast monsoon was wearing out. So on most afternoons there was a good doldrums squall—a lot of rain and not much wind, and afterwards the whole atmosphere seemed clean and fresh as if it had been washed.

I settled in at my bungalow on Orchid Lane, where no telephone ever shrilled and no mail came. It was sometimes hot but never stifling. The mosquitoes were a bit of a plague, and the Secretary for Health told me they carried Maldivian fever, a kind of malarial illness which can be serious for European and Maldivian alike. I learned that nearly every European who spent more than 10 days in the islands seemed to contract this fever, which could be fatal. I covered myself with mosquito repellent, but the rascals liked it. Yet somehow I escaped the fever.

Next to the guest bungalow stood a big mosque, and in the cool of the mornings I

Dockmen Hoist Bags of Rice in Malé Harbor

The Maldivé staff of life comes from Burma and China by way of Ceylon. Clerk hands a stick to each sack-laden worker as a tally when he leaves the boat. Part of this load trickles to the pier.





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♣ **Island Boys Practice
Cricket on a Green
Campus in Ceylon**

Isolated though the Maldivians are, they boast an amazing literacy rate of 90 percent.

Scholarship winners receive advanced schooling at Colombo, where their government maintains a hostel for them.

These barefooted youths take turns at bat during a respite from studies.

◀ "Maldivian women seem to possess the secret of eternal youth," says the author. "I found it impossible to guess their ages. Up to 40 or so, they all look like children."

Smoking as she strolls, this Hulele Island matron supports her heavy water pipe by hand. She wraps her hair bun in a cloth veil.

**Grimacing Dancers Do
a Specialty Number**

Full of laughter and contentment, untouched by sophistication, Maldivians lead happy, carefree lives.

Comic faces are an essential part of this performance. While the boys twist and stomp, orchestra members clap hands and beat out the rhythm on drums, bones, and bamboo tubes.

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was wakened by the sonorous tones of the muezzin calling the faithful to prayer. After breakfast I would go for long walks around the island with my Maldivian guide and interpreter, who had learned English during World War II when he served with the Royal Air Force on Addu Atoll.

Children Stare at White Visitor

On one of the first of these walks we met some small children going to school (the islands are 90 percent literate). When they saw me they stopped, very quietly, and stared at me with the greatest politeness.

"What are they looking at?" I asked.

"You must excuse them, please," my interpreter said gently. "They rarely see a European, so you are a great curiosity."

The sailing ships trading to Malé, he explained, are either Maldivian or Indian, and so are their crews. Addu Atoll is a long way from Malé, and though a flying-boat buoy lay moored off the twin light towers that marked the entrance to the inner harbor, inside the fringing reef, an aircraft was a rare visitor. When they came, from bases in Ceylon, it was on the way to the Seychelles or the island of Diego Garcia, and they did not stay long. This was usually the only contact with Europeans, apart from the very occasional visit by a small steamship which might have white officers aboard. No wonder the children were interested in me!

This was a new experience for me, too. I had never been so completely alone before, not even with the Arabs. The children formed a circle around me, some of the little chaps peering into my countenance with solemn stare from a foot or two away, and before long there was an outer circle of adults behind them, also politely staring.

As interested in them as they were in me, I looked in the children's schoolbooks and saw they were studying Arabic and Maldivian scripts and arithmetic.

Girls Go to School at Night

The island city was divided into four wards, and each was responsible for its own elementary schools. The wards combined to build a large, modern secondary school, where the boys were taught by day and the older girls by night. It is considered undignified for girls and young women to be seen on the streets; hence the night schooling.

As a friendly privilege I was invited to

visit the high school by night, when the girls were there. There were about a hundred girls, from 12 years of age to perhaps 16. Even the teachers looked like teen-agers, but I was told that they were married women in their mid-twenties. Perhaps the Maldivian women know the secret of eternal youth, for only the very aged looked old at all.

The girls were all prettily dressed in long frocks with large, pointed collars, long sleeves, and high waists—not a school uniform, but the national style. The dresses were made from colorful gossamer stuff, and the girls' dark tresses were veiled with wisps of gay silk which hung over their shoulders.

Golden ornaments, the gold perhaps taken from the wreck of a galleon, set the girls off, and some of them wore tortoise-shell combs of an exquisite marking. The Maldivian tortoises are noted for their unusual markings, and quantities of the shells are exported to Ceylon, where they are worked into expensive ornaments.

I took some photographs of teachers and pupils, and I visited the high school by day, too, when the boys were there.

Homes Have Peering Places for Women

At first I had seen scarcely any older women. But I soon noticed that they were as interested in the stranger as the children were. They had special peering places above their garden walls where they could stand and look over without being seen.

Later, when the soldiers played a football match (which they did with great energy and considerable skill—and in their bare feet), many women came to a special walled enclosure to watch the game. I was able to see the older women then. Most of them wore the same-style dresses as the high school girls, but some elderly ladies still wore an older style national costume, which, I knew, had been in vogue a century before I stepped ashore in the Maldives.

This consisted of an overdress of blue or terra cotta material coming to the knees, and, beneath it, a broad skirt sewn in striped homespun, dropping nearly to the ground. The skirt always had two or three horizontal bands in white. To me the ensemble looked heavy for the intense heat of March in Malé.

These ladies had their hair made up most beautifully, with little buns at the side, and some had combs of great magnificence. They either were barefoot or wore bright sandals.

Similar dresses were noted by travelers to the Maldives, of whom the best known are the famed Arab Ibn Batuta and the French adventurer François Pyrard de Laval. Both left accounts of their sojourn, and both married several Maldivian women, so had a better chance to study them than I had.

"I have not seen in the whole world any women whose society is more agreeable," Ibn Batuta noted 600 years ago. "The wife entrusts to no one the care of her husband's service: she it is who brings him his food, takes away when he has eaten, washes his hands, presents the water for his ablutions, and covers his feet when he wills to go to sleep... I married many wives of that country..."

Pyrard de Laval's ship was wrecked in the islands in 1602, and he was held there five years. His account (published in English by the Hakluyt Society) is the best I have seen of the Maldives. He noted many features which apply equally today, by my own observation, particularly the manner of fishing and of preparing dried fish, and the piety and industry of the Moslem inhabitants.

Ibn Batuta made note of the use of rose water and sandalwood as a lotion. When I was rather badly sunburned during my stay in Malé, and no lotion or ointment I had was of the slightest benefit, a local bonesetter brought some sandalwood and rose water, mixed them carefully by rubbing the sandalwood end



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Friday Mosque Dominates Malé Like a Lighthouse

Five times daily the muezzin climbs this minaret to call for prayers. Arabic script mentions the year 1085 A.H. (*am Regira*). The Moslem calendar dates from the Hegira, or flight, of the Prophet from Mecca A.D. 622.



840

♣ **Sidewalk Artisans**
Fashion Lacquer Vases
with Primitive Tools

Fishing far outstrips other industries in the Maldives, but craftsmen still ply their arts on many of the islands.

Women turn out handmade pillow lace, which the Europeans introduced centuries ago, and weavers produce finely woven mats on hand looms.

Once-flourishing lacquer work is almost a vanished art. Artisans of Turadu Island are the only remaining specialists.

These three demonstrate how they work. Man at left holds a hand-powered lathe which he can fasten in a wooden frame and spin by pulling alternately on each end of the rope. His partner holds a chisel against the mouth of the partially formed vase at the end of the lathe. Axman in center roughs out another vase.

◀ **Slip of the Knife Could Spoil a Week's Work**

Master craftsman Idris Ismael peels away part of a top layer of black lacquer to reveal the red undercoat. Finished articles on the bench show his talent for intricate design.

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industriously in a bowl of the rose water for a quarter of an hour, and applied the resultant fluid to my burns. I was better in three days.

When I left Colombo to visit the Maldives, friends had said in all seriousness, "Take care! The people still believe in witchcraft and know how to use jinn."

I smiled. But I found that in fact there still are magicians in the islands, and official exorcisers of jinn. A jinni, apparently, is an evil spirit which can cause serious harm. In the Maldives, when there is sickness, it is usual first to request one of the qualified sorcerers to come along and try to drive away the jinni, and while I was there the local gazette (published monthly) gave a list of 39 qualified medical men of various types, six of whom were sorcerers.

If the sorcerer's treatment doesn't work, then it is presumed that the illness is not caused by a jinni, and other methods must be used. There is a Pakistani doctor at Malé, with a well-equipped dispensary, but for surgery patients must go to Colombo.

How a Sorcerer Casts Out a Jinni

Before scoffing at the idea of casting out a jinni, I reflected that really the Maldivians put first what an increasing number of Western medical men are only now learning—the probability of an illness having a mental cause. So when one of the local sorcerers offered to put on a demonstration for my benefit, I accepted with great interest.

His name was Hajara Mohammed Didi (Didi is a rank, something like Esquire in English), and he was an extraordinary man. He was dressed in the traditional whites of the Maldivian gentleman—white sarong, immaculate white shirt, and well-pressed white jacket. His feet were protected by open sandals, and he wore a gray woolen fez. His powerful, piercing eyes were striking. There was a challenge and a power in them that could not be denied.

Hajara the sorcerer came with my interpreter and the Secretary for Health and another young friend I had made, Abdulla Kaleel. Abdulla was a nobleman of the islands who was studying navigation at the Malé school for pilots. He had been six years at college in Ceylon and was an extremely pleasant young man. He also taught in the high school and worked by day in the customs house. He led a busy life, and he did not believe in jinn.

When Hajara came, we had no jinn for him to cast out, and were grateful for that. So his exercises that morning were purely in the way of demonstration. I half believed that he would not do anything at all.

I was wrong. He called to the kitchen for a few simple utensils—a white soup plate, a small glass with a little water in it, a jar of ink, and a bit of a pointed twig. He sat down beneath one of the orchid bushes and, taking the plate in one hand and the twig in the other, went to work.

If I had not been told that the man was a sorcerer, I would have thought he was playing the children's game of noughts and crosses. All he did, using the twig, was to draw crossed lines on the inside bottom of the plate. The diagram had two upright and two horizontal lines, and he hurriedly scribbled a few Arabic characters in some of the squares. Before I had time to see what these might signify, he erased the whole diagram by dashing water on it.

"This is the moment," my interpreter whispered. "Watch him now!"

I watched, keeping a sharp lookout on the orchid bush in case the face of a jinni might show there. I was not quite sure what such an apparition might be like, but any apparition would do.

Water and Words Call No Jinni

Hajara took a sip of the discolored water, holding the plate to his lips.

I saw no jinni.

Hajara mumbled some magic words. The water went cloudy. Still no jinni.

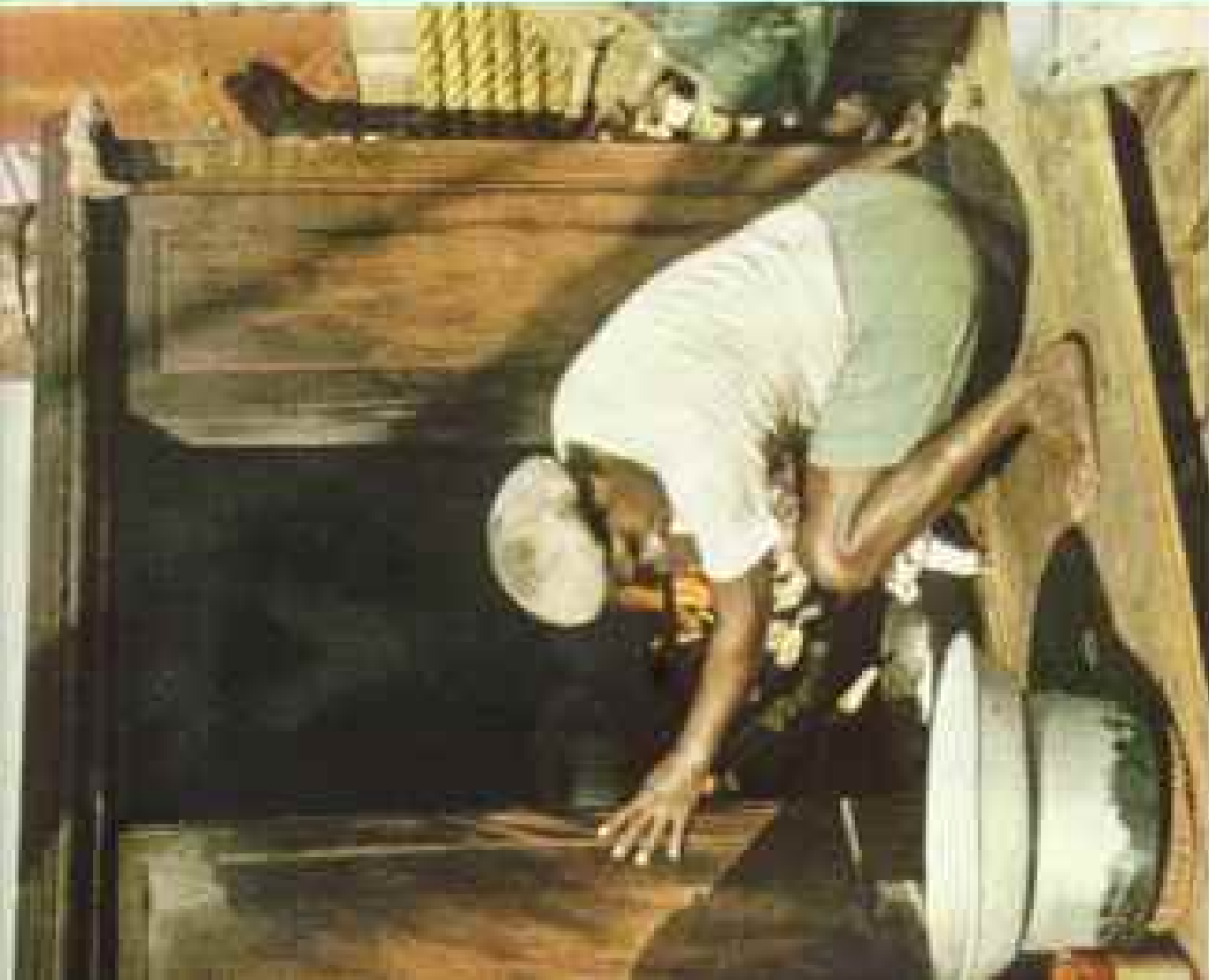
Hajara's face began to work. He looked wild. He swept the garden with fierce glances from his piercing eyes.

No jinni.

Then he got up and walked away. The demonstration was over. He didn't say whether he had seen a jinni.

After all, it was only a demonstration. What had I expected to see? Yet there was one odd thing: that night, the guest bungalow seemed to be haunted. None of us staying there could sleep. I tossed and turned until daybreak and was mightily glad to hear the muezzin calling the faithful to prayer.

I was informed that Hajara had driven jinn out of many men and cured them, but he had never cured a woman. Apparently jinn cannot be exorcised from women, but stay with them always.



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A Baggala Sets Sail for Ceylon →

A fleet of Indian and Maldivian buggalas trades between Colombo and the islands. Carved and windowed stern copies the style of 16th-century Portuguese galleons. Lateen rig resembles Arab dhows.

This vessel is somewhat similar in hull to the pilgrims' *Mayflower*, whose successor, *Mayflower II*, is commanded by Captain Villiers. The buggala is slightly smaller.

Crewman aloft looses the mizen sail as the ship leaves Malé lagoon. Dried fish in her hold will give way to flour, rice, and kerosene on the return.

Above: Crouched before his firebox, the ship's cook prepares curry, coffee, and bread for the 21-man crew.

↓ Sailors swim ashore from the motorship *Hyacinth* (center), moored in Malé harbor. Fishing vessels jam the lagoon.

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Walking around Malé was always interesting. The place was walled more than half around, and there were old cannons here and there in emplacements in the walls. I noticed one beautiful weapon made of bronze, decorated with the royal arms of Portugal.

Old Cannons Recall Portuguese Rule

The Portuguese were the only Europeans to occupy the Maldives by force. They held control for 10 years, while establishing their power over the Indian Ocean.

The Maldivians took unkindly to their visitors; one night they rose up and slew every Portuguese soldier in the islands. They were never forcefully occupied again.

The lagoon of Malé is so large that it is impossible to see from one end of it to the other; an Indian haggala which sailed one morning was still within the lagoon the next morning, a pinpoint of sail on the horizon.

Other islands lie in the beautiful lagoon. I made a sailing trip to one of them—a low, tree-filled place called Dunidu. On it stood a spacious bungalow, a hard tennis court (put there, I was told, by the staff of a Royal Air Force radio station during the war), the remains of an American amphibian aircraft, a large bower anchor and 100 fathoms of cable, two beautiful boats in tin sheds, and a rusty war-built jetty.

Walking by the beach on the seaward side, I came suddenly upon a skull lying beneath a half-tide rock. I wondered whether it was that of one of the Portuguese garrison who had been slaughtered here, or maybe of some fisherman whose thirst-tortured body had been cast up by the sea.

Dances Celebrate a Good Catch

I also visited two other islands—Hulele and Wilingili—in Malé lagoon. Hulele's headman mustered the school children for me and showed me the island's industries: copra gathering, and drying tuna and bonito. The deep waters of the lagoon abound in these fish, which are caught from beautiful sailing boats shaped like Viking craft. When the fishermen return with a good catch, they dance along the thwarts in a hazardous manner and bang on skin drums and sing.

The fish are cut into pieces, slightly boiled, and then smoked and dried. There is a tremendous trade in this dried fish, mostly to Ceylon, though it used to be sent to Arabia and East Africa as well.

Another trade (noted by all the commentators who had ever visited the islands) is in cowrie shells. These are beautiful small shells, abundant all around the Maldives. Centuries ago they were so prized they were used as currency, but no one regards them as money now. I could buy a thousand for a Maldivian rupee, less than 10 cents at the time of my visit.

I saw men cutting firewood and women walking across the island to a beautiful white beach. There they did the family wash by simply wetting it in the sea, banging it industriously on the hard sand, and then spreading it on the bushes to dry.

A boy ran up a palm to cut me a coconut, and the drink was very welcome. Hulele was hot and infested with large mosquitoes.

On Wilingili I saw a Government resthouse, where overworked civil servants could bring their families and take it easy for a while. It was another garden island, and it offered splendid fishing off the beach. Tuna, marlin, bonito all swam in great schools there.

Ambergris Drifts In from the Sea

The headman offered me a piece of gray stuff which he picked up on the beach. It looked repulsive and of no value. He seemed anxious that I should accept the gift.

"Take it," whispered my guide. "That's ambergris."

Ambergris! I had never seen any before. That is the stuff sperm whales cough up and whalers prize, for it has considerable value as a fixative of the better perfumes.* The piece I took still smelled of whale.

"We get a lot around our islands," said the guide. "I don't know why. Maybe plenty sperm whales come here to die."

Skimming the lagoon in a swift fishing boat, visiting the old brig which lay rigged down in the lagoon, walking about picturesque and attractive Malé meeting its people and studying its life—my days passed pleasantly and my time was always full.

I was received very kindly by His Highness the Sultan and His Excellency the Prime Minister alike, the one in his palace and the other in his airy and well-built bungalow, which had the only fan in town.

In the old days the Sultan was titled "King

(Continued on page 849)

* See "Perfume, the Business of Illusion," by Lonelle Aikman, NATIONAL GEOGRAPHIC MAGAZINE, April, 1951.



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Malé Fishermen Net Fingerlings for Bait. Their Boat Is Flooded as a Live Box

When the men have loaded their craft almost to the gunwales, they head toward open water a dozen miles or more beyond the reefs. There hovering gulls direct them to schools of tuna weighing three to ten pounds apiece. Balling live bait overboard, the men fish with short lines on bamboo poles. Silvery, sardine-shaped hooks carry neither barb nor bait. Hungry fish, striking swiftly, are yanked into the boat and released in one smooth motion.

↓ Up comes the seine. The boat's grizzled master inspects its yield.



↓ **Sailors Pole a Cargo Lighter to Pierside at Malé**

Hands aloft secure lateen sail along the high, slim yard. Cased goods piled aboard came off a haggala anchored at the harbor entrance.



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↑ **Warm Monsoon Winds
Dry Outrigger Sails
on a Palm-fringed Beach**

Seaside villagers throng these shores each afternoon to greet incoming fishermen. The day's catch is sold on the spot, for fish spoil quickly in the hot climate.

Islanders make copra and coir rope from the coconut palms. They thatch their homes with the fronds and use the wood for fuel.

Outrigger canoes closely resemble those of the South Pacific. Cotton sails billow between twin masts. Steering paddle on boat at right suggests the steering-board of a Viking ship.

Children wading in the surf await fathers' return from sea.

→ **Father Treats Family
to an Evening Sail**

Even the babies crowd aboard the small cargo launch as it heads out into Malé lagoon. Girls wear headcloths and long gowns. One of them helps crewmen unfurl the mainsail. Jovial father wears a wrist watch.





Ships Moor in the Lee of Malé Island's Coral Breakwater

The crescent flag of the Maldives flies from one of two inter-island passenger vessels. Boxlike projections are toilets. Other craft here are fishermen. Breadfruit trees blanket the island.

of the Thirteen Provinces and Twelve Thousand Islands," and he held absolute power. Today he is elected, and there is a prime minister with a parliament, called the Majlis. In 1953 a republic was established, which lasted nine months.

The Sultan today lives in a palace surrounded by thick walls. It was terribly hot when I was there, and a labyrinth of courtyards and more walls shut out the cooling breeze. Tin-roofed buildings, which almost filled the courtyards, added to the heat, and the virgin white sand underfoot blazed back at the fierce sun so that it hurt my eyes, even with dark glasses.

I was ushered at last into a spacious hall, heavy with darkly polished teak paneling and gleaming brass fittings (like an old East Indian). Thence a narrow stairway like a ship's companionway led to the Sultan's audience chamber. Here the Sultan, His Highness Mohammed Farid Didi, awaited me, with his Prime Minister, Mr. Ibrahim Ali Didi, and the official secretary. All were dressed in European clothing.

The Sultan is a tall man with fine, well-chiseled features. He received some of his education in Egypt and speaks both French and English, but he spoke to me in Maldivian, his Prime Minister acting as interpreter. We chatted pleasantly for a few moments, but I was glad to take my leave. The two-storied palace was stifling, and I thought, if I were a sultan, the first thing I would demand would be a cooler place to live.

Day of the Baggalas Is Dying

When I called on the Prime Minister, I saw on his wall photographs of Queen Elizabeth II of Great Britain and her husband, Prince Philip, Duke of Edinburgh, taken during their visit to a Maldivian exhibition in Ceylon.

Mr. Ibrahim Ali Didi, a tall and well-built man of strong and dignified features, looked remarkably like the Sultan and was, in fact, related to him. He talked to me of Maldivian progress and aspirations, and of the islands' need for a powered vessel of their own. The day of the baggala, he said, was past.

I'm afraid I had to agree. The picturesque big sailing ships, which had sufficed for many centuries, were no longer able to compete with motorships and steamers. As we were speaking a small motorship came into the lagoon and anchored close by the fringing

reef to take on a sizable cargo of dried fish.

In the winds then blowing, baggalas might take a month to sail the 450 miles from Malé to Colombo, tacking and beating and fighting the adverse currents. The motorship would be there in two days, and back again in Malé within six days, with a cargo of necessary rice and textiles.

Reluctantly I took passage in the motorship, a little German named the *Hugo Arlt*, commanded by a German captain who had been a submarine commander in the war. As I went aboard, his mate was getting the anchor up. I looked overside into the clear water, and then I looked back at the island city a long time.

Motorship Heads for Ceylon

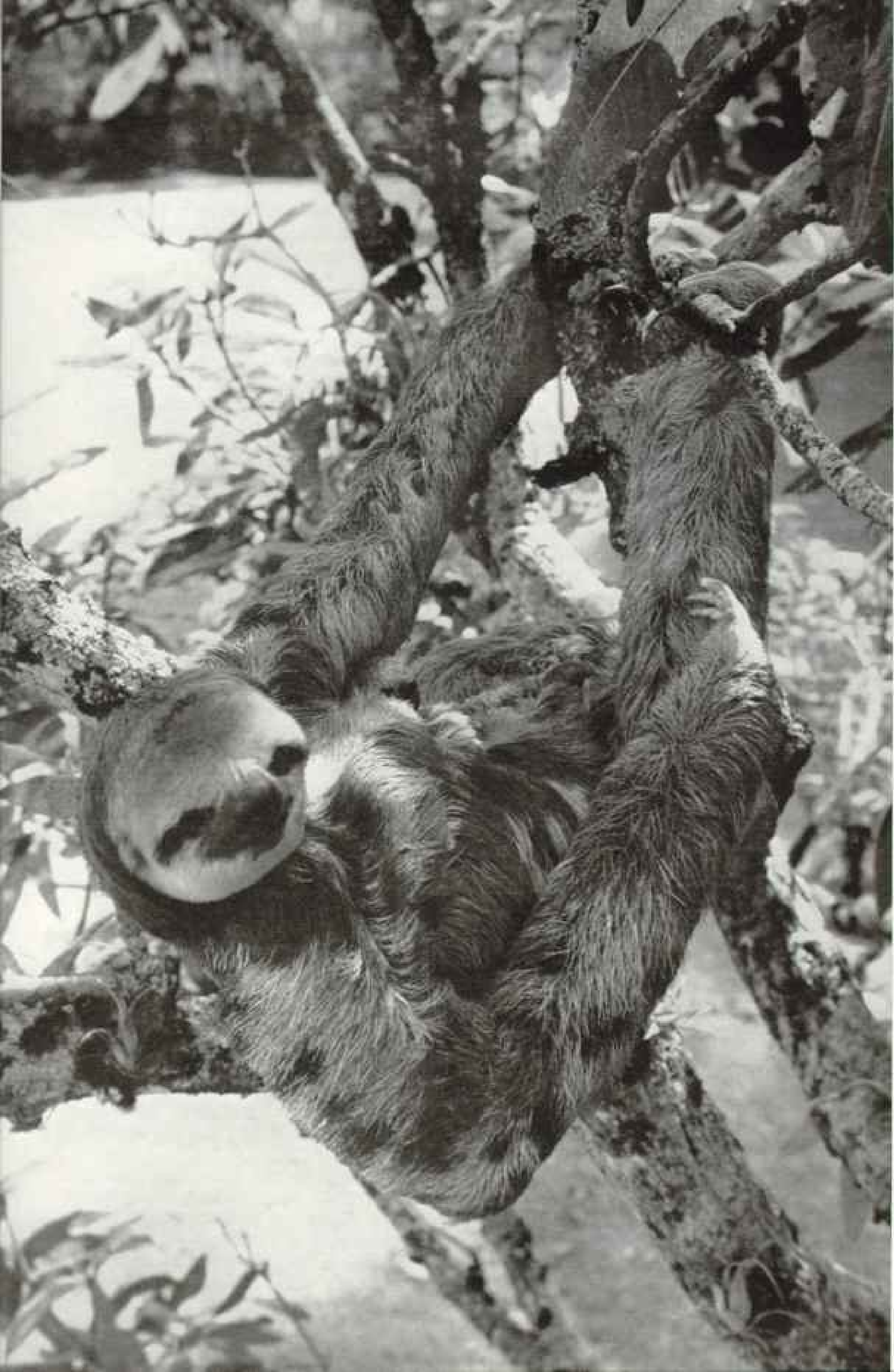
The motorship's engines thrashed the blue water to a creamy white. The baggalas in port were flying their Maldivian ensign for our departure, and the old brig was being hove ashore for her last beaching. The sun shone on the twin light towers marking the entrance to the small inner harbor through the fringing reef, and I could still hear the kites buzzing high above the trees.

Now my motorship was under way, heading for the gap in the reefs through which Capt. Mohammed Maniku had sailed by night. Soon the atolls, more sea than land, would sink below the horizon, leaving the coconut palm tops for a while like trees growing mysteriously in the water. Then all disappeared, and only the lonely ocean stretched away toward Ceylon.

It would be a long, long time before I would ever forget the enchanted Maldivian Islands, with their rugged, quiet, and independent citizens, who were making such a success of their islands and their city and their industries, without interference or aid from the outside.

The central position of the islands in the rich monsoon-blown waters of the Indian Ocean had attracted the navigators and the empire builders of the distant past—Indian, Persian, Arab—and long after them the Portuguese, Dutch, French, and the English, in that order.

All had come, for the strategic position of the great atolls was important. All had come, but, seeing how well the islands were doing by themselves, all had gone again, leaving the islands and the islanders alone—a record which is surely unique.



Englishmen Hunt Wildlife for B.B.C. Television and the London Zoo
Amid Indian Tribes of Tropical South America

BY DAVID ATTENBOROUGH

With Illustrations from Photographs by Charles Lagus and the Author

I POKED a stick into the tunnel. Muddy water surged from its mouth, and a subterranean bellow shook the lake shore.

The sound could scarcely have come from an anaconda, the big South American boa constrictor we were looking for. Nor would a snake own the large yellow tooth I could just distinguish deep in the gloom.

"That settles it," said Jack Lester, leader of our British Broadcasting Corporation-London Zoo animal-collecting expedition to British Guiana. "It's a cayman."

Angry Reptile Eludes a Lasso

We were far back in the Rupununi River region of southwestern British Guiana, in the savanna country near Brazil. By this time nearly 20 copper-skinned Macushi Indians were watching—at a prudent distance.

A cayman, close cousin of the alligator and crocodile, has two offensive weapons: first and obviously, its enormous jaws; and second, its immensely powerful tail. Luckily, with this one, we had to deal with only one end at a time. Having glimpsed that tooth, I knew which end to worry about.

Working swiftly, we cut saplings and drove them deep into the mud in a semicircular palisade around the hole. Without hesitation Jack clambered inside and began sloshing about, trying to see how the reptile was lying. If the beast came out in a hurry, he would have to leap for the bank to avoid losing a leg. For my part, I felt nervous enough outside the stakes, wading thigh-deep while I maneuvered a canoe carrying Charlie Lagus, our B.B.C. television-film photographer.

Jack dangled a rawhide lasso in front of the cayman's nose, hoping the beast would lunge and thrust its head into the noose. It roared and thrashed so violently that the very bank quivered, but it refused to charge.

With two forked sticks to hold the noose open, Jack inched it over the cayman's snout. Infuriated, the animal shook it off.

Three times the rope was on and shaken off. Again Jack eased it into position. Suddenly he drew the noose tight, and the dangerous jaws were secured.

Jack pushed a long sapling into the lair and, reaching inside, looped the rope over the pole, under the reptile's front legs, and hitched it tight. Then, tugging cautiously, he drew out pole and cayman, trussing the back legs, and finally the tail itself as they emerged (page 856).

The animal lay at our feet, muddy water lapping around its jaws, yellow, unblinking eyes glaring at us malevolently. It measured just 10 feet long.

Charlie and I were both jubilant. Jack was less demonstrative. "Not bad," he said, "for a start."

Guiana Offers Animal Wealth

British Guiana offered us ideal hunting grounds for our tropical wildlife films and for new creatures for the London Zoo. Here were not only thick tropical rain forest but also coastal creeks and swamps, and the savannas of the interior (map, page 857). Each area held distinctive animal life.

Jack Lester, the zoo's curator of reptiles, Charles Lagus, an experienced 16-mm. movie-maker, and I, the expedition's film producer and director, had worked together once before in Sierra Leone, western Africa. This time we were joined by Tim Vinall, one of the overseers in the London Zoo and a skilled caretaker of animals.

Two days after we captured our cayman, Jack, Charles, and I were walking near a swampy creek with Teddy Melville, our rancher host at the outpost settlement of Lethem. Suddenly Teddy stopped and

← The Indolent Sloth Views the World Forever Topsy-turvy

Scientists call this sluggish *Bradypus*, a Greek word meaning slow foot. Suspended from hooklike claws, the sloth swings at tortoise pace through the branches of tropical forests in Central and South America. In an entire day it may progress no more than 50 yards. So leisurely does the creature take life that its name is a symbol for laziness.

This three-toed female hangs in a mango tree by the Mazaruni River in British Guiana.



pointed to a footprint in the mud. "Ant bear," he said tersely.

We knelt down and examined the spoor. The great anteater's track is unmistakable. Its enormous claws, used to rip apart concrete-hard termite hills in search of soft larvae, fold backward against bare knuckles and leave prints like fists dug into soft ground.

Catching an Ant Bear by the Tail

Normally the ant bear is an inoffensive creature, but if it grips an opponent with its powerful forelegs, the victim has little chance of escaping the ruthless claws.

As we poked in the undergrowth, there was a rustle, and a few yards in front of us a great, shaggy form shambled to its feet. It set off at a gallop, with Jack and Teddy hot on its heels. I rushed out of the thicket yell-

ing to Charles to hurry and bring his camera.

As we skirted the clump of brush, the ant bear came lumbering in our direction. I gave chase and, starting fresh, slowly overhauled the animal. I was wondering what to do if I caught it when Jack, about 100 yards away, shouted: "Grab hold of its tail!"

Without thinking, I grabbed. The creature lurched round, reared, and swung at me with one of its forelegs. I fell backwards, and the ant bear once more lumbered away across the savanna, its tail waving like a banner.

The pause was enough for one of Teddy's vaqueros to catch up with the beast, however. He whirled his rawhide lasso and cast it neatly around the ant bear's neck. Within seconds, he had brought the animal to a growling halt (above).

Once the bear was securely tied, we exam-



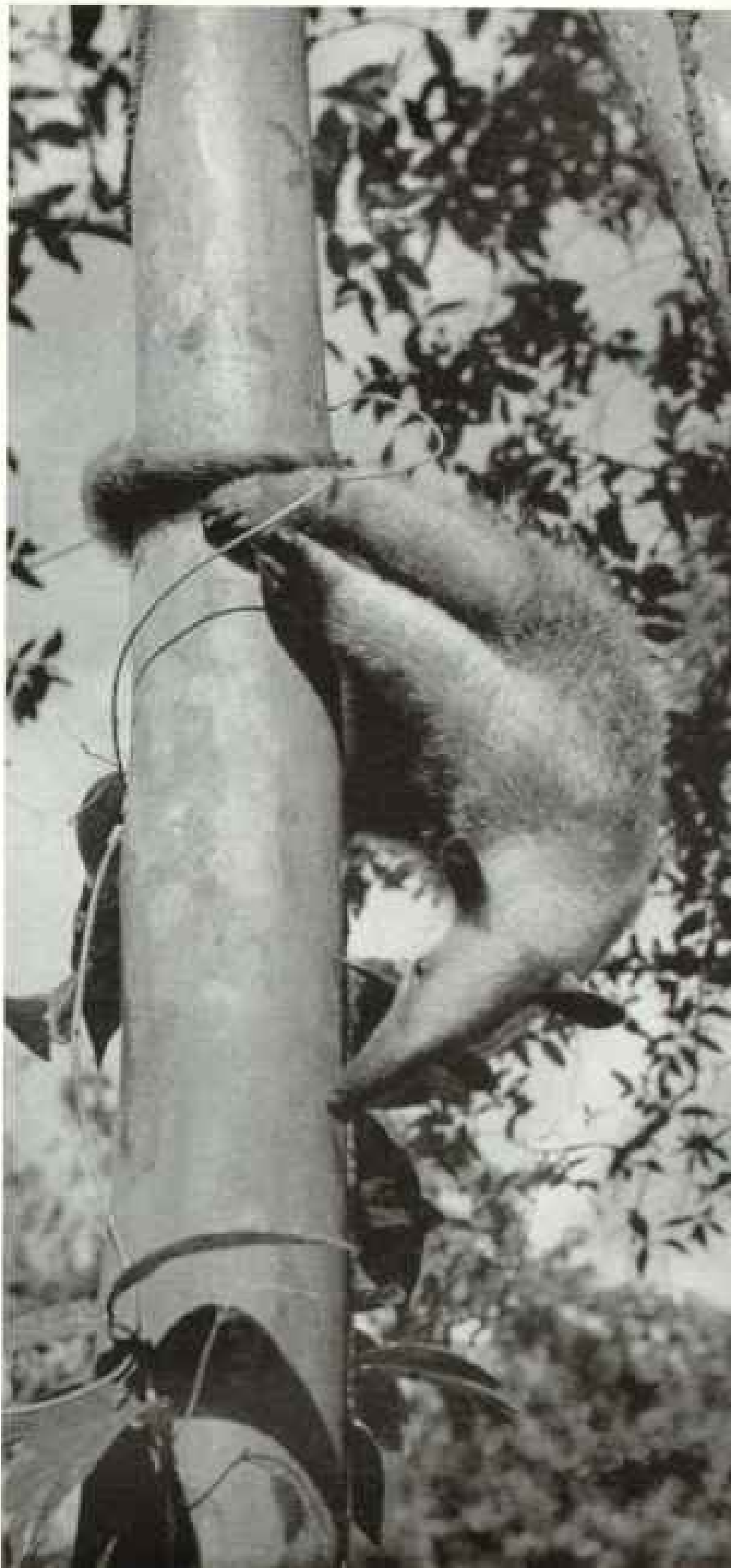
← Tail Lashing, a Great Anteater Struggles Against Hunters' Lassos

Mr. Attenborough visited British Guiana as a member of a B.B.C.-London Zoo expedition that filmed the capture of scores of animals and birds.

The expedition came upon this ant bear on the savanna at the edge of a swamp. The shaggy beast fled in a lumbering gallop, but the men soon overhauled and roped it, taking care to avoid swipes of the murderous foreclaws.

Back in camp, the captive found a termite nest into which it eagerly poked its long snout, licking up the insects with a sticky, thonglike tongue. For the trip to London, the ant bear was weaned on minced meat, raw eggs, and condensed milk mixed with earth.

↘ A prehensile tail braces the tamandua, or tree anteater, when climbing. The animal sometimes hangs by the tail to attack a termite nest with its forepaws.



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ined it carefully. It was covered with dirty gray hair and measured six feet from the tip of the shaggy tail to a tiny mouth at the end of a long, curved, and toothless snout. From this its long thonglike tongue, covered with sticky mucus, could extend even farther to gather ant and termite larvae from their earthen cells as if on flypaper. Its forelegs ended in four-inch claws.

On our return to Georgetown, capital of British Guiana, the hospitable Georgetown zoo boarded the anteater for us. The Agricultural Department put a large garage at our disposal to house smaller animals—capuchin monkeys, trumpeter birds, and a matamata turtle, whose rough shell and skin are camouflaged to blend with the floors of forest pools (page 865).

Our next objective was the rain forest.

Tim remained behind to care for the animals, while Charles, Jack, and I flew once more into the interior.* This time we went westward, crossing a steep mountain barrier into the basin of the upper Mazaruni River.

This huge area is almost isolated from the rest of the country. Its scattered Acawai and Arecuna Indians still live relatively untouched by civilization (pages 864-867). When the air age threatened their isolation, the government declared the whole area an Indian reservation—*forbidden country* for diamond and gold prospectors and travelers without permits. Only three American missionaries

*See, in the NATIONAL GEOGRAPHIC MAGAZINE: "Life Among the Wai Wai Indians," by Clifford Evans and Betty J. Meggers, March, 1955; and "A New World to Explore," by Maj. R. W. G. Hingston, November, 1932.

† A Jungle Delicacy Rides the Porter's Packload

South American Indians hunt the turkeylike curassow for its tender white meat. Though this bush fowl can be tamed, it fails to reproduce well in captivity. The expedition saved one choice specimen, a *crested curassow*, from the cooking pot.



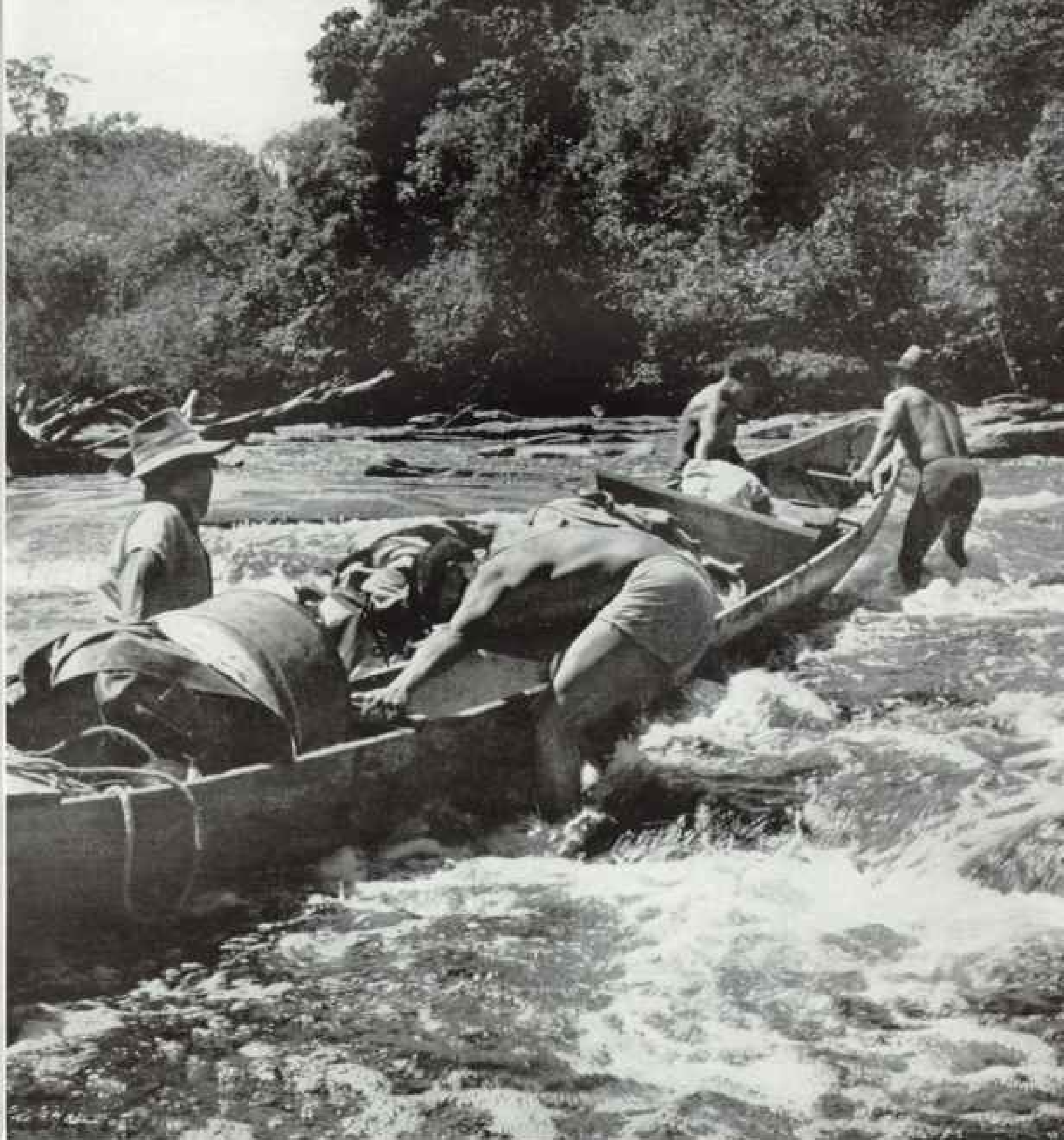
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and two Europeans—Bill Seggar, the district officer, and his wife Daphne—live in the basin.

Bill met us at the bumpy airstrip at Imbaimadai. Next morning we headed up the Karowrieng, a small tributary in the headwaters of the Mazaruni, in a 40-foot dugout canoe powered by an outboard motor (above).

"No one lives up there," Bill told us, "so there must be plenty of wildlife. There's also a mysterious Indian cliff painting that few people have ever seen."

Among the four Acawai Bill sent with us was a short shock-haired village headman with a ferocious scowl and a regal name:



Knee-deep in Frothing Rapids, Boatmen Haul a Dugout up the Karowrieng River

With this outboard-powered *corial*, the expedition explored an uninhabited region along a tributary of the Mazaruni. Waders had no fear of man-eating piranha fish. The razor-toothed killers, known to the natives as cannibals, frequent still pools. They seldom attack in swirling water.

King George. There had been efforts, Bill said, to persuade him to change this self-adopted title to George King, but in vain.

The next day King George led us through the forest unhesitatingly, cutting notches in the trees and bending down saplings to mark the return route. Great jungle trees—purple-heart, mora, crabwood, greenheart, and others—rose 150 feet above our heads. From them, orchids and air plants dangled long aerial

roots, taking nourishment not from earth but from the humid air. Occasionally, on the forest floor, fallen yellow blossoms lay in a thick carpet of color. No large animals appeared, but myriad tiny creatures filled the sweltering twilight of the forest with chirps, pipings, and buzzings.

Then, through a gap in the thick canopy of trees, a shaft of sunlight struck diagonally down to white quartzite rock. The light



Lashed and Muzzled, a Cayman Casts a Baleful Eye on Its Captors:

The black cayman, reaching 15 feet in length, is larger than any of its crocodile or alligator cousins in the New World. This 10-foot monster was penned in his hole with a sapling palisade, then dragged out with a rawhide noose.

played on red and black paintings covering the face of a cliff and stretching for 30 feet along its base and 30 feet high.

Many of the crude designs clearly represented animals. One seemed to be an armadillo, but if the head was taken as a tail, it became equally clearly an anteater. Another creature lay upside down, feet in the air. At first we thought it portrayed a dead beast, but then we saw that it had two claws on its forelegs and three on its hind, the anatomy of a two-toed sloth. Above it ran a thick red line, possibly the branch on which the sloth should hang. If so, it presented difficulties to the unknown artist, for he painted it separately.

Handprints Mark Painted Cliff

With the animals were boldly painted symbols—squares, zigzags, and strings of lozenges. Interspersed between the figures were hundreds of handprints, so overlapped as to form almost solid areas of red paint near the base of the cliff (pages 860 and 861).

I placed my hand over several of the prints, but they were all smaller than mine. Then King George tried it. His hands fitted the prints exactly.

King George knew neither the significance nor the origin of the paintings. "They made long time ago," he said, "but not by Acawai."

We found evidence of their age, for here and there painted rock had flaked away. The scars had weathered to the same shade as the rest of the cliff, a process that must have taken a great many years.

Such rock paintings have been found in other parts of British Guiana. Scientists have yet to study them systematically, but some believe they represent religious or mythological ceremonies of centuries ago.

For an hour Charles and I photographed the designs, but all too soon the sun disappeared over the crest of the cliff. If we

were to regain camp that night, we had to start back immediately.

At the mouth of the Kamarang, Bill Seggar's main station 40 miles down the Mazuruni from Imbaimadai, we started collecting live animals again. Jack and I scored our first success not far from the station, a cluster of white wooden houses set in a clearing. Picking a way through spiny creepers, we paused at the base of a huge tree.

One of Nature's Improbable Creatures

From branches high above hung thick lianas in immobile contortions. If we could have accelerated several years of the lianas' growth into a few minutes, they would have twisted and writhed, strangling both themselves and the tree from which they hung. Jack looked up into the tangle.

"Is there something up there, or is it my imagination?" he asked softly.

I could see nothing. Jack pointed. At last I spotted a round gray shape dangling from a liana. It was a sloth.

Few creatures are more improbable than the sloth, which spends its life in a permanent state of slow motion, hanging upside down in tall forest trees. It moves so slowly there was no risk that this one would career off and be lost. I was elected to climb the tree and fetch it down.



British Guiana: Equatorial Zooland

This Crown Colony, 83,000 square miles of rain forest and savanna, lies on the northeast coast of South America nearly on the Equator.

The author describes British Guiana as "the home of some of the strangest, some of the loveliest, and some of the most horrifying animals in the world."





← Baby Sloth Rides a Fur-lined Hammock

Few animals suffer the ridicule heaped on the slow-moving sloth. Yet, for all its seeming helplessness, it is better equipped to survive than many another animal.

No scent from a high-perching sloth reaches the marauding jaguar. Rolled up in a tree crotch, the animal is indistinguishable from an ants' nest or a cluster of leaves. Algae and lichens growing in the fur lend a greenish tint that heightens the illusion.

Heavy matted hair covers a tough hide and a tremendous bony framework. Powerful claws make dislodgment difficult.

Awkward on land, the sloth can swim a mile-wide river in about three hours. Yet it seldom need descend from the trees, since it gets ample water from its leafy diet.

This three-toed female cradles her young while climbing. Left hanging alone in a tree, the baby might unwittingly shift grip from the limb to its own arm and tumble to the ground.

→ Cameraman Charles Lagos takes aim at a bashful subject.

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The dangling creepers provided an abundance of holds. The sloth saw me coming, and in a slow-motion frenzy began climbing "hand over hand" up its liana. I overhauled it 40 feet above the ground.

Even a Sloth's Defense Is Slow-motion

About the size of a sheep dog, the sloth hung bottom up and stared at me with an expression of ineffable sadness on its furry face. Slowly it opened its mouth, exposing black enamelless teeth, and did its best to frighten me with its loudest noise—a faint bronchial wheeze.

I stretched out my hand, and the creature made a ponderous pass at me with a hairy foreleg. I drew back and it blinked mildly, as if surprised that it had failed to connect.

Its two attempts at slow-motion defense unsuccessful, the sloth now concentrated on clinging firmly to its perch. Holding on with one hand, I reached over with the other and

tried to unhook the animal. As I pried loose the scimitar-sharp claws of one foot and began work on the next, the sloth, very sensibly and with maddening deliberation, replaced its loosened foot. Never did I get more than one leg free at a time. I continued for five minutes in this way, not helped by the witty suggestions that Jack and Charles shouted up to me. Plainly, this one-handed struggle could go on forever.

Then I had an idea. Close by me hung a thin, crinkled liana, a vine the Indians call "granny's backbone." I called down to Jack to cut it loose near the ground. Then I pulled up the severed end and held it near the sloth.

The animal was so determined to grasp anything within reach that, as I unfastened each of its legs, it clutched at the loose liana. When all four feet were transferred, I gently lowered away. The sloth, clinging obligingly to the liana, slowly descended into Jack's





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Handprints and Hieroglyphics Form a Cliffside Fresco

Near the headwaters of the Karowrieng, the expedition visited these crimson and black cliff paintings. Their origin and meaning puzzle scientists.

arms. I clambered down.

There are two kinds of sloths in South America, the two-toed and three-toed. Our captive was the smaller three-toed species. We would have to release it. Jack said mournfully, for its main diet is the leaves of the cecropia tree, plentiful in Guiana but unobtainable in London.

We wanted to film it, so we carried it back to the Seggars' house and put it on the ground near the base of an isolated mango tree. Without a branch to hang from, the sloth had trouble in moving at all. Its long legs splayed out, and only by laboriously humping its body could it manage to drag itself across the few yards to the tree. Once there, it clambered gracefully up the trunk and contentedly suspended itself beneath one of the boughs.

Strange Results of an Upside-down Life

Every feature of its body seemed specialized in some way to suit an inverted existence. Gray, shaggy hair, instead of flowing down from the backbone toward the stomach as in most creatures, was parted along the belly and flowed toward its spine. The legs, used strictly as hangers, had lost all sign of a palm, and the hooklike claws seemed to grow straight from a furry stump (page 850).

A wide circle of vision is obviously helpful when hanging in a treetop. The sloth has a neck that allows the head to twist almost full circle. Its



Birds and Beasts Cavort Among Mysterious Symbols

Indian folklore of the Karowrieng region offers no explanation of the paintings. Handprints, thought to be artists' signatures, were too small for the author's hand but matched that of the native guide.

neck bones interest the zoologist, for whereas nearly all mammals from mice to giraffes have seven bones in their necks, the three-toed sloth boasts nine. This might be explained as a special adaptation for upside-down life. But the two-toed sloth, which lives in exactly the same manner and can twist its head just as far, has only six neck bones!

Three days later, we noticed our sloth craning upward to lick something on its hip. It was caressing a tiny baby. Still wet, the infant must have been born only a few minutes earlier. So similarly colored was the baby sloth that, when it dried, we could scarcely find it in the mother's shaggy fur (page 858). Occasionally it slowly and

laboriously climbed along the length of her body to suckle from nipples under her armpits.

We watched the pair for two days. The birth seemed to have robbed the mother of her appetite. Rather than run the risk of her going hungry, we carried the two back to the forest. With her baby peering at us over her shoulder, the mother started to climb a liana. When we returned to the spot an hour later, she was nowhere to be seen.

By the end of a fortnight we had a large collection of creatures, ranging from tiny insects and hummingbirds to boa constrictors and a capybara, a giant relative of the guinea pig (pages 872 and 873).



We often hunted at night with flashlights. In the darkness the forest was an eerie, mysterious place full of sound. We became used to its unceasing chorus, but the crash of a falling tree or an unidentifiable shriek still brought my heart into my mouth.

Night Prowl Nets Eight-eyed Catch

Paradoxically, in the darkness we were able to find animals that we never would have seen by day. One night, as we shone our torches over the surface of the river, four pairs of red coals glowed back at us—caymans lying almost submerged, with their eyes just above water.

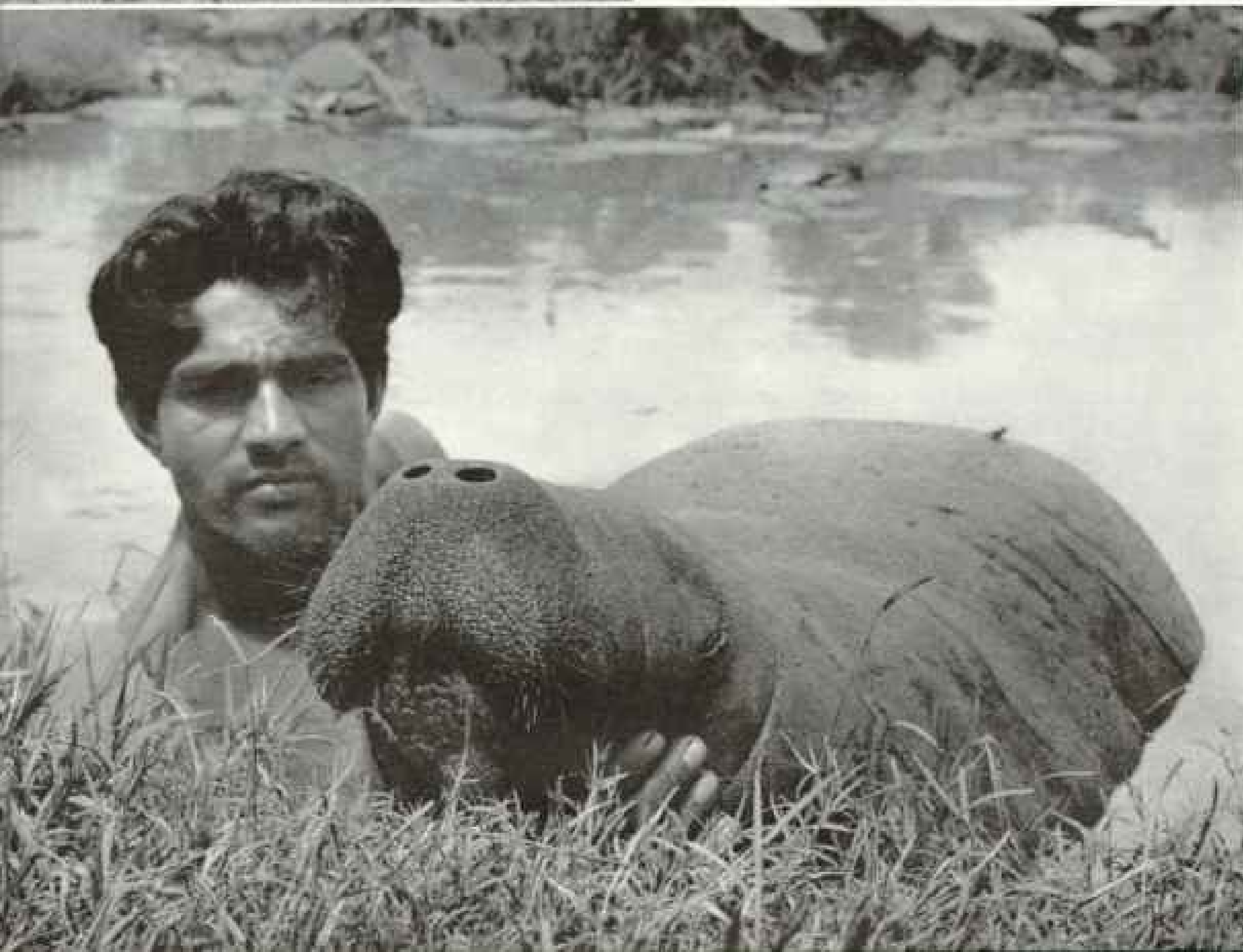
As we walked through the black jungle, a monkey turned to look at us. The reflections

← Captive Sea Cow Sags in Harness Like a Deflated Blimp

Scientists classify manatees, or sea cows, in the order Sirenia, on the theory that these ponderous mammals inspired myths of mermaids and sirens. They have no hind limbs, and bodies taper into tails like spatulas.

↓ An inoffensive weed eater, the manatee browses placidly along marshy banks. It must surface to breathe; when it dives, the circular nostrils close tightly to keep out water.

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from its eyes disappeared momentarily as it blinked. Then they vanished altogether, and we heard a rustling as it turned its back on us and fled.

Treading as silently as we could, we approached a bamboo thicket, the stems creaking as they swayed in the darkness. Jack shone his light into the tangle.

"A good place for snakes," he said with enthusiasm. "Make a racket on the other side and see if you can scare anything out toward me."

I picked my way with caution through the darkness and began beating against the bamboo with a machete. Then the light from my torch fell upon a small hole in the ground.

Gingerly I knelt and looked in. From the depths three bright little lights glowed at me.

"Jack," I called softly, "there's something here with three eyes!"

He was by my side in seconds. Under our two torches a black hairy spider as big as my hand crouched at the bottom of the hole.

The eyes I had seen were only three of eight that sparkled on the top of its ugly head. Menacingly it raised two front legs tipped with iridescent blue pads. Beneath, curved poison fangs shone like brown hooks.

"A beauty," Jack murmured. "Don't let him jump out."

He fumbled in his pocket for a cocoa can. I picked up a twig and gently pushed it down the hole. The spider lashed out with its front legs.

"Careful," Jack said. "If you rub any of that hair from its body, it won't live."

He gave me the tin. "I'll see if I can persuade him to come out."

He pressed his knife into the ground at the back of the hole. The spider revolved to face the new danger and retreated a few steps. Jack twisted the knife. The hole crumbled, and the spider suddenly ran back-



863

Newly Hatched Parrot Chick Seems All Eyes and Beak

Every Acawai village keeps a menagerie of small animals and gaudy parrots. The author fed this nestling with chewed-up cassava bread from his own mouth.

wards and landed straight in the tin. Quickly I clapped on the lid.

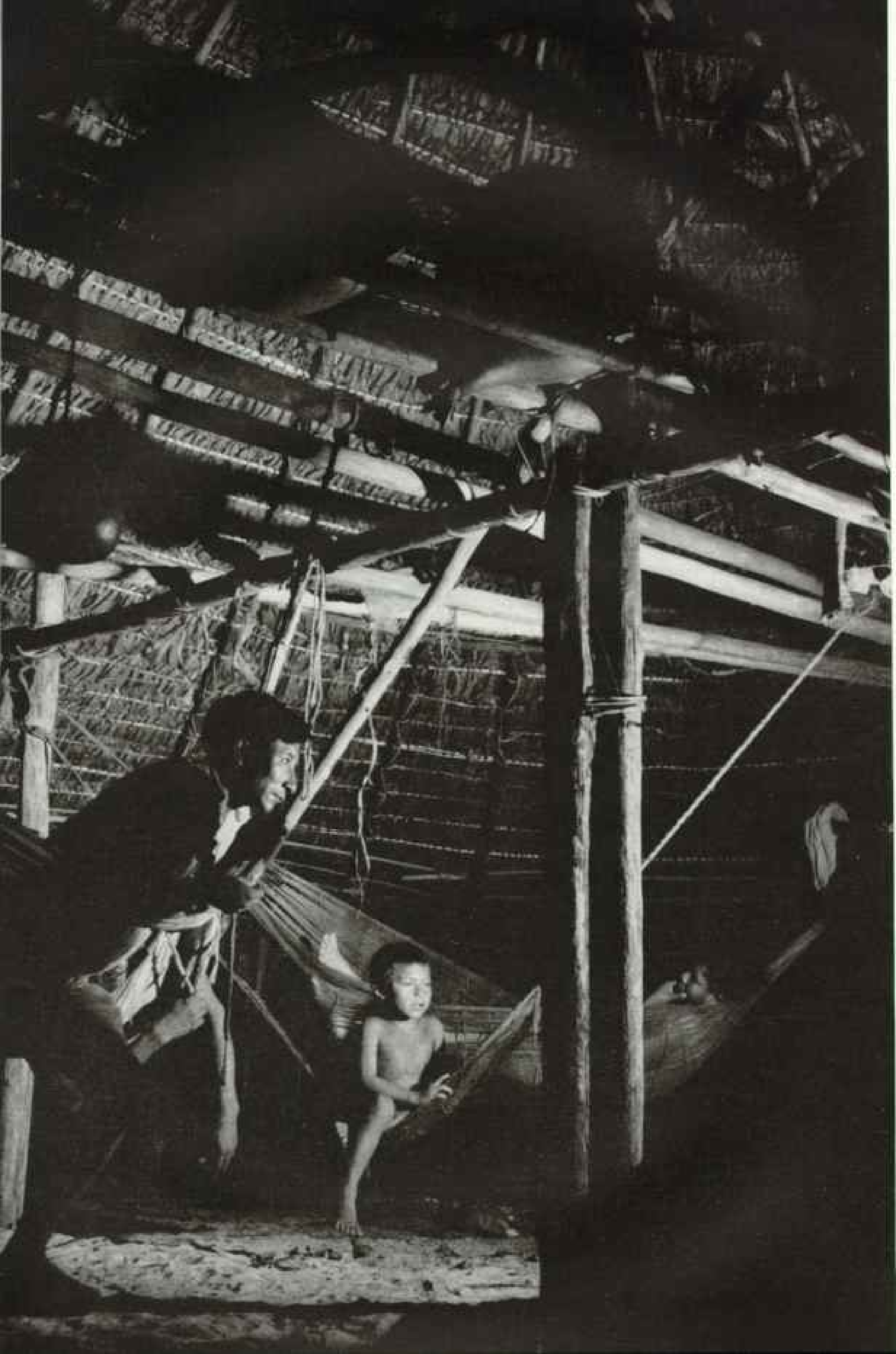
Jack grinned and put the can safely back in his pocket. Later he identified our catch as a fine *Avicularia avicularia*, quite common in South America. Its poison is not deadly, but can make a man extremely ill.

Before we left the Mazaruni, Charles and I wanted to visit an Acawai Indian village. On Bill Seggar's advice we set off by canoe for the Kukui, a comparatively heavily populated tributary.

Baby Parrot Fed by Mouth

We stopped at small settlements every few miles to ask for animals. Each village had its complement of tame parrots hopping along the eaves of the huts or waddling irascibly around the clearing. The Indians, like us, value parrots for their bright color and mimicry. Often, as we arrived, the birds would shriek abuse at us in Acawai.

Adult parrots are difficult to catch and tame, so Indians take young chicks from the nests in the forest and rear them by hand. At one village, a woman gave me a nestling with wide brown eyes, an absurdly large beak,





← Calabashes Line the Beams
of a Palm-thatched Acawai Hut

Few possessions clutter the Acawai home. Hammocks, made of fine fibers from silk grass, palm, or cotton, roll into tiny balls for carrying. Gourds are used in the preparation of fermented *casiri*.

and a few scraggly feathers poking through its naked skin (page 863). I could not refuse it, but if I was to keep the appealing little chick I had to learn how to feed it. The woman laughingly showed me what to do.

First, I chewed some cassava bread. As the little bird saw this, it became tremendously excited, flapped its featherless wings and jerked its head up and down in enthusiasm. I put my face close to it, and without hesitation the fledgling stuck its open beak between my lips. It was up to me to thrust the chewed cassava bread down its throat with my tongue.

This seemed most unhygienic for both parrot and me, but the woman made it clear there was no other method of rearing a chick. Fortunately ours was quite old. A

↑ Young Marksmen Send Blowgun Darts
Streaking to the Target

For small game, Acawai Indians prefer the silent blowpipe to the shotgun. Darts tipped with curare poison carry death several hundred feet. Agouti teeth, fixed to the 8-foot barrels, serve as sights.

week later it was able to eat soft banana by itself, thus relieving us from chewing cassava every three hours.

After several days' travel we had a chattering and squawking boatload of creatures—monkeys, parrots, macaws, a large turkeylike crested curassow, several tortoises, and a half-grown peccary, the South American wild pig.

Acawai Celebrate with Hallelujah Rite

We spent our last day near the mouth of the Kukui in King George's own village, which he called Jawala. The next day we were to catch a plane out of the Mazaruni.

Most of the village men were off hunting, but King George said they would return that day. If their hunt was successful, they would sing Hallelujah in thanksgiving.



We had heard much of this extraordinary practice. At the end of the last century, a Macushi Indian from the savannas visited a Christian mission. Returning to his tribe, he claimed to have visions of a great spirit called Papa high in the sky. Papa told the Indian to spread a new religion, called "Hallelujah."

Near-by tribes picked up the new beliefs from the Macushi. Missionaries, apparently not realizing the Christian foundation of the religion, condemned the Hallelujah practice as pagan, but it has persisted.

Ceremony Filmed

We asked King George if we might film the ceremony. He grunted an assent, and we settled down to wait.

In midafternoon the hunting party returned, clad in loincloths. Slung over their backs in woven baskets were loads of smoked fish, plucked carcasses of birds, and kipper-brown joints of smoked tapir flesh. One man carried a gun over his shoulder; the rest were armed with blowpipes and bows and arrows.

Without speaking to anyone, the men approached the main hut, the floor of which had been brushed and sprin-

866

Swinging Machetes, Women Gather Cassava in a Village Garden

Many South American Indians cultivate the cassava plant for its starchy rootstock, their main staple of diet.

These Acawai women dig plants along a tributary of the Mararuni.

**Breadmaker Sifts →
Cassava Through
a Wicker Mesh**

Raw cassava contains prussic acid, a lethal poison. To make the root edible, the Acawai follow a refining method common in the Amazon Basin.

Women shred the peeled tubers on a board studded with sharp stones. The gratings are squeezed in a flexible wicker tube, forcing out the poisonous juices and leaving a pulpy residue.

The meal, sieved through wicker mesh, is baked on flat stones or cast-iron plates. The author found the bread dry and tasteless.

Cassava juices are boiled until the earthenware vessel absorbs the poisons. Remaining liquid goes into pepper pot, a fiery stew.

To make casiri, a native liquor, women sometimes chew cassava into a mash and let it ferment.

The outside world knows cassava in the form of tapioca, made by heating the starchy meal.



867

↓ Acawai Cook Spreads Cassava Cake on an Outsize Iron Griddle.



kled with water. They carried their loads inside and stacked them around the center pole. Still silent, they withdrew 50 yards. There they formed a column three abreast and began chanting. With slow rhythmic steps, two forward and one back, the men advanced on the hut. As they entered, the song and the rhythm changed.

Several times in the droning three-note chant I heard the words "Hallelujah" and "Papa." King George squatted on his heels in the dust, pensively fiddling with a stick.

Again the chant changed, and the men formed a line facing inward. Each put his right hand on his neighbor's shoulder.

Matamata Turtle Wears a Mountain Range on Its Back

A river dweller, *Chelys fimbriata* lures fish with weedlike appendages on its well-camouflaged head. Charles Lagus belts this reptilian.



After 10 minutes the hunters knelt and spoke a brief prayer. Then the man with the gun walked over to King George, shook him by the hand, and lit a cigarette. The Hallelujah service was over.

Late that night, unable to sleep, I walked slowly through the moonlit village. As I approached the chief's dwelling, I heard the noise of voices and saw a flicker of light. King George's voice called out, "If you wish to enter, Dayveed, you very welcome."

Inside, a large fire illuminated smoked roof beams and the beautiful curves of several dozen giant calabashes on the floor. Men and women lay in hammocks crisscrossing from

beam to beam; others squatted on small wooden stools carved in the form of stylized tortoises. Occasionally a woman, naked except for her head apron, rose and walked gracefully across the hut, the firelight dappling her shining body.

Friends Offer a Farewell Toast

King George reclined in his hammock, holding in his right hand a mussel-like shell, its halves tied together with a string. Reflectively he felt his chin until he discovered a bristle. Then he closed the shell firmly around the whisker and plucked it out.

The air was filled with low conversation in Acawai. One man squatted by the enormous calabashes, stirring a pink lumpy fluid with a long stick.

This drink, I knew, was casiri, whose main ingredient is boiled grated cassava, plus sweet potato and cassava bread. I recalled uneasily having seen photographs of village



869

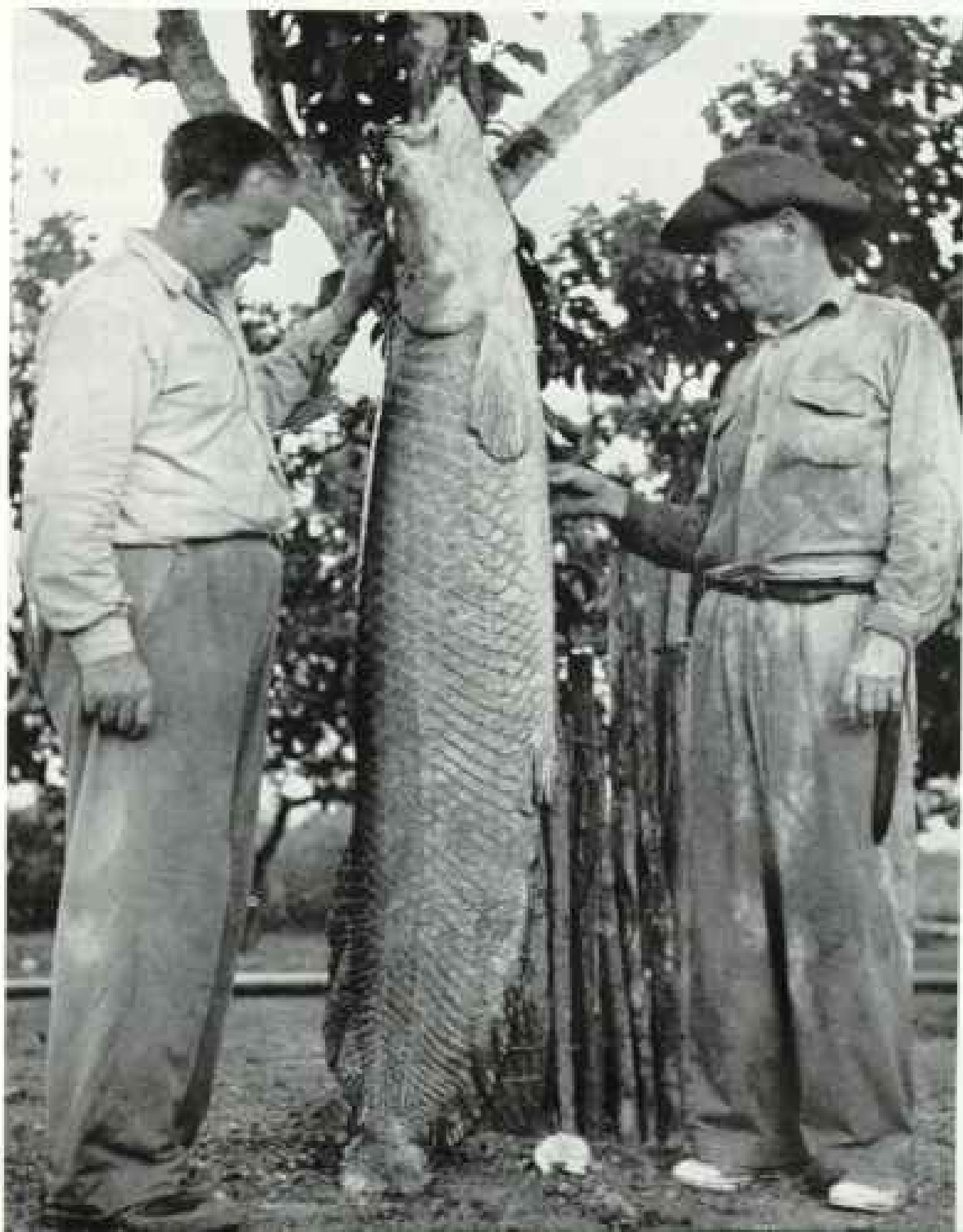
↑ Mouth Agape,
an Arapaima
Concedes the Battle

Relative of the salmon and herring, the arapaima, or pirarucu, is the largest known fresh-water fish in South America. Giants 15 feet long and weighing as much as 400 pounds have been reported in the Amazon Basin.

Indians seek the arapaima with baited lines and harpoons or in mass attacks with bows and arrows. The fish's strength is prodigious. Hunters tell of anglers dragged from the riverbank by medium-sized catches.

British Guiana's natives value the arapaima despite its tastelessness. In parts of South America, drying and salting of the flesh is an important industry.

→ Jack Lester, expedition leader (left), and Tiny MacTurk, a rancher, measure their prize. They harpooned this 7-foot, 200-pound titan on the Rupununi River,





women assiduously chewing cassava into paste, which then is allowed to ferment to make casiri. Had this been prepared that way?

Repeatedly, a small calabash was poured full and passed around the hut. At length it came to me. Knowing it would be most impolite to refuse, I lifted it to my lips. Though my stomach heaved, I held the gourd to my mouth until I had drained it. I handed back the bowl and smiled weakly.

King George leaned out of his hammock and grinned.

"Eh, you!" he called to the man in charge of the calabashes, "Dayveed like casiri and gets big thirst. Give 'im some more."

I was immediately handed another brimming gourd. As quickly as possible, I poured the liquid down my throat. I managed to discount the odor and decided that although casiri was a bit gritty and lumpy, its bittersweet taste was not wholly unpleasant.

I sat listening to the unintelligible conversation until early morning, often tempted to run back to our hut and bring a flash camera to catch the scene. Yet somehow it seemed an infringement of hospitality offered me.

A day later we were back amid the modern streets and buildings of Georgetown.

Our last animal hunt was planned for the coastal swamps and creeks that divide British Guiana's great sugar planta-

870

Lianas Stream from a Mora Tree Like Shrouds from a Giant Mast

Climbing vines grow 600 feet long in the moist air and high temperatures of tropical forests. One variety of liana is known to the Arawai as "granny's backbone."

Another species, immersed in water, gives off a mild poison that stuns fish and leaves them gasping on the surface.

Jack Lester stands dwarfed by a 200-foot mora.

tions. Back in London a special pool was being built in the aquarium for a manatee; we had promised to bring one back. A train took us along the coast to the town of New Amsterdam at the mouth of the Berbice and Canje Rivers.

The manatee, or sea cow, spends its life in brackish creeks inoffensively browsing on weeds. It breathes air like a walrus, its snout snorting and blowing above water. Being a mammal, it suckles its young, sometimes rising out of the water with an offspring cradled in its flippers. Descriptions of the creature brought back by the first seamen to sail round the coasts of South America gave new life to the legend of the mermaid.

"De water mamma is de mos' passionate creature," a New Amsterdam fisherman told me gloomily. "When she get in det net, she fly into de mos' turbul passion and t'row

871

Parasol Ants, Scourge of the Forest, → Can Strip a Tree Overnight

Powerful jaws of the parasol ants spell ruin for jungle foliage and cultivated crops. Indians abandon villages and fields rather than oppose a horde of these leaf cutters on the march. Here ants snip smooth-edged sections on which to raise the fungus they enjoy as food.

↓ Parasol ants in the Tropics forage chiefly between dusk and dawn. These workers, caught by flash exposure, hold leafy burdens overhead in the manner suggested by their name. They will transport the harvest to nests a quarter of a mile away.





872

Froliesome Capybaras, World's Largest Rodents, Stage a Water Fight

Amphibious, web-footed relatives of the guinea pig, these Indian pets enjoy a plunge in the Barima River. Villagers painted red bull's-eyes on the animals' haunches, paradoxically warning hunters not to shoot.

herself aroun' and den she'll bus' out of de net for sure.

"But, I," he said, lowering his voice and leaning forward conspiratorially, "kin stroke de net ropes so vibrations go down to her. She likes dat so much she jus' lies dere widout movin', an' you kin haul her in."

This sounded impressive and so was our fisherman. Immensely stout, he wore a brilliant red shirt, black pin-stripe trousers, and atop his mop of frizzly hair a small black homburg hat. We engaged him on the spot.

But though we traveled for four days up and down the Canje with this well-dressed expert, not a manatee did we see. We laid nets at night, we laid them during the day, we waited for the tide to flow and to ebb. Each time, nothing.

Finally, in a small pond practically within New Amsterdam, we found our manatee. She behaved exactly as predicted, and with a thrash of her spatulate tail tore a long rent in the net and escaped. But we cornered

her again, and this time tied a rope around her tail as she lay enmeshed. By hauling net and rope together, we finally landed her.

Our manatee was not a pretty sight. Her head was little more than a blunt stump, garnished with a straggly mustache on a blubbery upper lip. Minute, deep-set eyes peered from the flesh of her cheek beside prominent nostrils (page 862).

A Face Only a Manatee Could Love

From her nose to the end of her tail she was just over seven feet long—about three-quarters grown. She had two paddle-shaped front flippers but no rear limbs, and where she kept her bones was a mystery. Robbed of the water's support, her great body slumped like a sack of wet sand.

The problem of getting the rubbery creature back to Georgetown was solved by the Town Council of New Amsterdam, which lent us the municipal water truck. Sagging between rope slings, her flippers hanging limply and

Pineapple Bait Lures Two "Water Pigs" into a London-bound Cage

The expedition bartered for these tame capybaras for the London Zoo. Inside the crate an Indian coaxes the animals. Capybara at right pauses for a handout of cassava root.





"Who's Directing This Scene, You or Me?" Coatimundi Asks the Photographer

A relative of the raccoon, the coati is consumed by insatiable curiosity. Scientists call it *Nasua*, the nose. This ring-tailed kit perches atop the camera for a tête-à-tête. Another coati wraps Mr. Lagus's neck.

her mustache dribbling slightly, our "mermaid" hardly looked alluring.

"If any sailor ever mistook that for a mermaid," Lagus said, "he must have been at sea for a long time."

Our expedition had come to an end. A few days afterward Charles and I flew back to London to begin editing our film, leaving Jack and Tim with the task of readying the animals for their long voyage home.

Zoo Explorer's Last Expedition

But Jack, though camouflaging it bravely, had been in increasing ill health. After we left, his condition became critical. Doctors recommended that he be flown home. Six months later, in London, Jack Lester died.

Some weeks elapsed after the animals arrived at the zoo before I could go see them. Our manatee wallowed contentedly in her

crystal pool. The monkeys swung in their cages. Our spider had given birth to several hundred tiny young, now fast growing up.

The little parrot I had been given on the Kukui, now fully fledged, still knew me, I decided. When I spoke, the bird jerked its head up and down, exactly as it had when I fed it chewed cassava from my mouth in a forest village across the sea.

All our former charges seemed happy and thriving, a great satisfaction to me. It is also satisfying to know that we brought back the most comprehensive collection of South American wildlife to arrive in Great Britain for many years—a fitting tribute to the expedition's leader.

For an account of this expedition in book form, see *Zoo Quest to Guiana*, by David Attenborough, published by the Lutterworth Press, London, and the Thomas Y. Crowell Company, New York.

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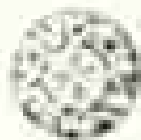
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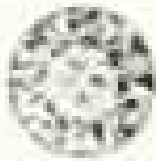
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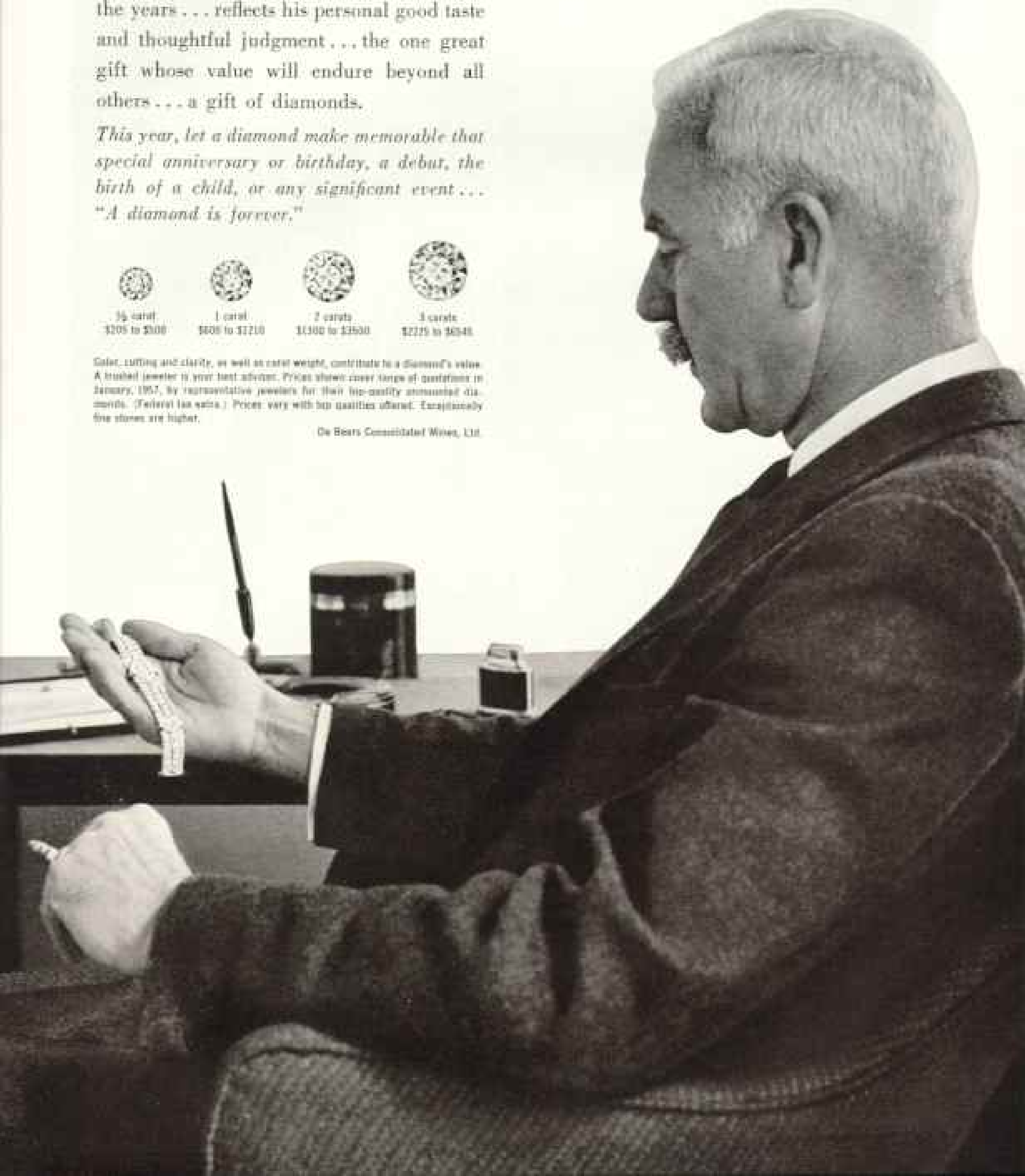
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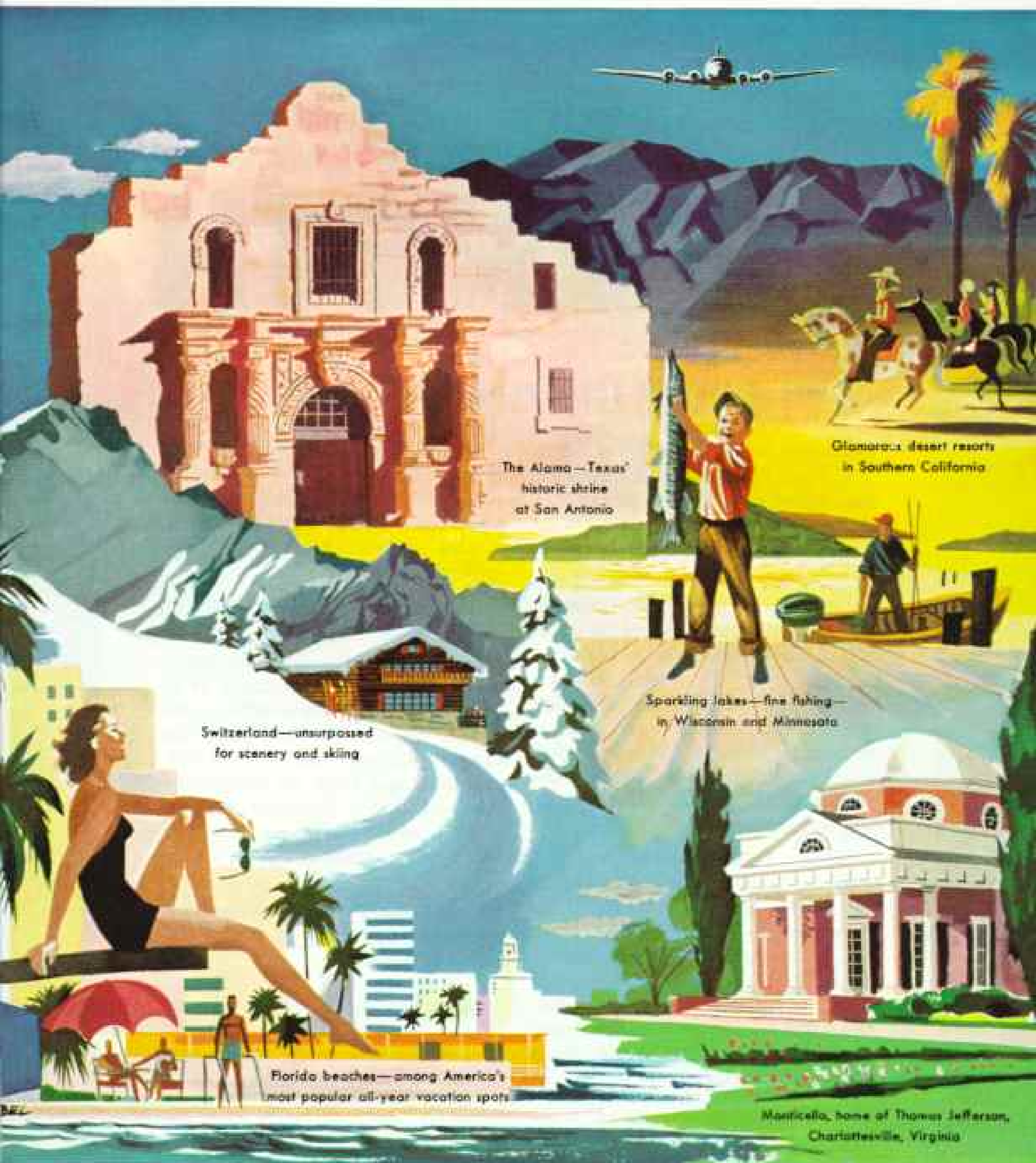


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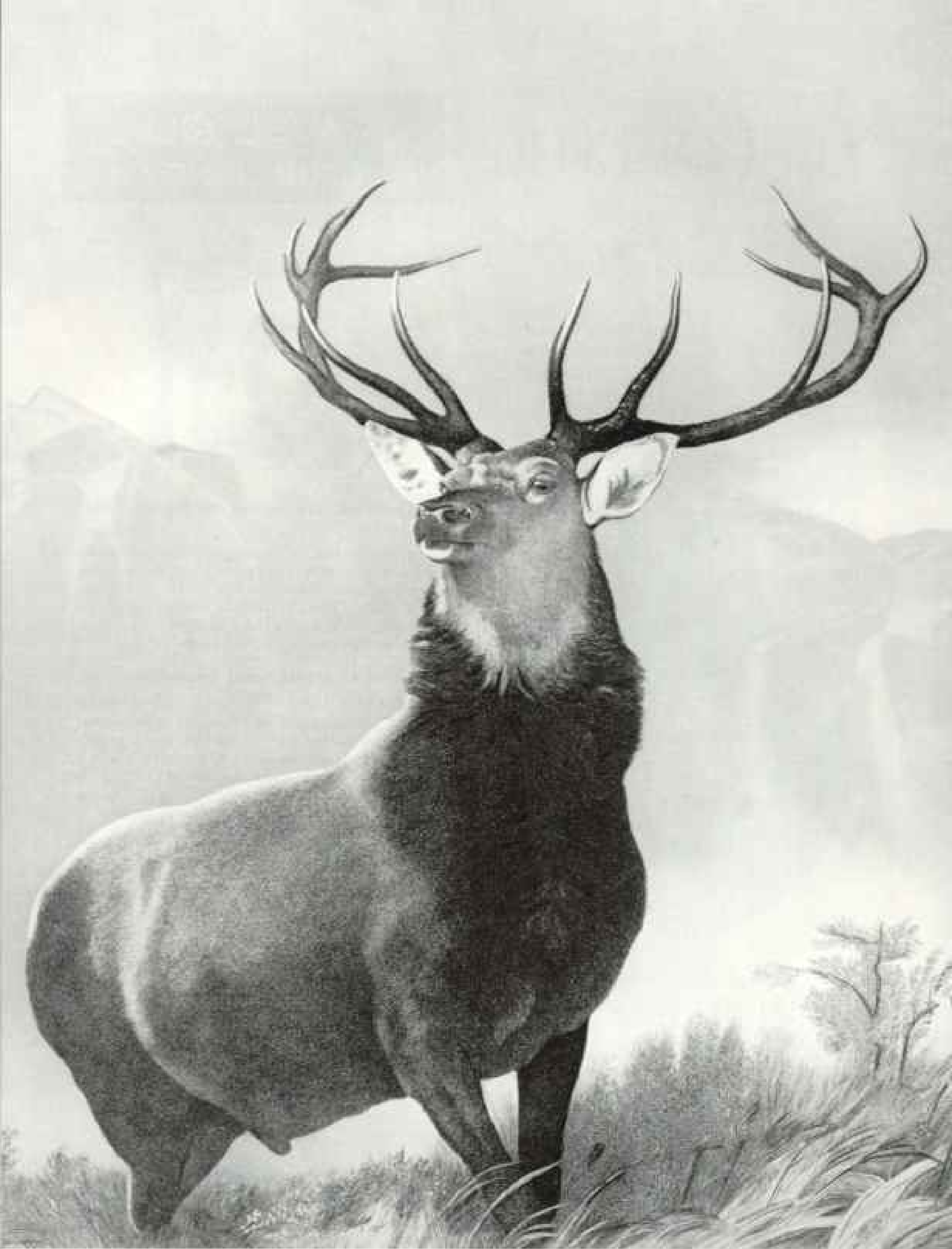
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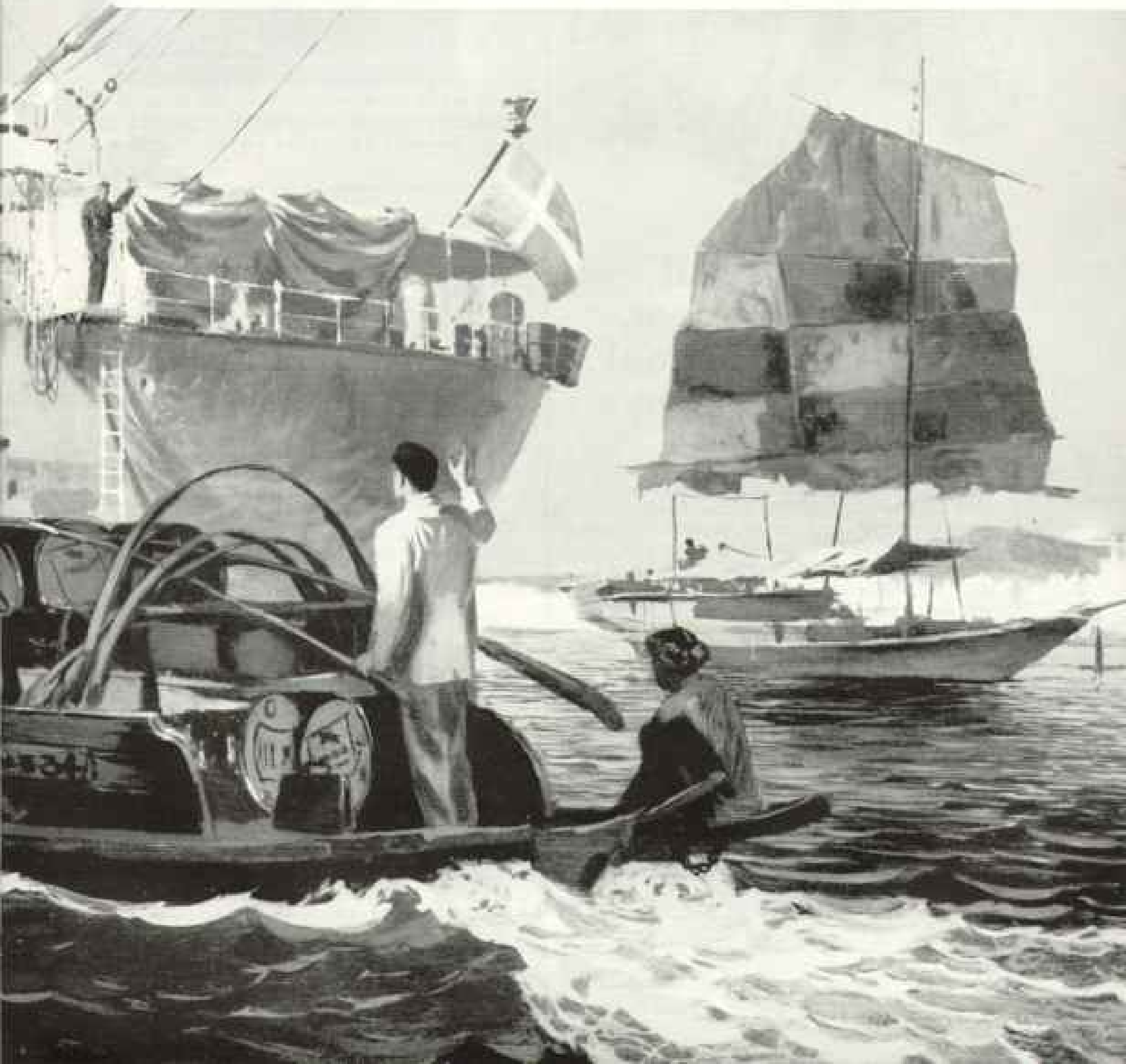
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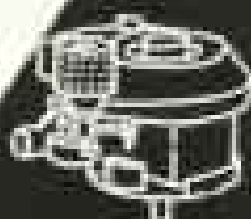
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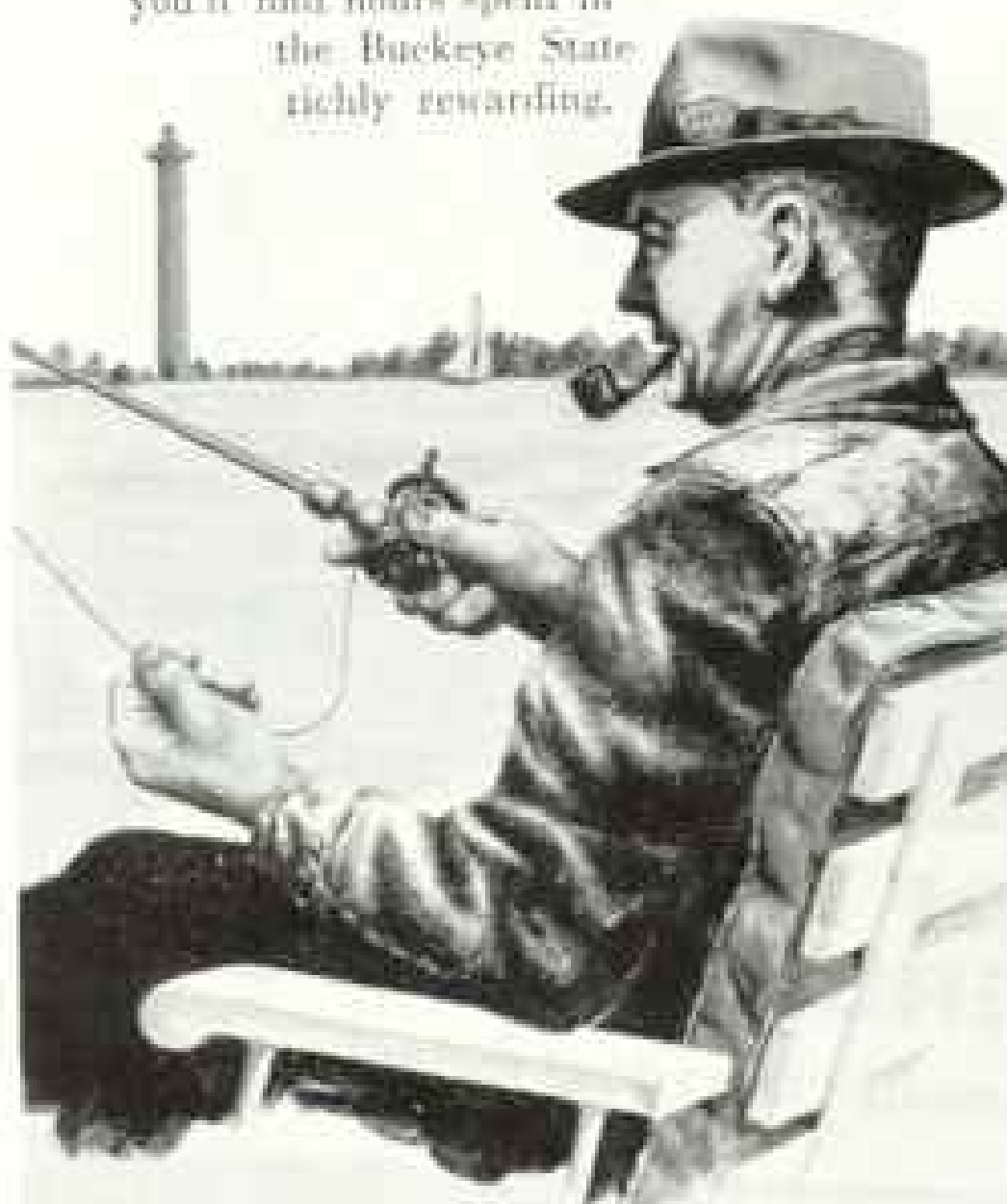




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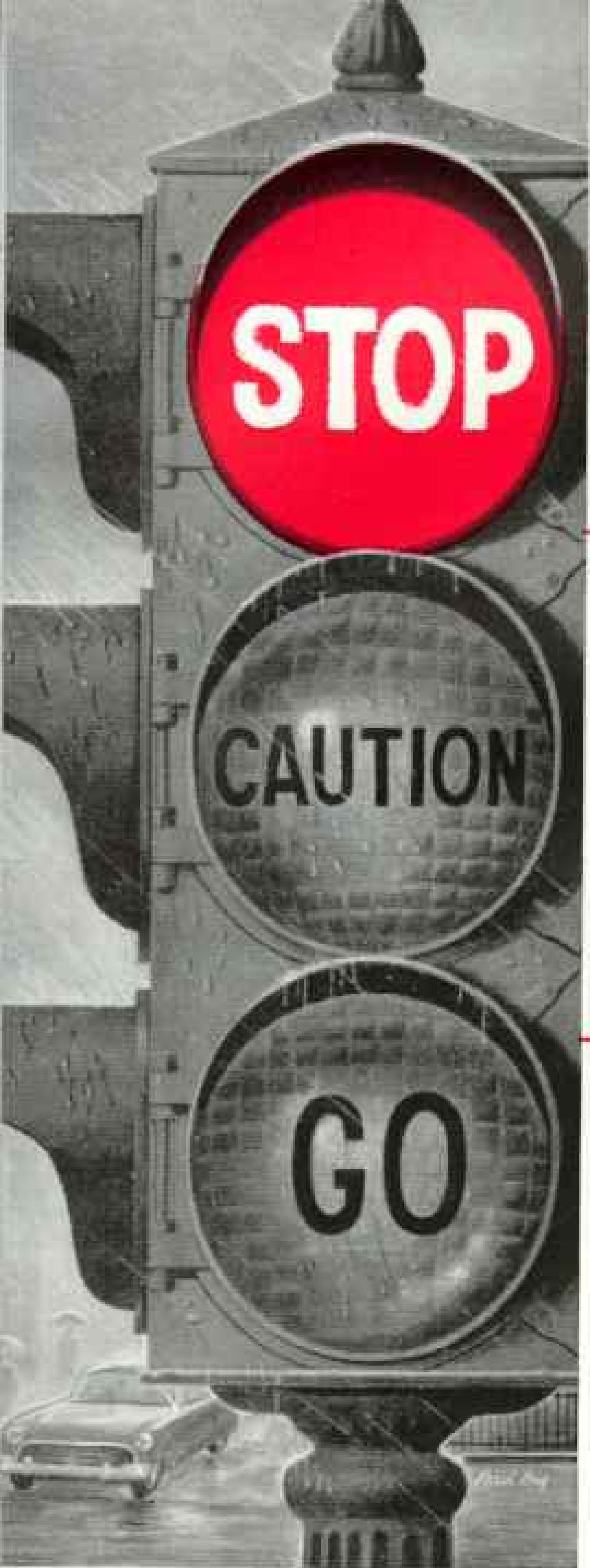
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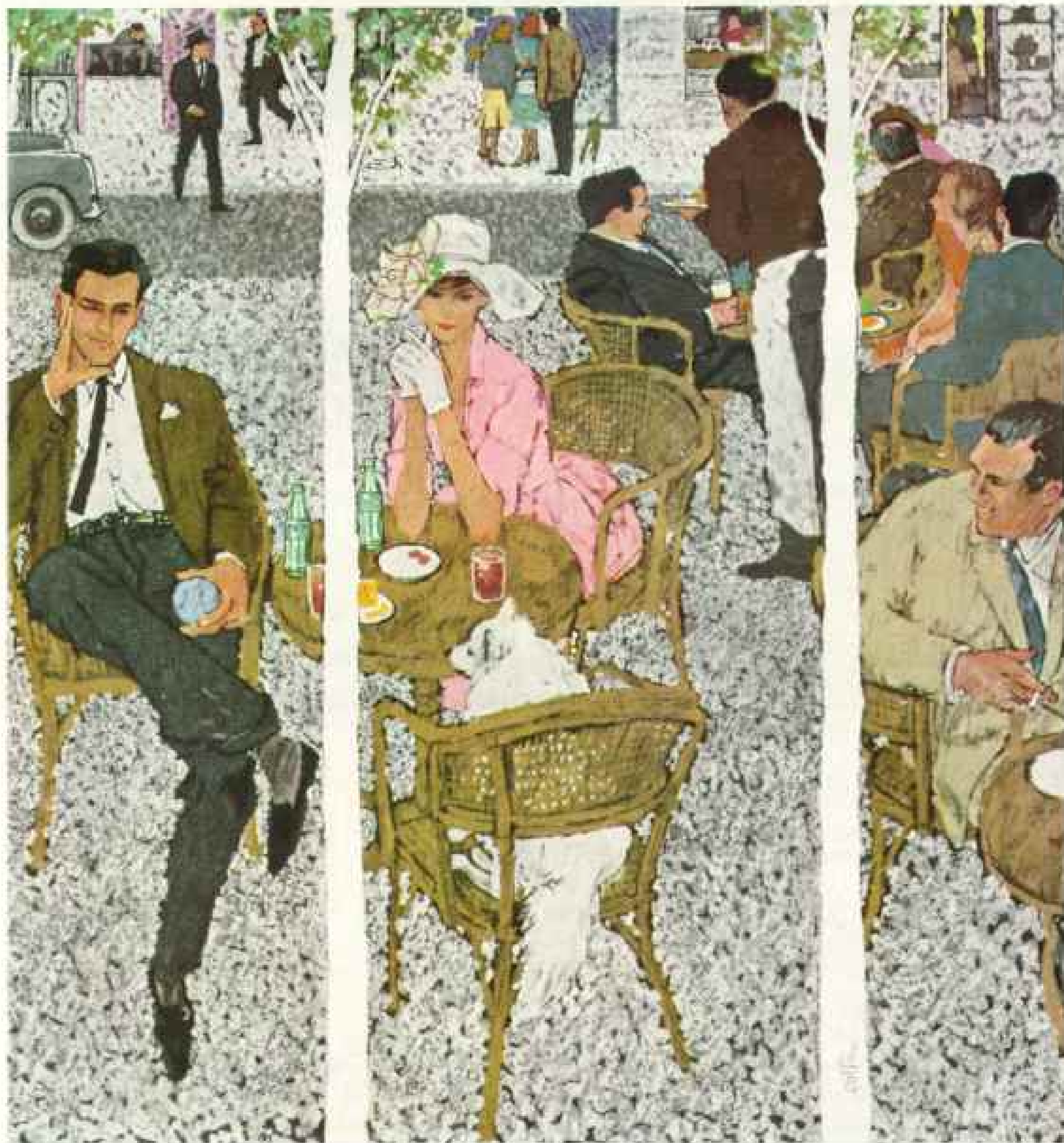
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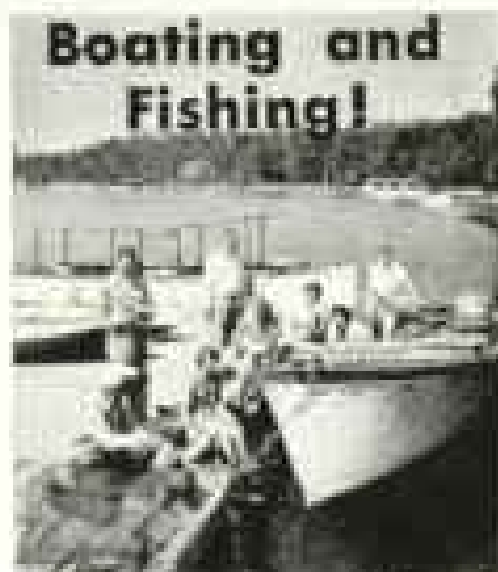
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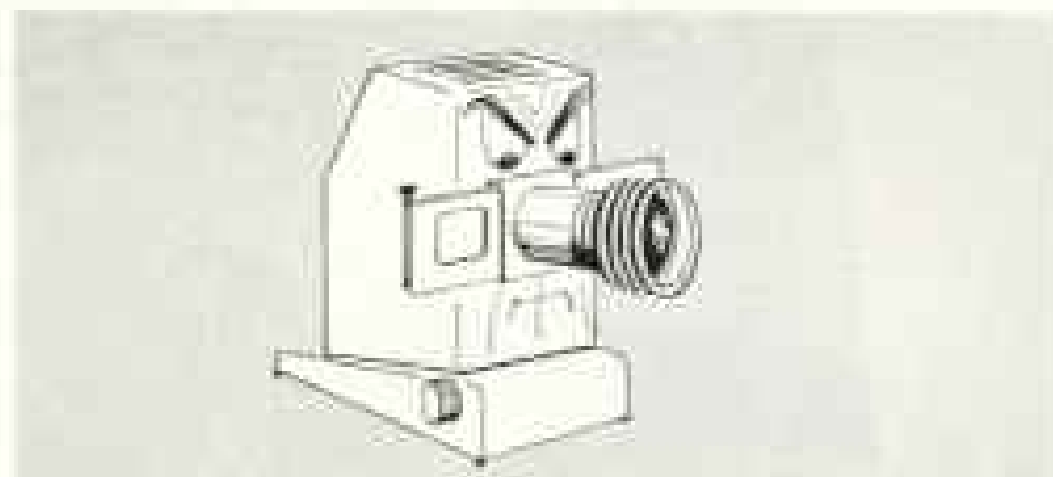
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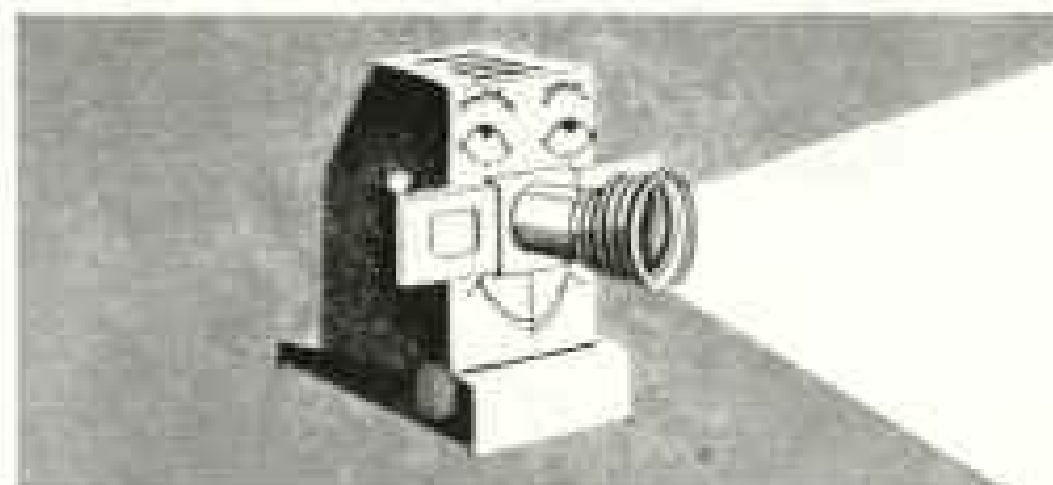
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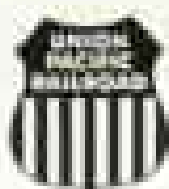
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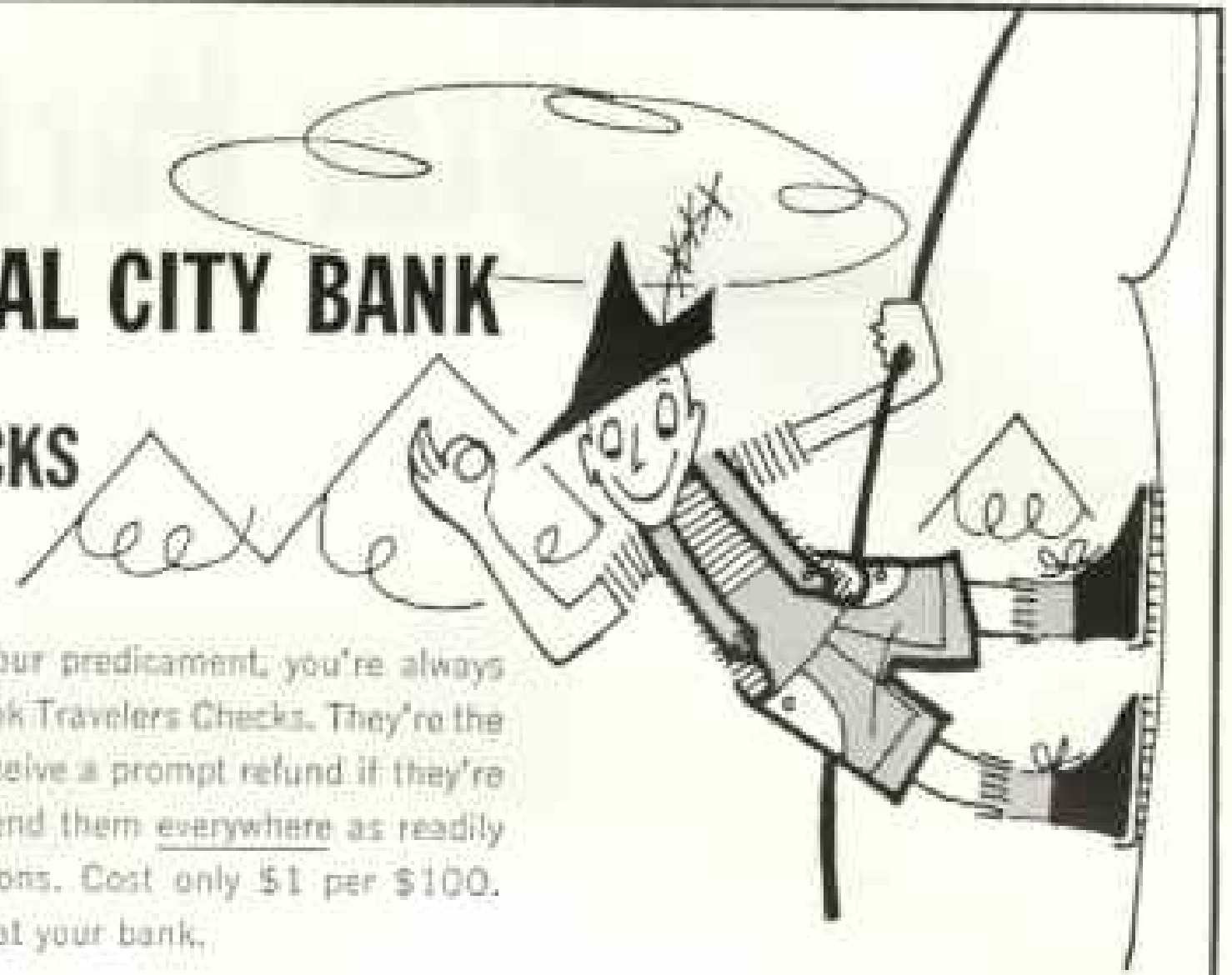
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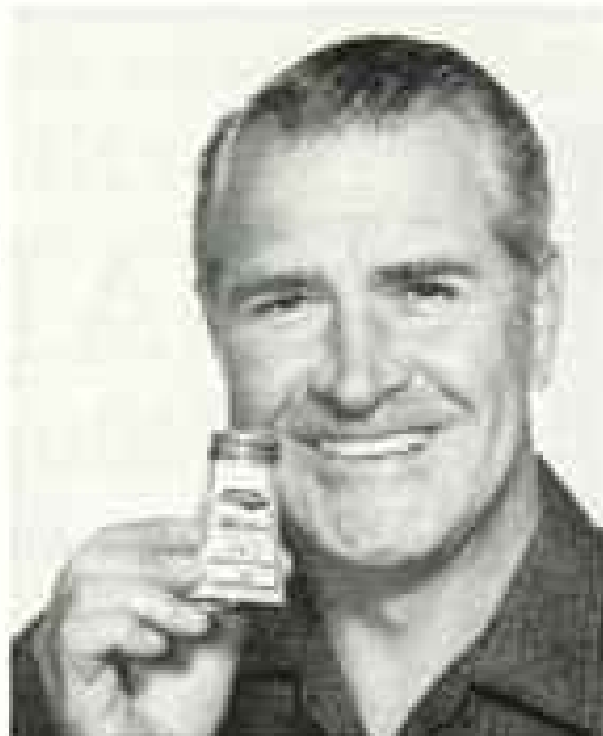
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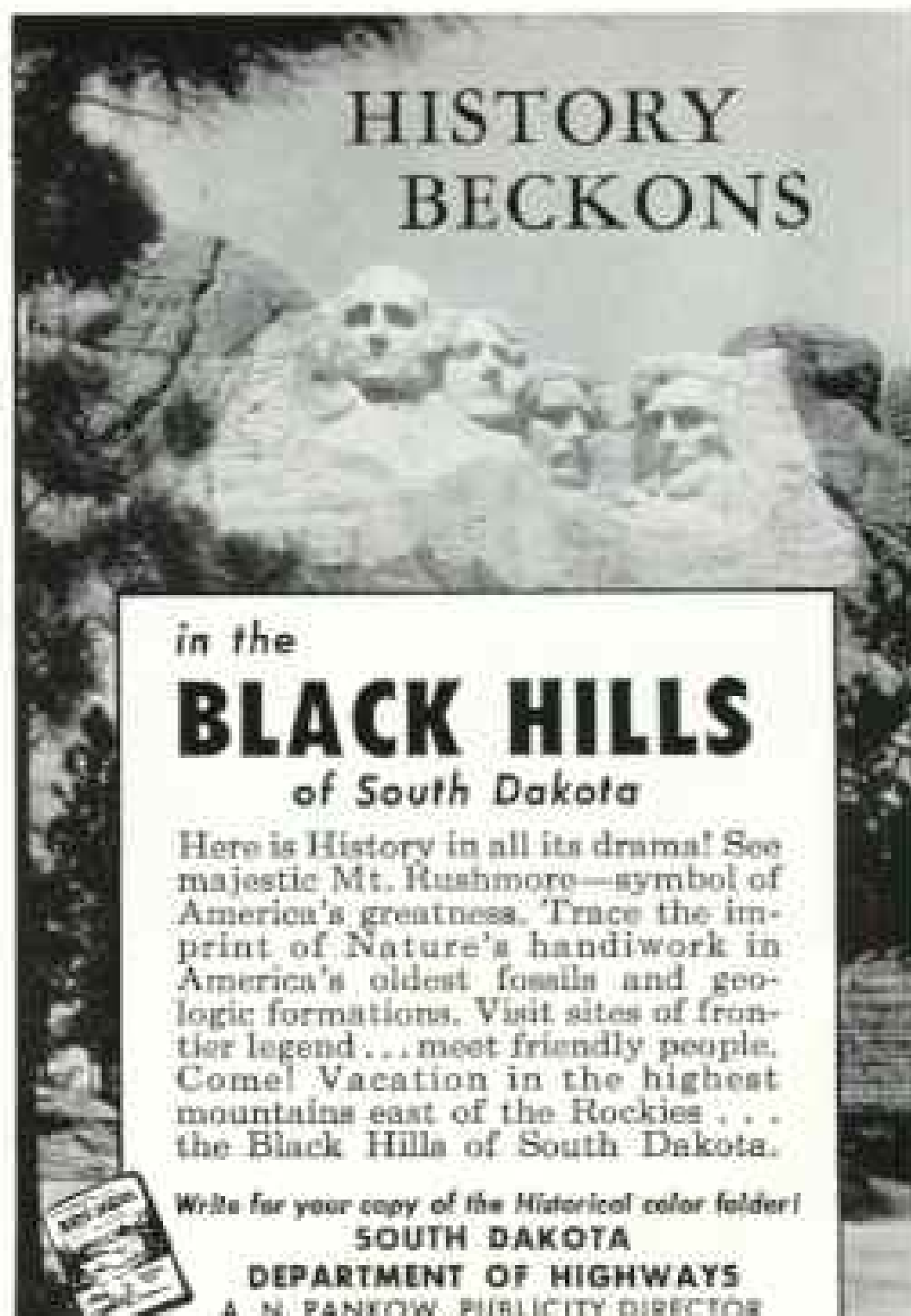


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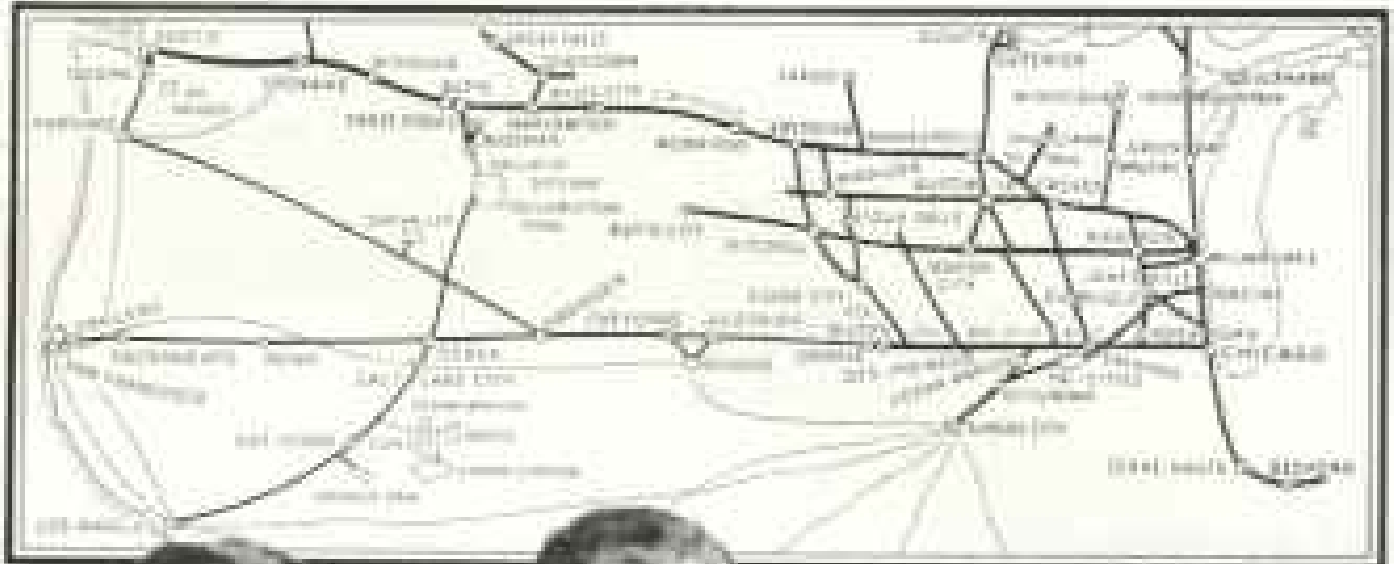
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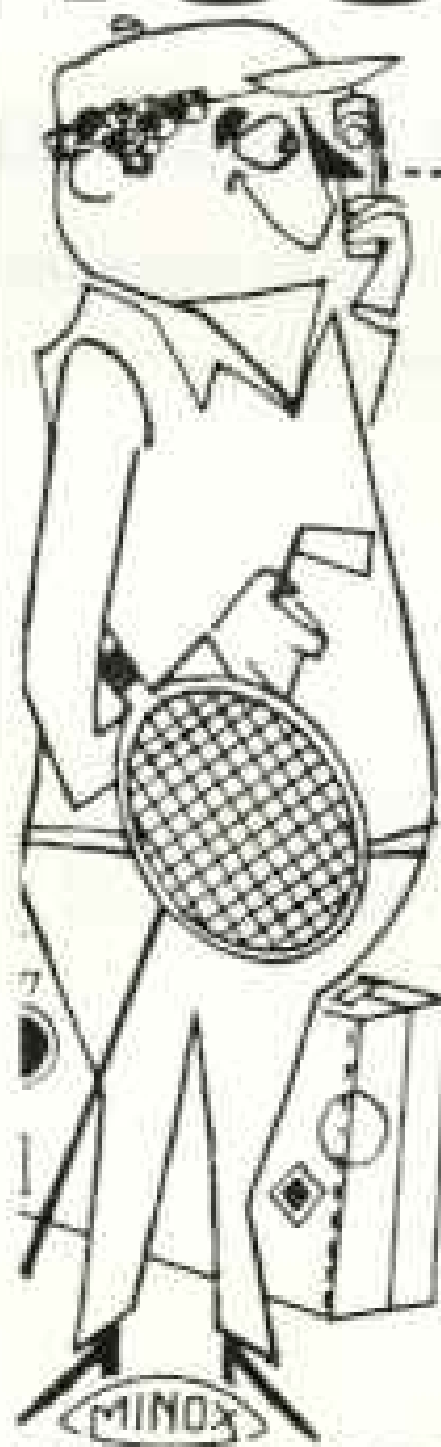
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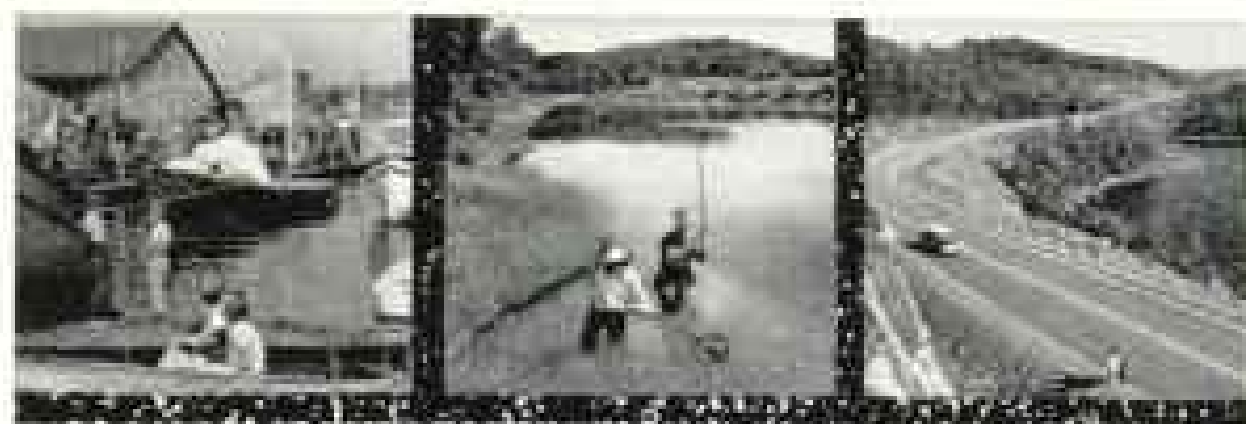
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4 A. M. Jack's a sound sleeper but he woke up fast when he heard the news. "It's a boy!" he shouted. "Nearly eight pounds, Mary's fine." Then I talked and Jack talked. Bless that bedroom telephone!



8 A. M. to 11 A. M. Just couldn't wait to tell Betty and Peggy about the baby. Then I ordered Jack's favorite roast for dinner and was lucky to get a hairdresser appointment. A grandmother must keep young!



5 P. M. Wouldn't you know! The very night I have something special for dinner Jack gets held up at the office. But it wasn't too bad. He telephoned he'd be an hour late. It's wonderful to have a telephone in the kitchen.



10 P. M. Such excitement! First Jack Jr.'s baby. Then Alice tells us she's engaged. I wasn't too surprised because of all those telephone calls and dates. I'm so glad it's that nice Bob Johnson.

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